

This file was downloaded from BI Open Archive, the institutional repository (open access) at BI Norwegian Business School <http://brage.bibsys.no/bi>.

It contains the accepted and peer reviewed manuscript to the article cited below. It may contain minor differences from the journal's pdf version.

Han, D. E., McClelland, A., & Furnham, A. (2017). The Effects of Programme Context on Memory for Humorous Television Commercials. *Applied Cognitive Psychology*, 31(6), 586-592.
doi:10.1002/acp.3354

Copyright policy of *Wiley*, the publisher of this journal:

Authors are permitted to self-archive the peer-reviewed (but not final) version of a contribution on the contributor's personal website, in the contributor's institutional repository or archive, subject to an embargo period of 24 months for social science and humanities (SSH) journals and 12 months for scientific, technical, and medical (STM) journals following publication of the final contribution.

<http://olabout.wiley.com/WileyCDA/Section/id-817011.html>

The effects of programme context on memory for humorous television commercials.

Da Eun Han¹, Alastair McClelland² & Adrian Furnham^{1,3}

¹Department of Clinical, Educational, and Health Psychology, University College London, London, UK

²Department of Experimental Psychology, University College London, London, UK

³Norwegian Business School (BI), Nydalveien, Oslo, Norway

Corresponding author: a.furnham@ucl.ac.uk

Abstract

This study investigated the effects of programme context on memory for humorous television advertisements in South Korean participants. Humorous and non-humorous Korean advertisements were embedded within two programme contexts; humorous and non-humorous. When the programme ratings of humour, enjoyment and involvement were higher, unaided recall was poorer. In addition, unaided recall of the advertisements was better when they were embedded within a non-humorous programme. However, there was no significant programme-advertisement interaction effect. Overall, both free and cued-recall were higher for humorous advertisements than for the non-humorous advertisements. The findings are discussed in terms of cultural differences and changes in television programmes and advertising over time.

Key words: television advertisement, memory, context effects, cross-cultural studies, South Korea

Introduction

Many studies have investigated memory for advertisements, particularly if they are associated with sex (Furnham & Mainaud, 2011; King, McClelland, & Furnham, 2015; Leka, McClelland, & Furnham, A.2013). It has been established that many factors such as the type of advertisement, programme context and individual differences in viewers play an important role with respect to the memory for, and effectiveness of, television commercials (Furnham, Gunter & Walsh, 1998). Indeed Mehta and Purvis (2006) claimed that there is strong empirical evidence to demonstrate that recall can be a valid measure of advertising effectiveness.

The effectiveness of humorous television commercials

An important factor that influences the effectiveness of a television advertisement is the emotional arousal when watching the commercial. Humour has been intensively studied and found to be one of the important factors for the effective advertisements. ZenithOptimedia (2012) showed that companies spend an approximate US\$119 billion on humorous advertisements, indicating that the research on the effectiveness of humorous advertisements is warranted.

Stewart and Furse (1986) found over thirty years ago that humour has a positive effect on attention in television commercials. The process of guiding attention is said to govern which stimuli will be attended to, and memory traces are thought to be formed or strengthened as a function of the length and depth of attention given to a particular stimulus. Zaltman (2003) emphasized the importance of emotion on memory by suggesting that emotional arousal is critical to guiding attentional processes.

In contrast, others claim that humorous advertisements have no – or even negative – effects on memory. Weinberger and Gulas (1992) suggested that the use of humour in

advertising is only effective in certain situations, depending on the product type, prior evaluation of the product and individual differences. It has been also emphasized that the effectiveness of an advertisement is largely determined by the programme environment in which the advertisement is placed (Norris & Colman, 1994). Furnham, Gunter and Walsh (1998) obtained evidence to support the claim that the context in which a humorous advertisement appears may also affect the impact of the advertisements, indicating that program contexts are crucial when considering the effectiveness of advertising.

Programme-induced viewer mood

Over several decades, numerous studies have investigated various effects of program context on memory for television advertisements; program genre (Barclay, Doub & McMurtrey, 1965); program-induced viewer mood (Goldberg & Gorn, 1987), program-advertisement mood congruity (Furnham, Gunter & Walsh, 1998); program-induced viewer excitement (Singh, Churchill & Hitchon, 1989); attitude or liking for the program (Clancy & Kweskin, 1971) and program-induced viewer involvement (Byrant & Comisky, 1978). The effect of program environment on advertising effectiveness has been investigated with mixed results.

