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## **Consumer appraisals of mobile marketing communications**

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### **Abstract**

This paper reports on a study that investigates the emotions elicited from appraising SMS-based mobile marketing (m-marketing) communications under three marketing conditions: product consistency, incentives and permission giving. Results from the experimental design show that appraising m-marketing communications elicits both single emotions and mixed emotions; that is, a mixture of positive and negative emotions in the same response. Additionally, the results show that the influence of specific marketing conditions may increase or reduce the intensity of the emotions elicited. This study contributes to marketing practice by examining consumer appraisals of m-marketing communications under different combinations of marketing conditions. The results provide insights into which emotions are likely to be elicited as a result, and how a specific marketing condition might influence their levels of intensity. The study contributes to marketing theory also through combining appraisal theory with Richins (1997) consumption emotion set.

### **Introduction**

Many businesses are considering ways to integrate mobile marketing (m-marketing) into their marketing strategies (Haghirian, Madlberger, and Tanuskova, 2005; Tsang, Ho and Liang, 2004). The area, however, is under-researched and there is limited understanding about how consumers might respond to such communications on their mobile phones (Haghirian et al., 2005; Pura, 2005). The study reported in this paper makes a contribution to this area by drawing together three specific marketing conditions into an experimental design that applies appraisal theory to test consumer affective responses to receiving m-marketing communications. Specifically, the study seeks to examine which emotions are elicited from appraising m-marketing communications under different combinations of marketing conditions.

Recent research has examined consumer responses to forms of m-marketing, such as SMS advertising (Haghirian et al., 2005; Tsang et al., 2004) and text-based banner adverts on the mobile Internet (Okazaki, 2004). These studies examine perceived value of m-marketing and the characteristics of message content, such as *entertainment*, *informativeness*, and *credibility* together with *frequency of exposure* and mobile consumer characteristics such as *attitude towards privacy* and *age* (eg: Haghirian et al., 2005; Tsang et al., 2004). Product fit and trust in the company are important factors also (Barwise and Strong, 2002; Scharl, Dickinger and Murphy 2005). Findings suggest, however, that consumers have negative attitudes towards receiving mobile advertising. Moreover, *irritation* has been a common response (Haghirian et al., 2005; Tsang et al., 2004).

Irritation can be reduced through gaining permission to send marketing communications (Haghirian et al., 2005; Tsang et al., 2004). Providing permission suggests that the consumer is prepared to experience some form of relationship with a company. However, gaining permission may be difficult. As a result, marketers may circumvent permission-giving by using a viral marketing strategy whereby product advertising is passed by email from user to user based on the premise that “the likelihood of trying a new offering rises significantly when trusted friends and acquaintances are the messengers” (Mohammed, Fisher, Jaworski *et al.*, 2002, p. 303). SMS is analogous to email in many respects and using viral m-marketing strategies through SMS has significant potential. Prior

research further suggests that incentives associated with m-marketing are significant in reducing irritation (eg: Haghirian et al., 2005; Scharl et al., 2005). Moreover, m-marketing strategies can be based on incentives in the absence of permission being given by the consumer (Tsang et al., 2004).

In summary, the discussion of the literature suggests that product fit, permission giving and incentives are important marketing conditions that can be combined in various ways to reduce consumer irritation. The limitation in the research by Haghirian et al. (2005); Okazaki, (2004) and Tsang et al. (2004) is that while they test an emotion variable, it is only *irritation*. This suggests that m-marketing only elicits this negative affect. What if the m-marketing activity is consistent with a consumer's perceptions of the relevance of the product to their needs, permission has been given and an incentive is offered? Would this elicit positive emotions rather than negative ones? We argue, therefore, that what is not readily understood is which emotions are actually elicited from consumer appraisals of m-marketing communications under the three marketing conditions: product consistency, incentives and permission-giving. If marketers can predict which emotions are likely to arise under particular combinations of these conditions, they can take steps to manage them more effectively (Ruth, Brunel and Otnes, 2002). To gain insights into this under-researched area, we specify the following hypotheses.

**H.1:** Receiving m-marketing communications under the optimum positive marketing conditions will elicit more intense positive emotions; and negative emotions elicited will be more intense when receiving m-marketing communications under the optimum negative conditions.

