

# **THE ADVERTISING EFFECTIVENESS OF DIFFERENT LEVELS OF HUMOR AND WARMTH AND THE MODERATING ROLE OF AFFECT INTENSITY**

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## **ABSTRACT**

The responses to three different levels of warmth and three different levels of humor are investigated as well as the moderating role of affect intensity (AI). In general, high levels of humour and warmth seem to be more effective, and generate significantly more positive responses in high than in low AI-respondents.

## **INTRODUCTION**

Although the effect of the use of emotional advertising techniques such as humor and warmth, on consumers' responses is well documented (see De Pelsmacker and Geuens, 1996 and Geuens and De Pelsmacker, 1998 for an overview), studies on the effect of different levels of emotional appeals are very scarce. An exception is the study by Thorson and Page (1988). They found that emotional appeals of high intensity triggered a more positive Aad than low intensity emotional ads. Furthermore, Kroeber-Riel (1984) argues that attitudes towards mature products are predominantly formed by emotional conditioning, at least in case of high intensity emotional appeals. Empirical studies investigating specifically the levels of humor and warmth lead to the conclusion that warmth is linearly related to recall. However, as far as humor is concerned, mildly humorous appeals seem to lead to better recall than stimuli without humor or with high levels of humor (De Pelsmacker et al. 1997). Furthermore, high levels of humor also seem to lead to more irritation (De Pelsmacker and Van den Bergh, 1997). An indirect indication of the importance of the level of emotional appeals can perhaps also be found in the differential effects of ad-evoked feelings of different levels. Pieters and de Klerk-Warmerdam (1996), for instance, conclude that Aad is predominantly determined by the pleasantness of the feelings while recall seems to be most related with the intensity of feelings : ads evoking positive feelings of high rather than low intensity produce better recall scores. Burke and Edell (1989) also conclude that upbeat, intense feelings have the most positive effect on Aad and Ab. As far as we can assume that more intense emotional stimuli indeed lead to more intense ad-evoked feelings, the foregoing clearly illustrates the importance of studying the response to stimuli characterised by different levels of emotional intensity.

Affect intensity (AI) can be defined as "stable individual differences in the strength with which individuals experience their emotions". AI can be measured by means of a 40-item scale, the affect intensity measure (AIM) (Larsen and Diener, 1987). Research shows that high AI individuals as compared to their low AI-counterparts respond more positively towards emotional appeals in advertising, in the sense that they report more intense ad evoked feelings, and a more positive Aad and Ab (Moore et al., 1995, Moore and Harris, 1996). In a refinement of the analysis of Moore et al. (1995), Geuens and De Pelsmacker (1997) indeed found that ad evoked feelings and Aad are positively influenced by AI in case respondents are shown warm and humorous stimuli, as opposed to non-emotional stimuli, where no effect can be observed.

## **RESEARCH OBJECTIVES AND HYPOTHESES**

The purpose of this study is to extend the fore-mentioned research in two directions: to investigate the responses to different levels of warm and humorous advertising appeals, and to study the moderating role of affect intensity for the responses to different levels of warmth and humor.

Indications in Aaker et al. (1986), De Pelsmacker and Van den Bergh (1997) and De Pelsmacker et al. (1997) suggest that increasing levels of warmth seem to lead to more positive affective reactions and attitudes.

H1. *Increasing levels of warmth lead to more positive affective reactions, and more positive Aad, Ab and PI*

A lot of research suggests a positive influence of humor on ad-related responses. Based on the results of De Pelsmacker and Geuens (1996) and Geuens and De Pelsmacker (1998) we even expect a greater effect of humor than of

warmth. The effect of humour on brand-related responses is less obvious, and some results suggest a negative effect as a result of too much humor (De Pelsmacker et al., 1997).

- H2. *Increasing levels of humor lead to more positive affective reactions, and more positive Aad. Moderate levels of humor lead to the most positive brand effects, i.e. Ab and PI.*

Geuens and De Pelsmacker (1997) found that the attitude towards a humorous ad is more positive if the ad is also perceived as being warmer, and vice versa. On the other hand, as indicated above, brand effects have been observed to be more negative when too much humor is used. This leads to the expectation that there is an interaction effect between the levels of intensity of warmth and humor.

- H3. *Higher levels of intensity of both humor and warmth in the same stimulus lead to more positive responses, with the possible exception of Ab and PI, for which high levels of humor might have a negative effect.*

Since increasing levels of warmth are associated with higher levels of recall (De Pelsmacker et al., 1997) it is reasonable to assume that they have lead to more cognitions. The same goes for increasing levels of humor, although some results suggest that high levels of humor lead to more negative effects. Higher levels of emotional content may have distracted the attention from the central information (about the brand) to peripheral (ad-related) cues (Baron et al., 1973, Nelson et al., 1985). Therefore, it might be expected that cognitions about the brand are not or even negatively affected by the level of warmth and humor used.