Goldberg and Gorn (1987) showed that the participants who saw advertisements embedded within a happy programme rated the advertisements as more effective than the participants who saw the advertisements embedded within a sad programme. It was claimed that a happy programme induced greater perceived advertising effectiveness, a more effective cognitive response, and an enhancement of recall. Similarly, Srull (1983) found that participants in a negative mood rated the product less favourably than those in a neutral mood.

Norris, Colman and Aleixo (2003) found that programme-induced involvement, entertainment and enjoyment were positively and significantly correlated with advertisement

memory when the participants were allowed to choose the programme that they wanted to watch. The authors concluded that the operation of selective exposure can result in a positive relationship between programme attributes and measures of advertisement effectiveness.

Programme-induced viewer involvement

Researchers agree that programme involvement influences the recall and recognition of accompanying advertisements (Kennedy, 1971). However, most of the studies that have shown negative effects of programme involvement on memory for advertisements were conducted in artificial settings whereas studies that reported positive effects were investigated in natural settings. Selective exposure theory can potentially explain this finding. Krugman, Cameron and MacKearney (1995) claimed that people in a natural environment are free to choose whether or not to expose themselves to commercials, which is not the case in the majority of laboratory experiments.

Recently, Marjolein, Lotte, Peter and Edit (2012) found that the programme involvement increased attention to the embedded advertisements. They suggested that the positive effects of programme involvement on advertising recall in a natural environment is due to more attention being devoted to the advertisements during the commercial break. In addition, they found that the social contexts, activities and genre which interest the audiences are highly related to the programme involvement rate.

However, Lloyd and Clancy (1991) observed positive effects of programme involvement on memory of advertisements in both natural viewing and forced-exposure groups, although a stronger positive effect was found in a natural viewing condition. According to the theory of facilitative priming, when audiences are involved in programme they have a more attentive state that is carried over while they watch the advertisements. Therefore, they become more

receptive to the accompanying advertisements.

Programme-advertisements mood congruity

Previous findings have shown that both the mood induced by the advertisements and the programme have an impact on memory for the advertisements. Goldberg and Gorn (1987) suggested that with emotional commercials, the greater availability of personal cues in the commercials makes it more likely that personal thoughts will be evoked which depend on the mood induced by the programme. They found evidence that the mood induced by a programme influenced the subjects' felt mood more when they watched the emotional commercials as opposed to an informational commercial. Murphy, Cunningham and Wilcox (1979) found evidence of a programme-advertisement interaction and suggested that programme content could interact with advertisement content to affect recall, particularly where there was an apparent mood-contrast between the two.

In contrast, Marks and Skinner (1991) found that advertisements were least effective when placed within contrasting environments, while Horn and McEwan (1977) suggested that advertisements might be most effective when the tone of advertisements and programme were consistent. Schumann and Thorson (1990) offered an explanation for these contradictory results via the selection-processing model, and suggested that the main factor influencing mood congruent or contrast effects on attitudes towards advertisements is the participant's stated desire for an advertisement break.

Three different types of programme effect were distinguished by Hoffman and Batra (1991). These were high cognitive impact (e.g., documentaries), high affective impact (e.g., peak-time soap operas) and low impact (e.g., situation comedies). Furnham, Gunter and Walsh (1998) investigated programme-advertisement mood congruity on memory for humorous

television advertising as well as the relationship between viewers' subjective ratings of programmes and their memory for the advertisements embedded within the programme using the dimensions of entertainment, enjoyment and involvement. They found that the memory for advertisements was better for humorous advertisements than for non-humorous advertisements. Also, they found that when people felt more involved with and excited by a programme, they had poorer recall for the advertisements. In addition, it was observed that memory for advertisements was better when embedded within a non-humorous programme. Importantly, the degree of advertisement-programme mood contrast was found to enhance memory for humorous advertisements. It was found that humorous advertisements were recalled considerably better than non-humorous advertisements when placed within a non-humorous programme. The present study is a cross-cultural replication of Furnham et al. (1998).

Studies have shown that audiences with diverse cultural values perceive and respond to advertisements differently. For example, Taylor, Miracle and Wilson (1997) showed that US participants responded more favourably to advertisements with higher information content than did Korean participants. Alden Hoyer and Lee (1993) compared and contrasted the contents of humorous television advertising from four countries; Korea, Germany, Thailand, and the US, and Aaker and Williams (1998) showed that ego-focused versus other-focused emotional appeals led to a more favorable attitude for individuals from a collectivist culture, with the reverse being the case for members of an individualist culture.

