

Rational VS Emotional Content in Mobile Advertising

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Recibido: 27/11/2014
Aceptado: 08/04/2014

Abstract

Advertising tries to find its place in the new consumer-centered paradigm for media communication. Consumers no longer are a uniform group, passive and powerless. Mobile technology has set some specific conditions that determine this particular sender-receiver relationship. In this context, there is a need for evidence about the effectiveness of traditional advertising strategies in this rather new channel. This study explores the relationship between the relevance of rational or emotional mobile advertising contents and the product's target cognitive and affective attitude components. An experiment was carried out in which two types of short messages (rational/emotional) advertising an eBook were sent to two groups of participants, and questions about its content were asked through an online questionnaire. Participants had been previously screened according their new role in the communication process. Results indicate that the cognitive processing component is significantly better rated than the affective component. Thus the rational strategy is more effective than the emotional one when talking about mobile advertising.

Keywords: Strategy, Mobile Advertising, Short Messages, Attitudes, Experimental.

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Contenido racional VS contenido emocional en la Publicidad a través del Móvil

Resumen

La publicidad intenta encontrar su lugar en el nuevo paradigma comunicativo centrado en el consumidor. Este consumidor ha dejado de ser masivo, pasivo y sin poder. La tecnología móvil ha establecido unos condicionantes específicos que determinan una relación muy particular entre emisor y receptor. En este contexto, se precisan evidencias sobre la eficacia de las tradicionales estrategias de la publicidad en este nuevo medio. Este estudio explora la relación entre la relevancia de los contenidos racionales o emocionales en la publicidad a través del móvil y su correlación con los componentes cognitivos y actitudinales del target. Se llevó a cabo un experimento en el que dos tipos de mensajes (racional/emocional) publicitando un eBook fueron enviados a dos grupos de sujetos, a los que se les preguntó sobre su contenido mediante un cuestionario online. Los sujetos habían sido filtrados anteriormente de acuerdo a su nuevo rol en el proceso comunicativo. Los resultados indican que el componente de procesamiento cognitivo es puntuado significativamente mejor que el componente afectivo. Por lo tanto, la estrategia racional es más efectiva que la emocional en la publicidad móvil.

Palabras clave: Estrategia, Publicidad Móvil, Mensajes cortos, Actitudes, Experimental.

1. Introduction

The penetration of mobile technologies in developed countries and their widespread use in emerging countries is widely known. There are more than 900 million mobile telephone owners in China, more than 300 million in the USA and the vast majority of European countries, including Spain, have more than one mobile device per citizen. In the UK, this sector's income will exceed 400 million Euros by the end of 2014. In Spain, there was a record 1743 million Euros of investment in 2008, as shown by *Microsoft Marketing*, with a volume of more than 9559 million SMS sent. In parallel, investment in SMS advertising is also growing, according to the *Mobile Marketing Association Spain (MMA)* it was of 28.6 million Euros in 2008 and reached 63.6 million Euros in 2011 (25 million more than in 2010).

The main advantages of short messages (via SMS, whats up or any other channel) as a marketing tool are its low cost and its power to reach the potential consumers. Moreover, short-message advertising does include a viral element (Cho and Hung, 2011³; Kim et al., 2008⁴) that traditional telemarketing and regular mail campaigns do not possess. In addition, the advertising possibilities are increasing due to the great proliferation of 4G mobiles, smart phones, tablets and other smart mobile devices. These factors allow advertising agencies to create carefully designed campaigns based on sending messages by the Internet and mobile devices. However, the possibility to reach individual consumers, defined by their socio-demographic and spatiotemporal

³CHO, V., and HUNG, H. (2011): «The Effectiveness of Short Message Service for Communication With Concerns of Privacy Protection and Conflict Avoidance», *Journal of Computer-Mediated Communication*, 16, 2, 250-270.

⁴ KIM, G. S., PARK, S., and OH, J. (2008): «An Examination of Factors Influencing Consumer Adoption of Short Message Service (SMS)», *Psychology & Marketing*, 25, 8, 769-786.

traits in the moment of reception (Watson et al., 2002)⁵ poses a new relationship between consumer and advertiser that can be of more interest for the consumer (Barnes and Scornavacca, 2004)⁶.

Nowadays, some «location-based-advertising» campaigns (Xu and Teo, 2009)⁷ adapt the message contents to the geographical location of the consumer. The «personalized SMS» is addressed and elaborated depending on the consumers shopping records (Zhang, Ma and Sun, 2008)⁸. There are «push» campaigns that offer a personalized design of advertising in which the consumer gives consent to the advertiser; and «pull» campaigns, where information is directly requested by the consumer. Given the fact that reception and reading of those short messages are individually-performed actions, any large-scale advertising strategy through mobile devices will be perceived as personalized by the user. Therefore, it is a unique tool that promotes the consumer's participation according to their needs, thus targets can be categorized in different groups. However, it has to be noted that this advantage has some privacy restrictions imposed by the user.

Advertising investment in mobile technology is still developing, and its research has started recently. The studies that have investigated the issue have focused on the attributes of the short messages (expressive forms and types of content) and the advertising process (sending conditions, spatiotemporal context of reception, risks, products and types of targets). In any case, experimental studies are of relevance to direct marketing campaigns through mobile phones. More specifically, some investigations have studied the relevance of the message content (Priporas and Mylona, 2008⁹; Heinonen and Strandvik, 2007¹⁰; Xu, 2006¹¹), that is, its usefulness and/or pleasantness, and the ability to accomplish the promotional functions, or branding of the product

⁵ WATSON, R. T., PITT, L. F., BERTHON, P. and ZINKHAN, G. M. (2002): «U-commerce: Expanding the universe of marketing», *Journal of the Academy of Marketing Science*, 30, 4, 333-347.

⁶ BARNES, S.J. and SCORNAVACCA, E. (2004): «Mobile marketing: the role of permission and acceptance», *International Journal of Mobile Communications*, 2, 2, 128-139.

⁷ XU, H., OH, L.B. and TEO, H.H. (2009): «Perceived effectiveness of text vs. multimedia Location-Based Advertising messaging», *International Journal of Mobile Communications*, 7, 2, 154-177.

⁸ ZHANG, P., MA, J.T. and SUN, X.R. (2008): «Intelligent delivery of interactive advertisement content», *Bell Labs Technical Journal*, 13, 143-158.