- H4. *Increasing levels of humor and warmth lead to more cognitions about the ad, but not to more cognitions about the brand. Cognitions are more positive as a reaction to increasing levels of humor and warmth.*

High affect intense individuals, as opposed to their low AI counterparts, are found to respond more positively to warm and humorous stimuli, as might be expected (Moore et al., 1995, Moore and Harris, 1996, Geuens and De Pelsmacker, 1997). It is reasonable to expect that, the higher the level of humor and warmth, the more positive the reaction of high AI individuals will be. Low AI individuals are assumed not to be affected at all by the level of emotional content of the stimuli.

- H5. *Higher levels of humor and warmth lead to more positive ad evoked feelings, Aad, Ab and Pi in subjects scoring high on affect intensity, but do not affect the responses of subjects scoring low on affect intensity.*

Increasing levels of emotional content are again assumed to lead to more positive cognitive reactions in high AI individuals, as opposed to low AI subjects. However, due to the potentially distracting effect of the warm or humorous content, brand-related cognitions are assumed to remain unaffected.

- H6. *Higher levels of humor and warmth lead to more ad-related but not brand-related cognitions in high AI individuals. The cognitions are more positive with increasing levels of intensity of humor and warmth. The cognitions of low affect intensity individuals are not affected.*

## RESEARCH METHOD

In the first stage of the study, a jury selected 27 commercials in 9 categories. The nine categories are all combinations of no humor or warmth, and moderate and high levels of humor and warmth. In each category three stimuli are selected. Spots were selected for those product categories that can be expected to appeal to students (soft drinks, fast food restaurants, consumer durables, snacks, recreation, clothing and body care). In each category, 3 spots for 3 different product categories were selected to avoid systematic product category effects. Six groups of approximately 27 undergraduate and postgraduate students each were formed (166 in total). In the first group the 9 commercials for consumer durables (one for each experimental category) were tested in random order. In the second group the same commercials were tested, but in reversed order. Similarly, in groups 3 and 4 9 ads for body care products and clothing were tested. Groups 5 and 6 were exposed to 9 ads for food, restaurants and soft drinks. In subsequent analysis the scores of the three spots per experimental category are averaged to obtain one score per experimental treatment. The manipulation check reveals that ads without

warmth, mildly warm and very warm ads are indeed perceived as significantly different from each other on this dimension. The same applies to the humorous stimuli selected on the humor dimension.

The 40-item Affect Intensity Measure (Larsen and Diener, 1987) was included as an independent variable. On the basis of their AIM score all respondents are divided into three equal groups, the two extreme of which are compared. The second and third independent variables are level of humor and level of warmth. As a result, a (2X3X3) factorial design is tested. As dependent variables the following responses were measured for each of the stimuli:

evoked cognitions about the ad and/or the brand. Respondents were asked to indicate whether the ad made them think about the ad and/or the brand, and whether these thoughts were positive, neutral or negative.

the attitude towards the ad. Respondents reported on a 7-point scale to what extent they liked the ad and thought the ad was persuasive, appealing, easy to forget, not effective, believable, not informative and original. Since principal components analysis revealed one major dimension, the mean score on the eight items is used to represent overall Aad. Internal consistency proved to be satisfactory (Cronbach alpha > 0.80).

ad-evoked feelings. Respondents scored on a 7-point scale to what extent they experienced irritation, insult, interest, cheerfulness and carefreeness while watching the ad. These adjectives were selected on the basis of the research results reported by Geuens and De Pelsmacker (1998).

After the respondent had been exposed to all stimuli, the attitude towards the brand (3 items, averaged, alpha > 0.80 ) and the purchase intention (3 items, averaged, alpha > 0.75 ) were measured by means of 7 point Likert type scales for each brand. Finally, students were asked to indicate their gender.

## RESULTS

In [table 1](#) the responses to lack of warmth and humor, and medium and high levels of warmth and humor are presented. Higher levels of warmth lead to significantly more positive affective responses, Aad and Ab. However, pairwise analysis reveals that this effect is almost exclusively attributable to the difference between stimuli without any warmth on the one hand, and medium levels on the other. The difference between mildly and extremely warm stimuli is not significant. Increasing the level of humor leads to more positive ad evoked feelings and Aad. In this case there is not only a significant effect of the use of humor, but also of its level. The results partly support H1 and H2. The interaction effects of the level of humor and warmth are all significant. Ad evoked feelings and Aad are invariably most positive in the case of a combination of high levels of both humor and warmth, and H3 is largely confirmed. As to the cognitive reactions to humorous and warm stimuli, the expectation in H4 is that more subjects will report ad-related, but not brand-related thoughts, and that these thoughts will be significantly more positive in the case of more intense warmth or humor. The data do not entirely support these assumptions. More ad-related as well as brand-related thoughts are reported with increasing levels of humor, although the effect seems largely due to the use of humor as such, regardless of its level.