Lee and Lim (2008) claimed that the interpretation of, and response to, humorous advertisements is culture-dependent, and Aaker and Williams (1998) claimed that the cultural dimension is important when comparing individualistic countries and collectivistic countries. The cultural values not only influence the perceptions of audiences, but also influence the nature of advertisements. Trompenaars (1993) claimed that the way and place the

advertisements can be expressed differently depend on cultural values. Studies have shown that there are cultural differences in the nature of the advertisements in terms of the use of celebrities (e.g., Choi, Lee & Kim, 2005), the use of humour (e.g., Alden et al., 1993) and the use of the types of persuasive appeals (e.g., Han & Shavitt, 1998).

Alden et al. (1993) found that the use of humorous advertisements varies across the countries; Germany (19.7%), U.S (16.1%), Thailand (14.5%) and South Korea (9.8%). They also found that type of humour used varied across countries, and these cultural differences, suggest that researchers should clarify the effectiveness of humorous advertisements in different countries. There is the need for more cross-cultural studies on the effectiveness of humorous advertising including the effects of programme contexts.

Furnham and Mori (2003) conducted a cross-cultural study (adapted from Furnham, Gunter and Walsh, 1998) to investigate the programme context effects on the memory for humorous advertisements in Japan. The results showed that humorous advertisements were better recalled than non-humorous advertisements. Moreover, they found that the rating of programme involvement and humour were positively related to the recall of advertisements. Advertisements were better remembered when embedded within a humorous programme than a non-humorous programme. However, there were no significant interactions between the nature of the advertisement and the nature of the programme context.

South Korea, which is well known as a collectivist society, has a GDP per capita that is increasing more quickly than any other countries in Asia. Park, Uk and Gil (2001) noted that humorous advertising, which had been used in that country for low-involvement products, was now also being used for high-involvement products. Hong and Lee (2010) were the first to compare the programme context effects on the memory of advertisements in two different advertising placement formats (advertisement break and original form where advertisements

are shown between the programmes). They found that advertisements were better remembered when embedded within a documentary than drama. Moreover, they found that the programme context effects did not differ in two formats.

The current study

The current study is a replication of Furnham, Gunter and Walsh (1998) conducted in South Korea. The current study was designed with the advertising placement format of advertisement breaks, which is a relatively new paradigm of advertising placement in South Korea. The current study investigates the programme-advertisement mood congruity on memory for humorous television advertising and the relationship between viewers' subjective ratings of mood; enjoyment, entertainment and involvement. Furnham and Mori (2003) noted the importance of controlling the length of both programmes and advertisements which were chosen to be of a similar length to the British programmes and advertisements used in Furnham et al.'s (1998) study. The hypotheses tested were:

H1: The audience evaluation of a programme will not affect either free or cued recall of advertisements embedded within it.

H2: The free recall of humorous advertisements will be better than non-humorous advertisements when they are placed within a non-humorous programme context (a mood-contrast effect).

Method

Participants

Eighty Korean university students (37 males and 43 females) participated in the study. They were students of varying disciplines but none had a specific knowledge of media studies. Their

ages ranged from 19 to 25 years ($M = 21.6$ years, $SD = 1.5$ years), participated in this study. They were naïve as to the hypotheses under investigation, and gave informed consent before participation. All were volunteers and none paid for participation

Materials

Programmes: For the humorous programme, an episode of the Korean sketch-comedy programme, ‘Gag Concert’ (total length: 27 minutes 24 seconds) was used. For the non-humorous programme, an episode of ‘VJ on the Scene’ (total length: 26 minutes 12 seconds) was used. This is a Korean documentary programme.

Advertisements: Out of an original sample of 26 advertisements (13 humorous, 13 non-humorous) six humorous and six non-humorous advertisements were selected for use in the study on ratings supplied by an independent panel of participants. They were asked to rate the advertisements on a counter-balanced set of five 7-point rating scales as in Furnham et al.’s (1998) study. The six advertisements scored as most humorous and the six scored as least humorous were chosen for final use. The six advertisements of each type were then paired-up on the basis of the products being promoted – with the same or similar products being paired together. The humorous advertisements were promoting; dairy, noodles, fruit, oriental medication, medicine and cosmetics (total lengths: 4 minutes 9 seconds). The non-humorous advertisements were promoting; dairy, noodles, oriental medication, cosmetics, fruit and dyeing foam (total lengths: 3 minutes 39 seconds). The advertisements were inserted within each programme using ‘Windows Movie Maker’.

Questionnaire and memory tests:

Participants were given a questionnaire immediately after watching the video clip. This consisted of a set of 17 seven-point, adjectival scales (*entertaining, enjoyable, exciting, happy,*

cheerful, humorous, funny, amusing, fun, stimulating, interesting, absorbing, thought-provoking, involved, relaxing, clever, informative) which had been used by Furnham et al. (1998). The first 14 were derived from an empirical definition of enjoyment, entertainment and involvement derived from a full-scale cluster analysis by Norris and Coleman (1994).