⁹ PRIPORAS, C. V. and MYLONA, I. (2008): «Mobile services: potentiality of Short Message Service as new business communication tool in attracting consumers», *International Journal of Mobile Communications*, 6, 4, 456-466.

¹⁰ HEINONEN, K., and STRANDVIK, T. (2007): «Consumer responsiveness to mobile marketing». *International Journal of Mobile Communication*, 5, 6, 603-617.

¹¹ XU, Y. (2006): «Two Tales of One Service: User Acceptance of Short Message Service (SMS) in Hong Kong and China», *Info*, 8, 1, 16-28.

(Rau et al., 2011¹²; Drossos, Giaglis and Lekakos, 2007¹³; Yunos, Zeyu, and Shim, 2003¹⁴) provided they are addressed to targets that accept mobile technology as a means of advertising and that prior consent for advertising reception about a product or brand has been given (Ran, Hao and Ji, 2009¹⁵; Zhang and Mao, 2008¹⁶).

The relevance of the short message's contents is associated with two types of advertising messages: those based on a «reason why» strategy and those based on an emotional experience. The former give information about the product or its price and are linked to an active processing while the latter try to link the product or brand to situations or positive attitudes at the emotional level, and are congruent with the brand image (Mehta and Purvis, 2006¹⁷). Historically, because of the initial dominance of rational advertising, the Cognitive Response Theory (Greenwald, 1968)¹⁸ postulated an exclusively active processing of advertising information. However, with the development of the consumer society and the appearance of new ways of advertising, there has been a growing tendency to use emotional advertising. This fact has led to new experimental theories, like the Elaboration Likelihood Model (ELM) (Petty and Cacioppo, 1986)¹⁹, which focuses on the targets' participation and ability to process advertising information. According to this model, a distinction can be made between high elaboration processing or central route, and low elaboration processing or peripheral route -also referred as «analytic cognition» and «syncretic cognition» (Chaudhuri and Buck, 1995)²⁰. The former promotes systematic learning of the rational message (Bettman, 1979)²¹ and the latter heuristic learning, based on vicarious or

¹² RAU, P-L.P., ZHANG, T., SHANG, X. and ZHOU, J. (2011): «Content relevance and delivery time of SMS advertising», *International Journal of Mobile Communications*, 9, 1, 19-38

¹³ DROSSOS, D., GIAGLIS, G.M. and LEKAKOS, G. (2007): «An empirical assessment of factors that influence the effectiveness of SMS advertising», *Proceedings of the Annual Hawaii International Conference on System Sciences*, Hawaii, United States, 58c.

¹⁴ YUNOS, M., ZEYU J., and SHIM, S. (2003): «Wireless advertising's challenges and opportunities», *Computer*, 36, 5, 30- 37.

¹⁵ RAN W., HAO X. and JI P. (2009): «Examining user behavioral response to SMS ads: Implications for the evolution of the mobile phone as a bona-fide medium», *Telematics and Informatics*, 27, 1, 32-41.

¹⁶ ZHANG, J. and MAO. E. (2008): «Understanding the acceptance of mobile SMS advertising among young Chinese consumers», *Psychology and Marketing*, 25, 8, 787-805.

¹⁷ MEHTA, A., and PURVIS, S. C. (2006): «Reconsidering Recall and Emotion in Advertising», *Journal of Advertising research*, 49-56.

¹⁸ GREENWALD, A. G. (1968): «Cognitive learning, cognitive response to persuasion, and attitude change», in A. G. Greenwald, T. C. Brock, and T. M. Ostrom (eds.), *Psychological foundations of attitudes*, New York, Academic Press, 147-170.

¹⁹ PETTY, R. E. and CACIOPPO, J. T. (1986): *Communication and Persuasion: Central and Peripheral Routes to Attitude Change*, New York, Springer-Verlag.

²⁰ CHAUDHURI, A. and BUCK, R. (1995): «Media differences in rational and emotional responses to advertising», *Journal of Broadcasting and Electronic Media*, 39, 1, 109-125.

²¹ BETTMAN, J. R. (1979): *An information processing theory of consumer choice*, Reading, MA: Addison-Wesley.

classical conditioning (Pechmann and Stewart, 1989)²². Thus, the type of products, the way of advertising, and commercial contexts might affect the effectiveness of messages that rely essentially on central or peripheral processing.

The goal of this study is to give evidence on what type of processing is more worthwhile in mobile advertising. In particular, the objective of this study is, firstly, to determine which of the two short-messages types (rational or emotional) is more effective in terms of positivity and negativity of the two components (cognitive and affective) of attitudes. Secondly, to test whether the rational message elicits the cognitive component and the emotional message elicits the affective component of attitude. To do this, the methodology consists of an experiment over the attitudes elicited by two types of messages, rational and emotional. Is there a preference between reason and emotion, information and promotion, usefulness and interest that advertising agencies should take into account in order to improve attitudes to mobile advertising?

2. Relevant content in mobile advertising

Following the Construal Level Theory (Trope and Liberman, 2010)²³, rational messages based on information (low-level affective concepts) are used when there is a great acceptance of advertising communication, especially because of a certain closeness between the consumer and the product -willingness to purchase; while the emotional or affective messages (high-level affective concepts) are addressed to more heterogeneous target audiences with no pressing need for information or product purchase. According to Wouters and Wetzel (2006)²⁴ and Eyal et al. (2008)²⁵, uncertainty is defined as the absence of objective information needed to perform a task, and it is overcome by appealing to emotions, whereas certainty is based on previous objective and useful information that can be confirmed by a rational advertising message (Brancheau and Wetherbe, 1990)²⁶. Thus, it can be argued that rational messages that use a central route of processing will possibly lead to a more certain purchase behaviour in the case of potential customers (selective targets who need the product), while emotional advertising messages that use the peripheral route of processing, and

²² PECHMANN, C., and STEWART, D. W. (1989): «The multidimensionality of persuasive communications: Theoretical and empirical foundations», in Cafferata, P. and Tybout, A. M. (eds.), *Cognitive and affective responses to advertising*, Lexington, MA: Lexington Books, 31-45.

²³ TROPE, Y. and LIBERMAN, N. (2010): «Construal-level theory of psychological distance», *Psychological Review*, 117, 2, 440-463.

²⁴ WOUTERS, J. and WETZEL, M. (2006): «Recall Effect of Short Message Service as a Complementary Marketing Communications Instrument», *Journal of Advertising Research*, 46, 2, 209-216.