**H.2(a)** Giving permission to receive m-marketing communications will increase the intensity of positive emotions and reduce the intensity of negative emotions compared to not giving permission.

**H.2 (b)** Receiving m-marketing communications when a viral marketing strategy is used in place of giving permission will increase the intensity of positive emotions and reduce the intensity of negative emotions compared to when permission is given.

**H.3 (a)** Offering an incentive in the m-marketing communication will increase the intensity of positive emotions and reduce the intensity of negative emotions elicited compared to when an incentive is not offered. **H.3 (b)** Offering an incentive in the m-marketing communication when a viral marketing strategy is used in place of giving permission will increase the intensity of positive emotions and decrease the intensity of negative emotions compared to when an incentive is not offered.

## Methodology

Appraisal theory is used to test the hypotheses. This theory posits that it is how the individual appraises the situation or event in terms of its significance to a specific goal or sense of well-being that elicits the emotions, rather than the situation or event itself (Roseman, 1984). Roseman proposes five appraisal conditions that are hypothesised to elicit emotions and suggests that combinations of these conditions elicit different emotions (Roseman and Evdokas, 2004). Consumer responses to receiving m-marketing communications are tested under three of these appraisal conditions, motive, probability and agency that reflect the three marketing conditions identified earlier. These are explained as follows:

- 1) Whether or not the m-marketing communication relates to a product that is consistent with the company offering the product [motive consistent/ inconsistent]. In our study, this appraisal condition has been called **product consistent/product inconsistent [PC / PI ]**.
- 2) Whether the m-marketing communication offers an incentive or not [probability certain]. The decision to use only the probability certain condition was based on the opinion that it is difficult

to operationalise an incentive that meets a probability uncertain criteria. This appraisal condition has been called **incentive offered / incentive not offered [ IO / InO ]**.

- 3) The final appraisal condition relates to who is considered to be responsible for initiating the m-marketing contact [agency], which forms the **permission-giving** condition defined as: permission given, permission not given and the use of a viral marketing strategy [**PG / PnG / VMS**].

**Experimental design.** The three marketing conditions were combined into a 2x2x3 between-subject factorial design shown in Table 1. These conditions were tested in a Web-based survey using 12 manipulated scenarios describing a consumer’s experience with receiving an SMS-based m-marketing communication. One condition was manipulated in each scenario. The Web is considered to be appropriate for data collection in many contexts (Berry, 2005), including experimental designs (eg: Biswas and Biswas, 2004; Richards and Chandra, 2005; Senecal, Kalcynski and Nantel, 2005).

**Table 1: 2 (PC/PI) x 2 (IO/InO) x 3 (PG/PnG/VMS) factorial design**

Product consistent		Product inconsistent	
1. PC-InO-PG	4. PC-IO-PG	7 PI-InO-PG	10. PI-IO-PG
2. PC-InO-PnG	5. PC-IO-PnG	8. PI-InO-PnG	11. PI-IO-PnG
3. PC-InO-VMS	6. PI-InO-Optl	9.PI-InO-VMS	12. PI-IO-VMS

**Measures.** We used 12 positive and 12 negative emotions selected from Richins (1997) Consumption Emotions Set (CES) based on discussions with mobile phone users and academic colleagues. These terms were measured with an intensity rating scale ranging from 1 = *not at all* to 5 = *very intensely*. The study also collected demographic information.

**Sample:** An email list of 2,000 names was purchased from an Australian market research company. These individuals were sent an email invitation to participate with an embedded universal resource locator (URL) that provided direct access to the online survey. Respondents were randomly assigned to one experimental condition and completed one scenario each to avoid any carry over effects. This sampling method resulted in 374 respondents which was reduced based on cell sizes and removal of cases where there was a lack of variance in responses.

## Results

The final sample consisted of 360 participants, with 30 cases in each of the 12 cells. There were 71 percent females and 29 percent males, with 78 percent of the sample distributed fairly evenly across the 21 – 35 years age groups. Twenty six percent had 11-12 years of schooling, while 45 percent had some university education. Forty three percent were in full time work. The average length of time participants had been using a mobile phone was seven and a half years and 80 percent of the sample indicated they were medium to high users of their mobile phones.