They were then given a free and then cued recall test in that order. For the free recall test, participants were asked to “*write down as much as you remember about each advertisement in the programme ad break*” (e.g., the brand name, product, the actor/actress names appearing in the advertisement, and the company name). Free recall descriptions of the advertisements were marked out of 32 according to a list of salient points compiled in advance. These covered virtually all the details mentioned in participants’ self-generated descriptions. For the cued recall test, there were 24 questions in total consisting of four questions for each advertisement. The participants were provided with the name of each brand and then asked questions about the advertisement in a multiple-choice format. For instance one advertment described a certain percentage in the advertisement: the questionnaire gave 4 responses only one of which was correct. The questions were about the more detailed information within the advertisements and products including the question on the benefits of the product emphasized in the advertisements. All the questionnaires had been translated into Korean.

Procedure

Ethical clearance was requested and provided by UCL. All participants were tested by the first author in Korea and tested either individually or small groups of two to three. All the participants were asked to read and sign the ethical guidelines form before the start of the experiment. They were then told that the aim of the study was an evaluation of the programme, and no mention was made of the advertisements. After the participants had watched the 30-minute video clip, they were given three minutes to fill in the questionnaires to provide a

subjective rating of the programme. They were then given 10 minutes to complete the free recall test and cued recall test. At the end of the study, participants were debriefed about the true aim of the study. All who started the study completed it

Results

Programme ratings factors

Insert Table 1 and 2 about here

A principle components factor analysis with a VARIMAX rotation was conducted on the programme ratings to examine the dimensional structure of the programme evaluations. This analysis was computed on data aggregated across the sample as a whole. A Scree Test revealed three major factors accounting for 77.8% of the variance. The first factor, labelled Humour (34.5% of variance), was defined by eight of the 17 items; clever, informative, enjoyable, humorous, funny, fun, relaxing and cheerful. The second factor, labelled Entertainment (30.1% of variance), was defined by six items; exciting, happy, entertaining, stimulating, amusing and interesting. The third factor, labelled Involvement (13.2% of variance), was defined by the remaining three items; absorbing, thought-provoking and involving.

Programme rating differences

The rating scales data on each factor were aggregated in order to produce a single summated score for each of the three factors identified. Three ANOVAs were then conducted to investigate potential differences between the two types of programme, and it was found that the two programmes differed on all three dimensions. The humorous programme was rated higher on Humour ($M = 4.62$, $SD = 0.44$) compared to the non-humorous programme ($M = 3.49$, $SD = 0.71$), $F(1, 78) = 71.11$, $p < .001$, $\eta_p^2 = 48.0\%$, and Entertainment ($M = 5.19$, $SD = 0.56$) compared to non-humorous programme ($M = 3.89$, $SD = 1.24$), $F(1, 78) = 36.58$, $p < .001$,

$\eta_p^2 = 31.9\%$. However, the Involvement was higher in the non-humorous programme ($M = 3.93$, $SD = 1.31$) than in the humorous programme ($M = 3.16$, $SD = 0.94$), $F(1, 78) = 9.08$, $p = 0.003$, $\eta_p^2 = 10.4\%$.

Programme rating and memory for advertisements

Second-order partial correlations were computed between the programme evaluation dimensions and measurements of recall (controlling for gender and hours watching television) in order to investigate the relationships between subjective programme ratings and memory for the advertisements. It was found that all of the three factors, the ratings were negatively correlated with the free recall of the advertisements; humour, $r(76) = -.35$, $p = .002$; entertainment, $r(76) = -.29$, $p = .01$; and involvement, $r(76) = -.47$, $p < .001$. Humour and entertainment were not found to correlate with cued recall ($r = .01$ and $.05$ respectively) but involvement was negatively correlated with cued recall, $r(76) = -.28$, $p = .014$. A measure of global advertisement recall (an aggregation of free recall and cued recall) was also found to be strongly negatively correlated with programme involvement, $r(76) = -.51$, $p < .001$.