²⁵ EYAL, T., SAGRISTANO, M. D., TROPE, Y., LIBERMAN, N., and CHAIKEN, S. (2008): «When values matter: Expressing values in behavioral intentions for the near vs. distant future», *Journal of Experimental Social Psychology*, 45, 35-43

²⁶ BRANCHEAU, J. C., and WETHERBE, J. C. (1990): «The Adoption of Spreadsheet Software: Testing Innovation Diffusion Theory in the Context of End-User Computing», *Information Systems Research*, 1, 115-143.

that rely on psychological conditioning (De Houwer, 2009)²⁷, will provoke some kind of affection towards the product or brand, especially in those consumers that do not have an immediate need to purchase (wider target). In any case, the new advertising model focuses on an active role of the consumer (Kirmani and Campbell, 2009)²⁸.

Advertising effectiveness, defined as the positive effect of the message on attitude and memory, depends on many factors of the advertising process. In fact, a rational message is associated with rational purchase or «high risk» products: basic need, pricey products or products with little competition, while an emotional message is associated with impulsive purchase or «low risk» products: medium-low priced products (Evans et al., 2006²⁹; Bless and Greifeneder, 2009³⁰). Although the «reason why» strategy is still used in advertising, there is a tendency to think that the associations within the peripheral route (emotional) evoked in consumers' thoughts determine purchasing decisions (Wouters and Wetzel, 2006)³¹. This is consistent with the fact that television, traditionally addressed to a heterogeneous audience, has proven to work better when peripheral route messages are used. But, what about mobile advertising? Certainly, it seems necessary to take into account the target's willingness to receive advertising and his/her perception of the advertisers' honesty (Kirmani and Campbell, 2009³²).

There are three widely accepted key factors that contribute to mobile advertising's acceptance (Bauer et al., 2005³³; Barnes and Scornavacca, 2004³⁴; Dickinger et al. 2004³⁵; Heinonen and Strandvik, 2003³⁶; Barwise and Strong, 2002³⁷): a) The user should give explicit consent to receive advertising about a product or a brand

²⁷ DE HOUWER, J. (2009): «Conditioning as a source of liking: There is nothing simple about it», In Wänke, M. (ed.), *Frontiers of Social Psychology: The Social Psychology of Consumer Behavior*, New York, Psychology Press, 151-166.

²⁸ KIRMANI, A., and CAMPBELL, M. L. (2009): «Taking the Target's Perspective: The Persuasion Knowledge Model», in Wänke, M. (ed.), *Social Psychology of Consumer Behavior*, New York, Psychology Press, 297-316.

²⁹ EVANS, M., JAMAL, A., and FOXALL, G. (2006): *Consumer Behaviour*, Chichester, John Wiley & Sons.

³⁰ BLESS, H., and GREIFENEDER, R. (2009): «Brands and successful brand extensions: A social psychology perspective on economic questions», In Wänke, M. (ed.), *The social psychology of consumer behavior*, New York: Psychology Press, 109-130

³¹ WOUTERS and WETZEL (2006), *op. cit.*

³² KIRMANI and CAMPBELL (2009), *op. cit.*

³³ BAUER, H.H., BARNES, S.J., REICHARDT, T. and NEUMANN, M.M. (2005): «Driving consumer acceptance of mobile marketing: a theoretical framework and empirical study», *Journal of Electronic Commerce Research*, 6, 3, 181-192.

³⁴ BARNES and SCORNAVACCA (2004), *op. cit.*

³⁵ Dickinger, A., Haghirian, P., Murphy, J. and Scharl, A. (2004): «An investigation and conceptual model of sms marketing», *Proceedings of the 37th Hawaii International Conference on System Sciences*, Hawaii, United States, 1-10.

³⁶ HEINONEN and STRANDVIK (2003), *op. cit.*

³⁷ BARWISE, P. and STRONG, C. (2002): «Permission-based mobile advertising», *Journal of Interactive Marketing*, 16, 14-24.

(Smutkupt, Krairit and Esichaikul, 2012³⁸; Van der Waldt et al., 2009³⁹), and should be able to cancel it at any time (Drossos, Giaglis and Lekakos, 2007⁴⁰); b) There should be a providers' *wireless* control service and transparency in obtaining personal data (Carrol et al., 2007⁴¹), and c) The brand should be trusted and should have a good reputation, as it is an invasive type of advertising. In addition, other factors such as usefulness and ease of use have also been suggested as key variables (Chen and Jin, 2010⁴²). Xu and Teo (2009)⁴³ and Muk (2007)⁴⁴ define two types of values involved in online advertising: Information and entertainment. The former contributes to a useful and rational advertisement and the latter, to an aesthetic, amusing and emotional one. Considering all these factors, mobile advertising seems a very private medium for advertising, so the main hypothesis of this study is:

H: «Mobile advertising mainly involves central processing; therefore a rational short-message will be more effective than an emotional SMS».

Thus it is expected that mobile advertising will work more effectively through a rational message, which is based on useful information and relevant content as opposed to an emotional content (Drossos et al., 2007)⁴⁵. The present study will explore to what extent this new advertising medium predetermines the efficacy of the type of short message. In addition, this study will also determine the correlations between the content and the attitudinal components.

Attitudes have three components: cognitive, affective and behavioural. Both the cognitive and the affective can lead to purchase intention or not (behavioural component). The Theory of Reasoned Action (Fishbein and Ajzen, 1975)⁴⁶ claims that the way individuals behave depends directly on their attitude towards that particular

³⁸ SMUTKUPT, P., KRAIRIT, D. and ESICHAIKUL, V. (2012): «An empirical study of the effects of permission on mobile advertising effectiveness», PICMET '10 - Portland International Center for Management of Engineering and Technology, Proceedings - Technology Management for Global Economic Growth, Portland, United States.

³⁹ VAN DER WALDT, D.L.R., REBELLO, T.M. and BROWN, W.J. (2009): «Attitudes of young consumers towards SMS advertising». *African Journal of Business Management*, 3, 9, 444-452.

⁴⁰ DROSSOS, GIAGLIS and LEKAKOS (2007), *op. cit.*

⁴¹ CARROLL, A., BARNES, S.J., SCORNAVACCA, E. and FLETCHER, K. (2007): «Consumer perceptions and attitudes towards SMS advertising: recent evidence from New Zealand», *International Journal of Advertising*, 26, 79-98.