**Statistical analysis:** The list of emotion terms was explored through one-way between-subjects ANOVAs to test which emotions were significantly different between the manipulated conditions. These ANOVAs showed that *enthusiasm, hopeful, thrilled, happy, amazed* and *astonished* together with *frustrated, angry, irritated, discontented, nervous, sad, tense*, and the negative versions of *astonished and surprised* had a significant difference in means between the manipulated cells at the  $p \leq .05$  level. *Amazed* and *astonished* were added together to form a composite positive emotion term named *surprised* ( $r = .82$ ) and *discontented, nervous, sad, tense, astonished and surprised* were summed to form a composite negative emotion term called *discontentment* ( $\alpha = .87$ ).

**Hypotheses testing:** A series of one-way, between-groups ANOVAs with planned comparisons were used to test the hypotheses. H.1 states that *receiving m-marketing communications under the optimum positive marketing conditions will elicit more intense positive emotions; and negative emotions elicited will be more intense when receiving m-marketing communications under the optimum negative conditions*. To test this hypothesis a planned comparison of the optimum positive and optimum negative marketing conditions was conducted (scenarios 4 and 8 respectively in Table 1). The results shows that *enthusiasm* was statistically different between the two scenarios ( $F [1;57.921] = 6.20, p <.05$ ) with mean differences of  $\underline{M} = 2.29 - \underline{M} = 1.93$ . However, *angry* ( $F [1; 57.757] = 27.35, p < .000$ ) and *irritated* ( $F [1; 57.993] = 7.29, p <.01$ ) were also significant with mean differences of  $\underline{M} = 2.48 - \underline{M} = 3.83$  and  $\underline{M} = 3.03 - \underline{M} = 3.86$  respectively. These results indicate that positive and negative emotions are elicited under both conditions. However, under the optimum positive marketing conditions the positive emotion is experienced more intensely and the optimum negative marketing conditions result in noticeably more intense levels of anger and irritation. **Therefore, H.1 is supported.**

Owing to space constraints, the results for H.2 and H.3 are reported for planned comparisons of scenarios under the product consistent condition only, rather than both product consistent and inconsistent conditions. Each comparison tested identical scenarios except for the condition being manipulated. H.2 (a) states that *giving permission to receive m-marketing communications will increase the intensity of positive emotions and reduce the intensity of negative emotions compared to not giving permission*. The results testing the influence of permission-given against permission not given when no incentive is offered [scenarios 1 and 2 respectively] show that *happy* is significant with mean differences of  $\underline{M}=2.07 - \underline{M}=1.55$ . However, *frustrated* ( $\underline{M}=2.00 - \underline{M}=2.90$ ), *irritated* ( $\underline{M}=2.10 - \underline{M}=3.45$ ), *anger* ( $\underline{M}=1.93 - \underline{M}=2.72$ ) and *discontentment* ( $\underline{M}=8.19 - \underline{M}=12.62$ ) are also significant, although the mean differences show that they are less intense when permission has been given. On the other hand, the results of the planned comparison to test the influence of permission-given against permission not given when an incentive is offered [scenarios 4 and 5 respectively] show that no emotions are significant. Therefore, **H.2 (a) is partially supported** as the hypothesis does hold when no incentive is offered. H.2(b) states that *receiving m-marketing communications when a viral marketing strategy is used in place of giving permission will increase the intensity of positive emotions and reduce the intensity of negative emotions compared to when permission is given*. Comparing these two conditions when no incentive is given [cells 1 and 3] *surprised* is significant and is experienced more intensely under the viral marketing condition ( $\underline{M}=1.93 - \underline{M}=2.63$ ). However, *frustrated*, *irritated*, *discontentment* and *anger* are also more intense under the viral marketing condition than when permission is given ( $\underline{M}=2.0 - \underline{M}=2.77$ , ( $\underline{M}=2.10 - \underline{M}=3.0$ ,  $\underline{M}=8.19 - \underline{M}=12.60$ ,  $\underline{M}=1.93 - \underline{M}=2.63$  respectively). A comparison of these two conditions when an incentive is given [scenarios 4 and 6] indicates that no emotions are significant. Therefore, **H.2 (b) is partially supported** since the positive emotions are more intense when the viral marketing strategy to circumvent permission giving is used with no incentive, but the negative emotions are not.