Programme environment and memory for advertisements

One-way ANCOVAs (controlling for sex and number of hours of reported television watching) were computed to compare free recall and cued recall of advertisements as a function of both type of programme and type of advertisements (humorous versus non-humorous). For programme type, it was found that free recall of advertisements was higher when the participants watched advertisements embedded within a non-humorous programme ($M = 5.92$) than when embedded in a humorous programme ($M = 4.90$), $F(1, 71) = 4.77$, $p = .032$, $\eta_p^2 = 6.3\%$. The free recall of humorous advertisements was significantly higher ($M = 6.27$) than the free recall of non-humorous advertisements ($M = 4.55$), $F(1, 71) = 13.32$, $p < .001$, $\eta_p^2 =$

15.8%. However, there were no interactions between programme type and advertisement type with respect to free recall. No significance effects were found for the cued recall measure. For the measure of global recall, there was only one significant effect; humorous advertisements ($M = 9.84$) were better recalled than non-humorous advertisements ($M = 9.92$), $F(1, 71) = 4.18$, $p = .045$, $\eta_p^2 = 5.6\%$.

Discussion

The current study showed that there was a relationship between the programme ratings and the memory of advertisements. The three dimensions of Humour, Enjoyment and Involvement were significantly negatively correlated with the free recall of the advertisements, and a global recall measure was also negatively correlated with Involvement. This suggests that programme involvement is more influential than humour and enjoyment with respect to the memory for advertisements embedded within it

These findings are inconsistent with Furnham et al. (1998), who did not obtain significant correlations between humour and free recall and involvement but found a significant positive correlation between enjoyment and free recall. However, the finding here of a relationship between audience involvement and advertising recall is consistent with Park and McClung's (1986) notion that participants who find a programme involving will have insufficient processing capacity to attend to any outside stimuli such as an advertisement.

Participants who watched humorous programme had poorer recall for advertisements than those who watched non-humorous programme. These results are therefore consistent with Furnham et al (1998). This finding can be understood in terms of processing capacity effects; a positive mood appears to take up valuable memory resources, which leads to attention and capacity impairments for outside information (Forgas, Laham & Vargas, 2005).

In addition, the free recall for humorous advertisements was better than for non-humorous advertisements within both humorous and non-humorous programmes. These results indicate that humour in advertisements enhances memory for the material within the advertisement. This finding is inconsistent with Furnham et al. (1998), but is consistent with Furnham and Mori (2003). This may be explained by the difference between a collectivist and individualistic culture as Furnham and Mori's study was conducted with Japanese participants. There was no evidence for an effect of advertisement type, programme type or a programme-advertisement interaction with respect to the cued recall measure of advertisement memory.

The positive effect of humour on the free recall of advertisements in the current study may be explained by the uniqueness of this population group. Taylor et al. (1997) claimed that Koreans prefer the television advertisements with less information and emotional advertisements compared to the Americans. The results showed that Korean subjects react more positively to emotionally oriented advertisements whereas the US subjects react more positively to information-oriented advertisements. Similarly, the nature of advertisements differs in terms of information contained has received a considerable attention.

Moreover, it is important to note the specific nature of the advertisements as the current study which could have influenced the findings. First, as claims of Alden et al (1993) the different and specific types of humour used in Korean humorous advertisement might have led to stronger positive effect of humorous advertisements on memory.

Another significant issue concerns is the use of celebrities. Advertisements using celebrities are particularly prevalent in Asian countries such as Japan and South Korea (Choi et al.,2005), and possibly dropping in the west. In the current study, 5 out of 6 humorous experiments used celebrity endorsement while 4 out of 6 non-humorous advertisements contained celebrity endorsement. In addition, celebrities such as younger and popular

comedians appeared in humorous advertisements whereas celebrities who are older and less popular appeared in non-humorous advertisements. Since the participants were aged between 20 and 25, the use of famous celebrities who were more interesting to them could have influenced their attention and attitudes towards the advertisements, thus enhances memory for the humorous advertisements. Also, Atkin and Block (1983) found that the positive effect of celebrity in advertisements is stronger for young adolescents, indicating that the use of celebrity endorsement in humorous advertisements in the current study maximized its positive effect on memory.

However it should be pointed out that culture may be confounded with time. That is, to compare the result of this study with others, specifically Furnham et al. (1998), is to ignore the fact that there have been many changes over the past twenty years. These include the use of celebrities, the type of humour used (e.g. visual vs verbal), the range of products advertised as well as the sophistication and “media savvy” of viewers/participants. Thus comparing the results of this study with a British study done two decades ago and using different advertisements may say more about changes over time than culture. That said, however, there are various findings that have been replicated in this area over time and culture which do suggest a certain degree of robustness in the phenomena studied.

Limitations of the current study

The study had various strengths. The length of Korean programmes and advertisements in the current study were matched to the length of the British programme and advertisements (Furnham, 1998). In addition, both males and females participated in this study, increasing the generalizability of study. In terms of experimental materials, the humorous and non-humorous advertisements were carefully chosen after the pilot study. In addition, the humorous and non-humorous advertisements were matched in terms of product similarity, or even the same

product. All these improvements were to remove any confounding variables such as personal preferences towards certain products.