⁴² CHEN, Y. and JIN, X. (2010): «Research in influencing factors of consumer willingness to accept mobile SMS advertising», *International Conference on Management of e-Commerce and e-Government, ICMecG 2010*.

⁴³ XU and TEO (2009), *op. cit.*

⁴⁴ MUK, A. (2007): «Consumers' intentions to opt in to SMS advertising», *International Journal of Advertising*, 26, 2, 177-198.

⁴⁵ DROSSOS et al. (2007), *op. cit.*

⁴⁶ FISHBEIN, M., and AJZEN, I. (1975): *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*, Reading, MA: Addison-Wesley.

behaviour, that is, the sum of beliefs, evaluation and subjective rules or opinions about it (for instance, the behaviour of purchasing a product or not). Therefore it is of interest to assess whether a rational or an emotional short message advertisement will activate the cognitive or the affective components or attitudes, as these will influence purchase intention in the long term (Ko et al., 2005⁴⁷; Li and Zhang, 2002⁴⁸). It has been traditionally assumed that the high elaboration or central route leads to higher recall whereas an emotional content is related to implicit recall. According to Drossos and Fouskas (2010)⁴⁹ the cognitive component processing is encouraged by content relevance, it generates conscious reasoning and as a result, a logical and immediate purchase, whereas the affective component is motivated by emotion, it provokes an unconscious or implicit affection towards the message, product and brand and, as a result, a delayed purchase (Dijksterhuis et al., 2009)⁵⁰. Therefore, the previous general hypothesis is complemented by the following sub-hypotheses: SH1: «A rational SMS preferentially activates the cognitive component of attitude». SH2: «An emotional SMS activates the affective component of attitude but to a lower degree».

The experimental study of short-message mobile advertising offers many possibilities in methodological terms as the manipulation of the message is simple and realistic, it allows controlling many variables, and the conditions of reception can be easily reproduced. Thus, an experiment can be designed that takes into account the following factors: the type of product and its attributes, the type of target audience and their needs, and the general context of reception. Firstly, the advertised product must be neutral, with a medium price, and must be associated with reasons for purchasing, although it can be linked to a non-reasoned purchase as well (Dijksterhuis et al., 2009). According to Rau et al. (2011)⁵¹, there are three levels of purchase deliberation: high deliberation (e.g. a digital camera), medium deliberation (e.g. a book), or low deliberation (e.g. yogurts). In the present study, a Kindle eBook from Amazon was chosen. On the one hand, the purchase of technological products is associated with the rational component as attributes such as capacity, size, brand and price are important factors, but also with the emotional component, as there is a certain irrational need to buy new gadgets, especially among young consumers. On the other hand, books are associated with emotional purchase because it depends on the taste for an author or a

⁴⁷ KO, H., CHO, C. H. and ROBERTS, S.M. (2005): «Internet uses and gratifications: a structural equation model of interactive advertising», *Journal of Advertising*, 34, 57–70.

⁴⁸ LI, N. and ZHANG, P. (2002): «Consumer online shopping attitudes and behavior: an assessment of research'», in Ramsower, R. and Windsor, J. (EDS.), 8th Americas Conference on Information Systems, Dallas, United States, 508–517.

⁴⁹ DROSSOS, D.A. and FOUSKAS, K.G. (2010): «Mobile Advertising: Product involvement and its effect on intention to purchase», ICMB and GMR 2010 - 2010 9th International Conference on Mobile Business/2010 9th Global Mobility Roundtable, Athens, Greece.

⁵⁰ DIJKSTERHUIS, A., VAN BAAREN, B., BONGERS, K., BOS, M. and MATTHIJS, L. (2009): «The rational unconscious: Conscious versus unconscious thought in complex consumer choice», in Wänke, M. (ed.), *Social Psychology of Consumer Behavior*, New York, Psychology Press, 89 -108

⁵¹ RAU et al. (2011), *Op.Cit.*

story, although price also implies some reasoning in purchase. Secondly, the target of this kind of product is wide, but is mainly young and educated (University students). Thirdly, the experiment must create a context in which the natural conditions of a campaign are reproduced (Wouters and Wetzels, 2006)⁵². In this sense, Kindle Spain appeared in early December 2011 and they initiated a Christmas campaign in which mobile advertising acted as a complementary bonus addressed to private use or as a Christmas present. Finally, and regarding content, it is important to adopt concise but also amusing, interactive and useful language (Dickinger et al., 2004⁵³; Jelassi and Enders, 2004⁵⁴). Hence, the central route will consist of giving objective, useful and precise information about the Kindle product and the peripheral route on giving affective, emotional and amusing information about the product, resulting in:

1. Rational short-message: gives information about the product usefulness, in terms of innovation (its capacity, speed and design), special offer (price) or novelty.
2. Emotional short-message: links the product, brand or its use to positive values associated with styles, context (Christmas) or ideals. It is a version of brand image advertising: a funny and affective message.

3. Methods

3.1. Participants

A total of 24 (19 females and 5 males) undergraduate students from different faculties of the Universidad Autónoma de Barcelona, aged between 18 and 22 (M=21.71, SD=3.46) took part in the study. It is a convenient sample that consists of students from literature, psychology and communication degrees. Participants guaranteed the homogeneity of the sample as they all had the same high educational level, interest in reading, and were users and followers of new technologies. After screening the sample of students by their availability to receive advertising in their mobile phone, selected participants were randomly assigned to two homogeneous experimental groups (12 participants each). Real SMS reception conditions were reproduced in order to test the effect of the two types of messages.

3.2. Materials

The rational message was based on the product's attributes and the emotional message was based on the shopping context. Regarding wording, the rational message used literal and logical language in order to provide purchase security, and the emotional

⁵² WOUTERS and WETZELS (2006), *Op.Cit.*

⁵³ DICKINGER et al. (2004), *Op.Cit.*

⁵⁴ JELASSI, T. and ENDERS, A. (2004): «Leveraging wireless technology for mobile advertising», 12th European Conference on Information Systems, Turku, Finland, 1-10.

message was based on «dreams and fantasy», using symbolic and alliterative language (Leonidou and Leonidou, 2009)⁵⁵.