The final hypotheses test the influence of incentives on appraisals of m-marketing communications. H.3 (a) states that *offering an incentive in the m-marketing communication will increase the intensity of positive emotions and reduce the intensity of negative emotions elicited compared to when an incentive is not offered*. The results comparing the influence of not offering an incentive or offering an incentive when permission is given [scenarios 1 and 4 respectively] show that the mean difference for *surprised* is higher ( $\underline{M}=2.80 - \underline{M}=3.61$ ) when the incentive is offered. However, *frustrated*, ( $\underline{M}=2.0 - \underline{M}=3.06$ ), *irritated* ( $\underline{M}=2.10 - \underline{M}=3.03$ ), and *discontentment* ( $\underline{M}=8.19 -$

$\underline{M}=11.75$ ) are significant also and the mean differences are higher when an incentive is offered than when it is not. This is an unexpected result and may be due to promotional reactance (Kivetz, 2005). On the other hand, when comparing offering or not offering an incentive when no permission has been given [scenarios 2 and 5] the results indicate that *thrilled* ( $\underline{M}=1.41 - \underline{M}=1.97$ ) and *happy* ( $\underline{M}=.83 - \underline{M}=1.81$ ) are significant and the mean differences are higher when the incentive is offered. Moreover, no negative emotions are significant. Therefore, **H.3 (a) is partially supported** as the hypothesis does hold under certain marketing conditions. H.3(b) states that *offering an incentive in the m-marketing communication when a viral marketing strategy is used in place of giving permission will increase the intensity of positive emotions and decrease the intensity of negative emotions compared to when an incentive is not offered*. The results of the planned comparisons of the influence of incentives when the viral marketing strategy is used [scenarios 3 and 6 and scenarios 9 and 12] show that none of the emotions are significant in this analysis regardless of whether an incentive is offered or not. **Therefore, H.3(b) cannot be tested.**

### Discussion and Directions of Future Research

The results support previous research in that *irritation* is elicited in response to m-marketing communications. However, it is not the only emotion. The results show that different mixtures of emotions are elicited under combinations of the marketing conditions. In some instances this may be a mixture of positive emotions. For example: the two positive emotions *thrilled* and *happy* elicited for the influence of an incentive when no permission has been given and the product is consistent. However, the results in our study also show that appraising m-marketing communications elicits mixed emotions; that is, both positive and negative emotions of varying intensities depending on the marketing conditions. Therefore, this study contributes to marketing practice by examining consumer appraisals of m-marketing communications under different combinations of marketing conditions. The results provide insights into which emotions are likely to be elicited as a result, and how a specific marketing condition might influence their levels of intensity. Finally, the results in our study indicate the need to examine the influence of both positive and negative emotions on consumer responses to m-marketing communications, rather than one single emotion – *irritation*. The study also contributes to marketing theory as the findings support the combination of appraisal theory with Richins (1997) CES to provide a more insightful method for examining the complex and ambiguous nature of consumer responses to m-marketing communications.

A limitation when using scenarios with appraisal theory is it is how the individual appraises the situation contained in the scenario as being relevant to their own goals or sense of well-being rather than the scenario itself that determines the affect. The results should be interpreted within this limitation. However, the study does suggest a program of future research. First, research should be undertaken to more closely examine the content of specific marketing conditions and their influence on emotional responses. For example, does an incentive that is more consistent with the company offering it, or one that requires less effort to obtain elicit more intense positive emotions compared to an incentive that is less consistent and more effortful (Kivetz, 2005)? Additionally, consumer research has paid limited attention to how individuals experience mixed emotions and how these emotions might impact on marketing relationships (Ruth et al., 2002). Thus, future research is needed on how mixed emotions elicited from m-marketing activities might enhance or sever existing or potential marketing relationships. Appraisal theory offers possibilities here as well as it can be extended to examine the type of actions an individual might feel like taking in response to the elicited emotions.

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