Despite the methodological improvements, some limitations remained. The advertisements used in the current study were mainly products, which are considered to be low involving decision products. According to findings such as Hong (2011) the positive effect of humorous advertisements was stronger for low involvement products such as drinks than for the high involvement products such as cars.

The current study did not consider the influence of prior mood before the experiment. General limitation of the research including the current study which involves programme rating as self-report is the problems of the measuring the subjective feelings.

The current study used only two measurements of memory; free and cued recall whereas other studies such as Furnham et al. (1998) and Furnham and Mori (2003) used both recall and recognition. Krugman (1977) claimed that recognition is a better measurement of memory for television commercials because television advertising involves more emotions. Finally, the current study was done in an artificial setting as the participants were asked to watch and rate the television programme in a classroom setting. Since the participants were aware that this is a psychological experiment, they did not freely talk during advertisement breaks although any of their behaviour during advertisement breaks was not restricted, preventing the effects of selective exposure. Studies conducted in a natural setting inevitably increases the ecological validity of findings.

There is one more issue of note. It should be pointed out that memory for advertised products does not necessarily translate into either the choice of that brand when buying that product or indeed purchasing in general. Advertisers aim to raise brand awareness which is only the first

step leading to the purchase of that brand.

References

- 홍종필, 이영아. (2010). TV 프로그램 전후/중간광고 포맷과 프로그램 관여도에 따른 광고효과에 관한 연구. *한국심리학회지: 소비자·광고*, 11(3), 553-577.
- 홍영일, 홍영일. (2011). 효과적인 커뮤니케이션 수단으로서의 유머광고 표현에 관한 연구. *디지털디자인학연구*, 11(4), 279-290.
- Aaker, J., & Williams, P. (1998). Empathy versus pride: The influence of emotional appeals across cultures. *The Journal of Consumer Research*, 25(3), 241-261.
- Atkin, C., & Block, M. (1983). Effectiveness of celebrity endorsers. *Journal of Advertising Research*, 23(1), 57-61.
- Alden, D., Hoyer, W., & Lee, C. (1993). Identifying global and culture-specific dimensions of humor in advertising: A multinational analysis. *Journal of Marketing*, 57(2), 64-75.
- Barclay, W. D., Doub, R. M., & McMurtrey, L. T. (1965). Recall of TV commercials by time and program slot. *Journal of Advertising Research*, 5 (2), 41-47.
- Beal, V. (2002). *How has UK television viewing behaviour changed since the 1980's? Insights for the Australian Market*. Australian and New Zealand Marketing Academy.
- Bryant, J., & Comisky, P. (1978). The effect of positioning message within differentially cognitively involving portions of a television segment on recall of the message. *Human Communication Research*, 5(1), 63-75.
- Bush, A., Stewart, D., & Furse, D. (1987). Effective television advertising: A study of 1000 commercials. *Journal of Marketing*, 51(3), 143.

- Chattopadhyay, A., & Basu, K. (1990). Humor in advertising: The moderating role of prior brand evaluation. *Journal of Marketing Research*, 27(4), 466–476.
- Choi, S., Lee, W., & Kim, H. (2005). Lessons from the rich and famous: A cross-cultural comparison of celebrity endorsement in advertising. *Journal of Advertising*, 34(2), 85-98.
- Clancy, K. J., & Kweskin, D. M. (1971). TV commercial recall correlates. *Journal of Advertising Research*, 2, 18-20
- Crawford, H., & Gregory, G. (2015). Humorous advertising that travels: A review and call for research. *Journal of Business Research*, 68(3), 569-577.
- Colman, A. M., Grimes J. E., & Wober, M. (1989). Effects programme context on recall and recognition of television advertisements. Unpublished Report to the Independent Broadcasting Authority, London.
- De Mooij, M. (2000). The future is predictable for international marketers: Converging incomes lead to diverging consumer behaviour. *International Marketing Review*. Vol. 17. No. 2, 103-113.
- Forgas, J., Laham, S., & Vargas, P. (2005). Mood effects on eyewitness memory: Affective influences on susceptibility to misinformation. *Journal of Experimental Social Psychology*, 41(6), 574-588.
- Furnham, A., & Mainaud, L. (2011). The effect of French television sexual program content on the recall of sexual and non-sexual advertisements. *Journal of Sex Research*, 48, 590–598
- Furnham, A., & Mori, T. (2003). The effect of programme context on memory for humorous television advertisements in Japan. *Psychologia*, 46(1), 53-66.