These are the two versions of the sent SMS, limited to 160 characters:

1. Rational SMS: «This week in AMAZON.ES, eBook Kindle Wi-Fi for ONLY 95€: thinner, with electronic ink, anti-reflective, downloads in 1 minute, 1 month battery life...»
2. Emotional SMS: «Enjoy a wonderful Christmas break with the big heroes of universal literature: Take them with you in the eBook Kindle Wi-Fi, in AMAZON.ES».

3.3. Design and Procedure

The study consisted of three phases. First, a screening questionnaire was administered with a Likert scale ranging from -3 to +3. The screening criteria were:

- To have a mobile telephone, no technology phobia and to be a SMS communication user
- To be a regular consumer of technology products such as DVD, CD, pen drives, eBooks or video games (targets must have purchased any of these products in the last 12 months)
- To have purchased any of these products in popular Spanish stores such as Amazon, FNAC, El Corte Inglés, Mediamarkt, APP Informática.
- To have a positive attitude towards advertising and to allow reception of advertising SMS about a product of his/her interest

Those who were not technology consumers, with an aversion towards mobiles and/or advertising and that had a negative disposition to receive advertising of any technology product from Amazon stores were not included in the sample (mean scores of 0 or less). Participants' telephone numbers were required for research purposes and eBook technology and Amazon were hidden among other technologies and brands.

Second, two to five days after filling the screening questionnaire, the two types of short messages were sent to the 24 remaining participants (12 in each group). Two hours after sending the text message, an email was sent to participants with a link to an online questionnaire. The email contained a brief explanation in which experimenters identified themselves as the SMS sender and asked participants to answer a few questions about the attitude elicited in the moment of the short-message reception, when they still did not know that it was just for research purposes. The impact of each advertisement on the two attitudinal components was measured using a scale ranging from -3 (negative attitude) to +3 (positive attitude) in each group of participants:

⁵⁵ LEONIDOU, L.C. and LEONIDOU, C. N. (2009): «Rational Versus Emotional Appeals in Newspaper Advertising: Copy, Art, and Layout Differences», *Journal of Promotion Management*, 15, 522–546.

a) Cognitive Component:

1. The way the product is promoted is appropriate (-3: not appropriate, +3: very appropriate)
2. The source of the SMS advertisement is important to me (-3: not important, +3: very important)
3. The SMS usefulness (-3: not useful, +3: very useful)
4. The special offer or the product's price (-3: not worthwhile, +3: very worthwhile)
5. The SMS is a good source of information (-3: not a good source, +3: very good source)
6. The SMS gives relevant information about the product (-3: not relevant, +3: very relevant)
7. The SMS's accessibility or ease of use (-3: not accessible/easy, +3: very accessible/easy)

b) Affective Component:

1. How much did you like the SMS? (-3: did not like it, +3: liked it very much)
2. How do you assess the style of the SMS? (-3: did not like it, +3: liked it very much)
3. Was the SMS fun/amusing? (-3: not fun/amusing, +3: very fun/amusing)
4. Was the SMS interesting? (-3: boring, +3: interesting)
5. Was the SMS attractive? (-3: not attractive, +3: very attractive)

Questions of the two components were randomly mixed on the questionnaire and validation questions were included as a control for response coherence.

As additional information, the online questionnaire included 2 items about purchase intention (behavioural component):

1. Would you buy this or a similar product if advertised by mobile advertising? (-3 to +3)
2. Purchase intention of the advertised product (-3 to +3)

Complementary data regarding recall of the message's information were also registered. Participants who received a rational message were asked whether they could recall the price, the product's attributes, its name and brand. Participants who received an emotional message were only asked about name and brand recall.

In summary, there was a between-subjects independent variable, type of advertisement, with 2 levels (rational and emotional), and a within-subjects independent variable, attitudinal component, with 2 levels (cognitive and affective), resulting in a 2x2 factorial mixed design.

4. Results

As can be seen in Figure 1, the items that were more positively rated belong to the cognitive component, especially in the group of participants who received a rational advertisement. Within the rational component, the item «the way the product is promoted is appropriate» was significantly better rated by participants who received a rational advertisement ($t(11)=2.59$; $p=.02$). On the other hand, the items that were more negatively judged were those that belong to the affective component, rated by participants who received an emotional advertisement. Within this component, «how do you assess the style of the short message?» and «was the message attractive?» were significantly more negatively rated by this group of participants compared to the group that received a rational advertisement ($t(11)=2.48$; $p=.03$ and $t(11)=2.43$; $p=.02$, respectively).

It is worth noting that the best rated items were the source of the advertisement (in both groups of participants) and the accessibility or ease of use (especially by the group who received a rational advertisement), and the items with the lowest ratings were how much they liked the advertisement and how fun/amusing they found it (especially by the group who received an emotional advertisement). However, there were no significant differences as a function of the type of advertisement for these items.

Fig 1: Descriptive statistics of each item of the two components, as a function of type of advertisement. Own source.

ITEM	RATIONAL ADVERTISEMENT				EMOTIONAL ADVERTISEMENT				Sign.
	MEAN	SD	MIN	MAX	MEAN	SD	MIN	MAX	
Cognitive Component									
1	1	1,04	-1	2	-0,75	1,76	-3	1	$P= 0,02^*$
2	2,58	1,16	-1	3	2,33	1,15	0	3	ns
3	0,5	1,57	-3	3	,00	1,59	-3	2	ns
4	0,42	1,38	-3	2	,00	1,76	-3	3	ns
5	0,17	1,69	-3	2	-0,58	1,68	-3	2	ns
6	-0,25	2,14	-3	3	-0,42	2,02	-3	2	ns
7	1,00	1,35	-1	3	,00	1,54	-3	2	ns
Mean	0,77	1,08	-1,42	2,29	0,08	1,33	-2,29	2	
Affective Component									
1	-0,17	1,8	-3	2	-1,5	1,62	-3	1	ns
2	0,75	1,14	-1	3	-1,06	1,78	-3	1	$p= 0,03^*$
3	-0,25	1,86	-3	2	-1,25	1,54	-3	1	ns
4	-0,25	0,87	-1	2	-0,75	1,48	-3	1	ns
5	-0,5	1,45	-3	2	-0,92	1,62	-3	2	$p= 0,03^*$
Mean	0,22	1,13	-1,6	2	-1,1	1,32	-3	0,6	
Total Mean	0,5	1,11	-1,51	2,15	-0,51	1,33	-2,65	1,3	

This figure's numbers refer to the following items. The cognitive component: 1) The way the product is promoted is appropriate, 2) The source of the SMS advertisement is important to me, 3) The SMS usefulness, 4) The special offer or the product's price, 5) The SMS is a good source of information, 6) The SMS gives relevant information about the product, 7) The SMS's accessibility or ease of use. While the affective component: 1) How much did you like the SMS, 2) How do you assess the style of the SMS?, 3) Was the SMS fun/amusing?, 4) Was the SMS interesting?, 5) Was the SMS attractive?

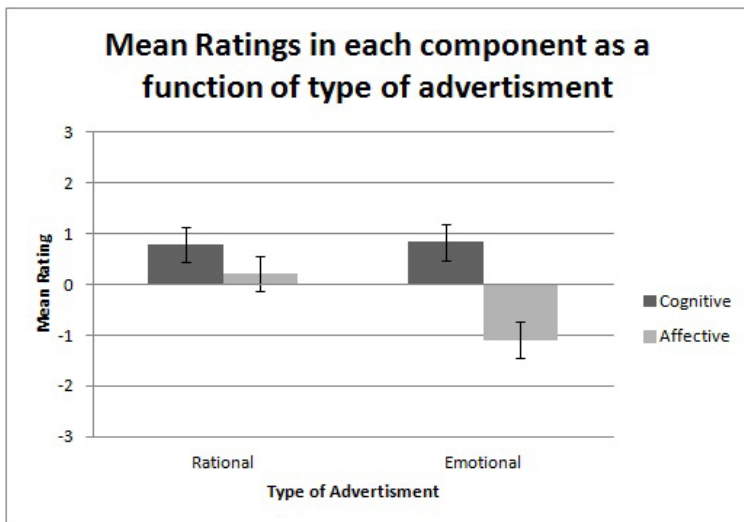
A two-way mixed analysis of variance (ANOVA) was conducted to compare the mean ratings of each component as a function of the type of advertisement.

Levene's tests confirmed that variances were homogeneous between groups. There was a significant main effect of advertisement $F(1,22) = 4.356, MSE = 2.775, p = .04,$ partial $\eta^2 = .17,$ showing that the rational advertisement ($M = .50, SD = 1.11$) resulted in higher (more positive) ratings than the emotional advertisement ($M = -.51; SD = 1.33$).

There was also a significant main effect of the within-subjects factor, component, $F(1,22) = 44.726, MSE = .203, p < .001,$ partial $\eta^2 = .67,$ which showed that the cognitive component ($M = .43, SD = 1.23$) resulted in higher ratings than the affective component ($M = -.44; SD = 1.38$).

Moreover, these effects were mediated by the interaction between type of advertisement and component $F(1,22) = 5.789, p = .03,$ partial $\eta^2 = .21.$ Further analyses revealed that this interaction was only significant within the affective component ($p = .02,$ see Figure 2).

Fig. 2: Mean ratings (Standard Error) in each component as a function of type of advertisement. Own source.



Additional analyses were carried out to determine the effect on the behavioural component and on the recall of the SMS. The ratings of the two questions regarding the behavioral component were low, and did not differ as a function of the type of advertisement (rational advertisement: $M=-1.21$, $SD=1.45$; emotional advertisement: $M=-1.67$, $SD=1.42$; $t(11)=.729$; $p=.48$). Participants recalled the name of the product (rational: 25%; emotional: 41.7% of participants) and the brand (rational: 8.3%; emotional: 33.3%). Although the price and other attributes of the product were not included in the emotional advertisement, they were recalled by 33.3% and 33.3% (respectively) of participants who received a rational advertisement.

5. Discussion

The main goal of the experiment was to assess the effectiveness of two types of message's content. Results showed that the rational message had a more positive effect on attitude than the emotional message. The rational message highly and positively activated the cognitive component, and also the affective component, although to a lesser extent. The emotional message activated the cognitive component of attitude as well but at the same time it showed a considerably negative effect on the affective component, which seems to be relevant only as a result of the cognitive coherence that operates through the central route. Thus, the hypotheses based on the SMS Model of Attitudinal Activation have been partially confirmed. As can be seen in the modified model, the cognitive component seems to have a major role in SMS advertising.

Specifically, participants who received a rational message rated the item «the way the message is promoted» significantly higher than the other group whereas participants who received an emotional message rated «message attractiveness» and «style» significantly lower. «Accessibility and ease of use» was also positively rated by the rational message receivers, and also by the emotional message receivers but to a lower degree. Other items such as «how much they liked the message» and «how fun the message was» were highly negatively rated by the two groups, especially by the group of participants that received an emotional message. Therefore, participants seem to value advertisements mainly by the information they provide. In the same line, the affective component is only activated (although to a low degree) as a result of the perceived advertiser honesty through a rational message, as it gives relevant information and does not attempt to manipulate the target's attitude. Only the advertising source was equally positively rated by both groups.

Besides the partial confirmation of the hypotheses, it has to be noted that, as expected, neither of the two messages had an impact on the behavioural component. This component of attitude depends on many other marketing factors such as price, distribution and a long-lasting campaign. Also, recall of the brand and name of the product was higher in those participants who received an emotional message which is consistent with the fact that its aim is to enhance brand image and not promote the product's attributes.

Therefore, it seems that perceived honesty and usefulness of the message are the key factors in positively affecting attitudes in mobile advertising, without completely disregarding the involvement of emotions. Firstly, honesty has to do with the explicit consent to receive advertising as proven by most studies on this medium (Smutkupt et al., 2010⁵⁶; Van der Waldt et al., 2009)⁵⁷. Secondly, because of the reception demands, advertising should provide useful information about the product, such as its price and features. These are essentially cognitive aspects, and as reflected in the model, the rational strategy seems to be the most appropriate for advertising on this medium nowadays.

6. Conclusions

Mobile advertising implies a very personal relationship with the consumer, who needs to feel the announcer is being honest. This means previous consent is needed and the content of messages should be relevant and useful. This study has confirmed that in the present day mobile advertising should give information about the product and use central or cognitive processing. This does not imply a return to the old ways of television advertising based on very naïve ways of giving information, but a step forward from the current emotionally-based advertising in television. Only honest and relevant information is accepted when advertising through personal channels. This evidence is very relevant to announcers and advertisers given the tendency toward personalization of all media. Advertising is getting more personalized and under consumers' control. The Internet, with its different ways of accessing information -chats, message boards, social networks etc. - and also interactive television are aiming to use an advertising strategy that is based on requested information about the product by the consumer. If the consumer is looking for an aesthetic or amusing experience the advertiser can appeal to emotions. However, the actual affective impact of an explicit advertising message arises when it also gives important information and when the user perceives that he/she is being given a fair treatment.