- Furnham, A., Bergland, J., & Gunter, B. (2002). Memory for television advertisements as a function of advertisement-programme congruity. *Applied Cognitive Psychology, 16*(5), 525-545.
- Furnham, A., Gunter, B., & Walsh, D. (1998). Effects of programme context on memory of humorous television commercials. *Applied Cognitive Psychology, 12*(6), 555-567.
- Goldberg, M., & Gorn, G. (1987). Happy and sad TV programs: How they affect reactions to commercials. *Journal of Consumer Research, 14*(3), 387.
- Haley, R. I., & Baldinger, A. L. (1991). The ARF copy research validity project. *Journal of Advertising Research, 31*(2), 11-32.
- Han, S., & Shavitt, S. (1994). Persuasion and culture: Advertising appeals in individualistic and collectivistic societies. *Journal of Experimental Social Psychology, 30*(4), 326-350.
- Hoffman, D., & Batra, R. (1991). Viewer response to programs: Dimensionality and concurrent behaviour. *Journal of Advertising Research, 31*, 46-56.
- Horn, M., & McEwen, W. (1977). The effect of program context on commercial performance. *Journal of Advertising, 6*(2), 23-27.
- Isen, A. M. (1987). Positive affect, cognitive processes, and social behavior. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (vol. 20, pp. 203–253). San Diego, CA: Academic Press.
- Kamins, M., Marks, L., & Skinner, D. (1991). Television Commercial Evaluation in the Context of Program Induced Mood: Congruency versus Consistency Effects. *Journal of Advertising, 20*(2), 1-14.
- Kennedy, J. R. (1971). How program environment affects TV commercials. *Journal of*

Advertising Research, 11(1), 33–38.

King, J., McClelland, A., & Furnham, A. (2015). Sex Really Does Sell: The Recall of Sexual and Non-sexual Television Advertisements in Sexual and Non-sexual Programmes. *Applied Cognitive Psychology*, 29(2), 210-216.

Krugman, D., Cameron, G., & White, C. (1995). Visual attention to programming and commercials: The use of in-home observations. *Journal of Advertising*, 24(1), 1-12.

Krugman, H .E. (1967). The measurement of advertising involvement. *Public Opinion Quarterly*, 30, 583-596.

Krugman, H. E. (1977). Memory without recall, exposure without perception. *Journal of Advertising Research*, 17, 7-12.

Lee, Y. H., & Lim, E. A. C. (2008). What's funny and what's not: The moderating role of cultural orientation in ad humor. *Journal of Advertising*, 37(2), 71-84.

Leka, J., McClelland, A., & Furnham, A. (2013). Memory for sexual and non-sexual television commercials as a function of viewing context and viewer gender. *Applied Cognitive Psychology*, 27, 584–592.

Lloyd, D., & Clancy, K. (1991). Television program involvement and advertising response: some unsettling implications for copy research. *Journal of Consumer Marketing*, 8(4), 61-74.

Ioannides, A. A., Liu, L., Theofilou, D., Dammers, J., Burne, T., Ambler, T., & Rose, S. (2000). Real time processing of affective and cognitive stimuli in the human brain extracted from MEG signals *Brain Topography.*, 13, 11–19

Mehta, A., & Purvis, S. (2006). Reconsidering Recall and Emotion in Advertising. *Journal of*

Advertising Research, 46(1), 49-56

- Moorman, M., Willemsen, L., Neijens, P., & Smit, E. (2012). Program-Involvement Effects on commercial Attention and Recall of Successive and Embedded Advertising. *Journal of Advertising*, 41(2), 25-38.
- Madden, T. J., & Weinberger, M. G. (1984). Humor in advertising: A practitioner view. *Journal of Advertising Research*, 24, 23-29.
- Marin, G., Gamba, R. J. & Marin, B. V. (1992). Extreme response style and acquiescence among Hispanics: The role of acculturation and education. *Journal of Cross Cultural Psychology*, 23, 498-509.
- Murphy, J., Cunningham, I., & Wilcox, G. (1979). The Impact of Program Environment on Recall of Humorous Television Commercials. *Journal of Advertising*, 8(2), 17-21.
- Newcomb, M. D., Huba, G. J. & Bentler, P. M. (1986). Desirability of various life change events among adolescents: Effects of exposure, sex, age, and ethnicity. *Journal of Research in Personality*, 20, 207-227.
- Norris, C., & Colman, A. (1994). Effects of entertainment and enjoyment of television programs on perception and memory of advertisements. *Social Behavior and Personality*, 22(4), 365-376.
- Norris, C., Colman, A., & Aleixo, P. (2003). Selective exposure to television programmes and advertising effectiveness. *Applied Cognitive Psychology*, 17(5), 593-606.
- Park, C., & McLung, G. 1986. The effects of TV programme involvement on involvement with commercials. *Advances in Consumer Research*, 13, 544-548