Needless to say, within the framework of the Construal Level Theory (Trope and Liberman, 2010)⁵⁸, this conclusion is dependent on the type of brand, product and receiver. In this sense, the brand loyalty can make emotional messages in mobile advertising acceptable, though only in very few exceptions and under same permission-base conditions. In addition, results suggest that in order to design a promotional campaign through mobile advertising and increase purchase intention (behavioural component), the consumer should not be overloaded with information as the recall and brand prestige could be negatively affected. The conclusion is that advertisements should not be totally emotional or totally rational, so a mixed content that gives useful information, shows honesty about achieving the agreement between advertiser and consumer, does not overload him/her with information, and gives importance to the brand, would be more appropriate. As said, it depends on the strategic aims of the

⁵⁶ SMUTKUPT et al. (2010), *Op Cit.*

⁵⁷ VAN DER WALDT et al. (2009), *Op Cit.*

⁵⁸ TROPE and LIBERMAN (2010), *Op Cit.*

advertising campaign, type of product, historical position of the brand, etc. For instance, established brands, whose products are well known and are perceived as quality products, should use a mixed strategy (rational/emotional) whereas a less established brand, with known products but without a consistent brand image, should opt for an emotional strategy and an exclusively rational strategy would be recommended for a new brand, with unknown products (Nantel and Sekhavat, 2008)⁵⁹.

This study has some limitations. Mainly, one could argue that the results are conditioned by the small number of participants. However, it must be taken into account that the sample was selected according to its adequacy for the research purposes. A third of the participants were excluded because they did not give prior consent to receive any kind of advertising, and only those who showed a real predisposition to receive a short-message to his/her mobile phone, from Amazon, and about a Kindle product -among others- were included (even though they did not explicitly know that the study included the reception of a message, which can affect the source's honesty). So, although the size of sample makes those results quite exploratory, the fact that real reception conditions were reproduced with the aim of making the participants believe that the campaign was actually real, gives relevance to these conclusions.

For future research, it is recommended to make use of real user lists from big companies, so this same experiment can be replicated with brand or product-consumer groupings. Likewise, social groupings can determine the way consumers connect with brands, companies, advertising and technology. In addition, it is worth noting that because of the changing nature of the socio cultural use of the different communication platforms, research data should be updated regularly.

Whatever the case may be, the implementation of mobile advertising as a new tool for targeting customers under the conditions shown in this paper is strongly recommended. For instance, any business can develop a database of the records of its members' and/or customers' purchases. This way it is possible to have an accurate profile of the customer's interests and get their permission to –«inform»- them of new offers/products/services, which seems to be a new way to build loyalty towards a business, brand or product.

References

- BARNES, S.J. and SCORNAVACCA, E. (2004): «Mobile marketing: the role of permission and acceptance», *International Journal of Mobile Communications*, 2, 2, 128-139.
- BARWISE, P. and STRONG, C. (2002): «Permission-based mobile advertising», *Journal of Interactive Marketing*, 16, 14-24.

⁵⁹ NANTEL, J. and SEKHAVAT, Y. (2008): «The impact of SMS Advertising on members of a Virtual Communicaty», *Journal of Advertising Research*, 48, 3, 363-374.

- BAUER, H.H., BARNES, S.J., REICHARDT, T. and NEUMANN, M.M. (2005): «Driving consumer acceptance of mobile marketing: a theoretical framework and empirical study», *Journal of Electronic Commerce Research*, 6, 3, 181-192.
- BETTMAN, J. R. (1979): *An information processing theory of consumer choice*, Reading, MA: Addison-Wesley.
- BLESS, H., and GREIFENEDER, R. (2009): «Brands and successful brand extensions: A social psychology perspective on economic questions», In Wänke, M. (ed.), *The social psychology of consumer behavior*, New York: Psychology Press, 109-130
- BRANCHEAU, J. C., and WETHERBE, J. C. (1990): «The Adoption of Spreadsheet Software: Testing Innovation Diffusion Theory in the Context of End-User Computing», *Information Systems Research*, 1, 115-143.
- CARROLL, A., BARNES, S.J., SCORNAVACCA, E. and FLETCHER, K. (2007): «Consumer perceptions and attitudes towards SMS advertising: recent evidence from New Zealand», *International Journal of Advertising*, 26, 79-98.
- CHAUDHURI, A. and BUCK, R. (1995): «Media differences in rational and emotional responses to advertising», *Journal of Broadcasting and Electronic Media*, 39, 1, 109-125.
- CHEN, Y. and JIN, X. (2010): «Research in influencing factors of consumer willingness to accept mobile SMS advertising», International Conference on Management of e-Commerce and e-Government, ICMcCG 2010.
- CHO, V., and HUNG, H. (2011): «The Effectiveness of Short Message Service for Communication With Concerns of Privacy Protection and Conflict Avoidance», *Journal of Computer-Mediated Communication*, 16, 2, 250-270.
- COURSARIS, C.K., SUNG, J. and SWIERENGA, S.J. (2010): «Effects of message characteristics, age, and gender on perceptions of mobile advertising - An empirical investigation among college students», *ICMB and GMR 9th International Conference on Mobile Business/2010 9th Global Mobility Roundtable*, Athens, Greece.
- DE HOUWER, J. (2009): «Conditioning as a source of liking: There is nothing simple about it», In Wänke, M. (ed.), *Frontiers of Social Psychology: The Social Psychology of Consumer Behavior*, New York, Psychology Press, 151-166.
- DICKINGER, A., HAGHIRIAN, P., MURPHY, J. and SCHARL, A. (2004): «An investigation and conceptual model of sms marketing», *Proceedings of the 37th Hawaii International Conference on System Sciences*, Hawaii, United States, 1-10,
- DIJKSTERHUIS, A., VAN BAAREN, B., BONGERS, K., BOS, M. and MATTHIJS, L. (2009): «The rational unconscious: Conscious versus unconscious thought in complex consumer choice», in Wänke, M. (ed.), *Social Psychology of Consumer Behavior*, New York, Psychology Press, 89 -108
- DROSSOS, D., GIAGLIS, G.M. and LEKAKOS, G. (2007): «An empirical assessment of factors that influence the effectiveness of SMS advertising», *Proceedings of the Annual Hawaii International Conference on System Sciences*, Hawaii, United States, 58c.
- DROSSOS, D.A. and FOUSKAS, K.G. (2010): «Mobile Advertising: Product involvement and its effect on intention to purchase», *ICMB and GMR 2010- 2010 9th International Conference on Mobile Business/2010 9th Global Mobility Roundtable*, Athens, Greece.