- Park, Y., Uk, Y., & Gil, H. (2001). TV 유머광고의 표현 특성에 관한 연구. *Journal of Global Academy of Marketing Science*, 7(1), 181-208.
- Rapoport, A., & Horvath, W. J. (1961). A study of a large sociogram. *Behavioral Science*, 6, 279-291.
- Rubinson, J. (2009). Empirical evidence of TV advertising effectiveness. *Journal of Advertising Research*, 49(2), 220-226.
- Shao, T., Alan, Raymond, M. A. & Taylor, C. R. (1999). Shifting advertising appeals in Taiwan. *Journal of Advertising Research*, 39(6), 61-9.
- Singh, S., & Hitchon, J. (1989). The intensifying effects of exciting television programs on the reception of subsequent commercials. *Psychology and Marketing*, 6(1), 1-31.
- Stewart, D. W., & Furse, D. H. (1986), *Effective television advertising: A study of 1000 commercials*. Lexington, MA: Lexington Books.
- Schumann, D. W., & Thorson, E. (1990). The influence of viewing context on commercial effectiveness: a selection processing model. In J. H. Leigh, & C. R. Martin (Eds.), *Current Issues and Research in Advertising*, 12(1), 1-24.
- Srull, T. K. (1983). Affect and memory: The impacts of affective reactions to advertising on the representation of product information in memory. In R. P. Bagozzi & A. Tybout (Eds.), *Advances in Consumer Research* (Vol. 10, pp. 520-525). Ann Arbor, MI: Association for Consumer Research.
- Taylor, C., Miracle, G., & Wilson, R. (1997). The impact of information level on the effectiveness of U.S. and Korean television commercials. *Journal of Advertising*, 26(1), 1-

18.

Trompenaars, F. (1993). *Riding the waves of culture*. London: Nicholas Brealey.

Watson, J., Lysonski, S., Gillan, T. and Raymore, L. (2002). Cultural values and important possessions: a cross-cultural analysis. *Journal of Business Research*, 55, 923-31.

Weinberger, M., & Gulas, C. (1992). The impact of humor in advertising: A review. *Journal of Advertising*, 21(4), 35-59.

Weller, L., Amitsour, E., & Pazzi, R. (1976). Reactions to absurd humor by Jews of eastern and western descent. *Journal of Social Psychology*, 98(2), 159-163.

Zaltman, G. (2003). *How customers think*. Boston, MA: Harvard Business School Press.

ZenithOptimedia (2012). ZenithOptimedia forecasts 4.1% growth in global adspend in 2013.

Retrieved from <http://www.zenithoptimedia.com/zenith/zenithoptimedia-forecasts-4-1-growth-in-global-adspend-in-2013/>

Table 1: Programme-evaluation factors

Loadings of the 17 ratings on the three factors			
	Humour	Entertainment	Involvement
Clever	-0.90	-0.06	0.24
Informative	-0.90	-0.09	0.24
Enjoyable	0.82	0.45	-0.14
Humorous	0.81	0.50	-0.12
Funny	0.80	0.50	-0.13
Fun	0.79	0.52	-0.14
Relaxing	-0.69	0.28	0.12
Cheerful	0.64	0.54	-0.04
Exciting	0.27	0.89	0.14
Happy	0.23	0.85	0.09
Entertaining	0.36	0.81	-0.01
Stimulating	0.14	0.79	0.03
Amusing	0.57	0.70	-0.13
Interesting	-0.24	0.68	-0.01
Absorbing	-0.07	0.18	0.84
Involved	-0.31	-0.03	0.83
Thought-provoking	-0.16	-0.06	0.78

Table 2: Mean recall scores (*SDs*) for humorous and non-humorous advertisements embedded in humorous and non-humorous programmes adjusted for hours of viewing and gender.

	Humorous programme		Non-humorous programme	
	Humorous advertisements	Non-humorous advertisements	Humorous advertisements	Non-humorous advertisements
Free recall	5.60 (2.01)	4.19 (1.24)	7.01 (3.13)	4.80 (1.40)
Cued recall	13.10 (3.09)	12.75 (2.99)	14.25 (3.67)	13.40 (3.47)
Global recall	9.92 (1.62)	8.75 (1.64)	9.81 (2.57)	9.07 (2.03)