- EVANS, M., JAMAL, A., and FOXALL, G. (2006): *Consumer Behaviour*, Chichester, John Wiley & Sons.
- EYAL, T., SAGRISTANO, M. D., TROPE, Y., LIBERMAN, N., and CHAIKEN, S. (2008): «When values matter: Expressing values in behavioral intentions for the near vs. distant future», *Journal of Experimental Social Psychology*, 45, 35-43.
- FISHBEIN, M., and AJZEN, I. (1975): *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*, Reading, MA: Addison-Wesley.
- GREENWALD, A. G. (1968): «Cognitive learning, cognitive response to persuasion, and attitude change», in A. G. Greenwald, T. C. Brock, and T. M. Ostrom (eds.), *Psychological foundations of attitudes*, New York, Academic Press, 147-170.
- HEINONEN, K., and STRANDVIK, T. (2007): «Consumer responsiveness to mobile marketing». *International Journal of Mobile Communication*, 5, 6, 603-617.
- JELASSI, T. and ENDERS, A. (2004): «Leveraging wireless technology for mobile advertising», *12th European Conference on Information Systems*, Turku, Finland, 1-10.
- KIM, G. S., PARK, S., and OH, J. (2008): «An Examination of Factors Influencing Consumer Adoption of Short Message Service (SMS)», *Psychology & Marketing*, 25, 8, 769-786.
- KIRMANI, A., and CAMPBELL, M. L. (2009): «Taking the Target's Perspective: The Persuasion Knowledge Model», in Wänke, M. (ed.), *Social Psychology of Consumer Behavior*, New York, Psychology Press, 297-316.
- KO, H., CHO, C. H. and ROBERTS, S.M. (2005): «Internet uses and gratifications: a structural equation model of interactive advertising», *Journal of Advertising*, 34, 57-70.
- LEONIDOU, L.C. and LEONIDOU, C. N. (2009): «Rational Versus Emotional Appeals in Newspaper Advertising: Copy, Art, and Layout Differences», *Journal of Promotion Management*, 15, 522-546.
- LI, N. and ZHANG, P. (2002): «Consumer online shopping attitudes and behavior: an assessment of research», in Ramsower, R. and Windsor, J. (EDS.), *8th Americas Conference on Information Systems*, Dallas, United States, 508-517.
- MEHTA, A., and PURVIS, S. C. (2006): «Reconsidering Recall and Emotion in Advertising», *Journal of Advertising research*, 49-56.
- MUK, A. (2007): «Consumers' intentions to opt in to SMS advertising», *International Journal of Advertising*, 26, 2, 177-198.
- NANTEL, J. and SEKHAVAT, Y. (2008): «The impact of SMS Advertising on members of a Virtual Community», *Journal of Advertising Research*, 48, 3, 363-374.
- PECHMANN, C., and STEWART, D. W. (1989): «The multidimensionality of persuasive communications: Theoretical and empirical foundations», in Cafferata, P. and Tybout, A. M. (eds.), *Cognitive and affective responses to advertising*, Lexington, MA: Lexington Books, 31-45.
- PETTY, R. E. and CACIOPPO, J. T. (1986): *Communication and Persuasion: Central and Peripheral Routes to Attitude Change*, New York, Springer-Verlag.
- PRIPORAS, C. V. and MYLONA, I. (2008): «Mobile services: potentiality of Short Message Service as new business communication tool in attracting consumers», *International Journal of Mobile Communications*, 6, 4, 456-466.

- RAN W., HAO X. and JI P. (2009): «Examining user behavioral response to SMS ads: Implications for the evolution of the mobile phone as a bona-fide medium», *Telematics and Informatics*, 27, 1, 32-41.
- RAU, P-L.P., ZHANG, T., SHANG, X. and ZHOU, J. (2011): «Content relevance and delivery time of SMS advertising», *International Journal of Mobile Communications*, 9, 1, 19-38.
- SMUTKUPT, P., KRAIRIT, D. and ESICHAIKUL, V. (2012): «An empirical study of the effects of permission on mobile advertising effectiveness», *PICMET '10 - Portland International Center for Management of Engineering and Technology, Proceedings - Technology Management for Global Economic Growth*, Portland, United States.
- TROPE, Y. and LIBERMAN, N. (2010): «Construal-level theory of psychological distance», *Psychological Review*, 117, 2, 440-463.
- VAN DER WALDT, D.L.R., REBELLO, T.M. and BROWN, W.J. (2009): «Attitudes of young consumers towards SMS advertising». *African Journal of Business Management*, 3, 9, 444-452.
- WATSON, R. T., PITT, L. F., BERTHON, P. and ZINKHAN, G. M. (2002): «U-commerce: Expanding the universe of marketing», *Journal of the Academy of Marketing Science*, 30, 4, 333-347.
- WOUTERS, J. and WETZEL, M. (2006): «Recall Effect of Short Message Service as a Complementary Marketing Communications Instrument», *Journal of Advertising Research*, 46, 2, 209-216.
- XU, Y. (2006): «Two Tales of One Service: User Acceptance of Short Message Service (SMS) in Hong Kong and China», *Info*, 8, 1, 16-28.
- XU, H., OH, L.B. and TEO, H.H. (2009): «Perceived effectiveness of text vs. multimedia Location-Based Advertising messaging», *International Journal of Mobile Communications*, 7, 2, 154-177.
- YUNOS, M., ZEYU J., and SHIM, S. (2003): «Wireless advertising's challenges and opportunities», *Computer*, 36, 5, 30- 37.
- ZHANG, P., MA, J.T. and SUN, X.R. (2008): «Intelligent delivery of interactive advertisement content», *Bell Labs Technical Journal*, 13, 143-158.
- ZHANG, J. and MAO. E. (2008): «Understanding the acceptance of mobile SMS advertising among young Chinese consumers», *Psychology and Marketing*, 25, 8, 787-805.