Except for the level of irritation and the level of interest, no interaction effects between the level of warmth and the level of humor on the one hand, and affect intensity on the other, is significant. In the case of humor, the interaction effect between AI and level of humor is only significant with regard to the attitude towards the ad. Increasing levels of humor lead to more positive Aad, both in high and low AI subjects. However, the increasing appreciation of ads is significantly more pronounced in the case of high AI individuals, as expected. The other interaction effects are similar, but not significant, and H5 is only marginally confirmed. In [table 2](#) the interaction effects of affect intensity and the level of humor and warmth on cognitions are shown. The cognitions of subjects low on affect intensity are not affected by the level of warmth. The brand cognitions of these individuals are not affected by the level of humor, but more positive ad-related cognitions are developed with increasing levels of humor. In other words, only the level of humor affects the ad-related cognitions of low AI individuals. The number of ad-related and brand-related cognitions of high AI subjects is not influenced by the intensity of the emotions used. On the other hand, the more intense the humor and warmth used, the more positive the ad-related cognitions. H6 is partly confirmed.

## DISCUSSION

The use of warmth in advertising leads to more positive affective responses and a more positive Aad and Ab, regardless of its level. Increasing levels of humor lead to more positive ad evoked feelings and Aad. Moderate levels of humor result in the most favorable attitude towards the brand and purchase intention. The frequency of ad- and brand-related cognitions is higher when humor is used (regardless of its intensity) but is unaffected by the use of warmth. The direction of ad-related cognitions is positively affected by the use of warmth and by higher levels of humor. Warmth has no impact on the direction of brand-related cognitions while moderate levels of humor lead to the most favorable brand-related cognitions. The use of humor has more effect on cognitions than the use of warmth. All in all, the power of humor to lead to more and more positive ad and brand cognitions is reconfirmed, as well as the stimulating role of increased levels of humor. The distracting effect of increasing levels of emotional content is to a certain extent illustrated by the fact that ad-related cognitions are positively influenced, but brand-related thoughts are less significantly affected. Although the interaction effects between affect intensity and the level of emotional content are only partly significant, the significant results have the expected direction: high AI individuals respond more positively to increasing levels of humour and warmth than low AI subjects. The effect of affect intensity seems to influence the directions of ad-related and brand-related thoughts, rather than their frequency of occurrence.

The general conclusion is that whenever warmth has an influence most positive effects can be obtained with a high level of warmth. As far as humor is concerned, on the other hand, high levels seem to lead to the most favorable ad effects and moderate intensity levels to the most favourable brand effects. Therefore, it would be interesting to investigate these differential effects levels for other emotional execution types such as fear appeals, eroticism, irritation, provocation, ... Besides affect intensity, other individual differences such as Need for Cognition, Self-Monitoring, Extraversion/Introversion;... may play an important moderating role, as well as the level of product involvement. Finally, some obvious extensions are to repeat the same study with other consumer segments than students and for products in different stages of the product life cycle (new versus mature products).

Table 1. Responses to ads with different levels of warmth and humor

	Warmth				Humor			
	No	Medium	High	sign.F	No	Medium	High	sign.F
Irritation	3.61	3.50	3.02*	.000	3.79*	3.11	3.25	.000
Interest	2.61	2.72	3.07*	.000	2.64*	2.92	2.85	.002
Cheerfulness	2.51*	3.33	3.90*	.000	2.77*	3.30	3.65*	.000
Insult	2.25*	2.01	1.96	.001	2.17*	2.01	2.01	.101
Carefreeness	2.50*	3.21	3.29	.000	2.52*	3.18	3.31	.000
Aad	3.10*	3.47	3.92*	.000	3.37*	3.58	3.53	.002
Ab	4.51*	4.70	4.36*	.000	4.41*	4.65	4.51	.027
PI	4.22*	4.53	4.23*	.000	4.27	4.34	4.37	.519

Significance levels refer to repeated measures ANOVA. Responses are measured on 7 point scales (1=low, 7=high). \* indicates a result that is significantly different ( $p = 5\%$ ) from the medium intensity level (based on pairwise tests).

Table 2. Ad-related and brand-related cognitions of low and high affect intense subjects

	Warm				Humour			
Low AI	No	Med.	High	Sign.	No	Med.	High	Sign.
Ad-related	85.8	84.6	87.0	.817	80.1	88.8	88.4	.041
Positive	40.3	45.3	46.1		26.4	42.7	60.7	
Neutral	29.5	32.8	26.2	.473	43.4	28.0	18.6	.000
Negative	30.2	21.9	27.7		30.2	29.4	20.7	
	Warm				Humour			
High AI	No	Med.	High	Sign.	No	Med.	High	Sign.
Ad-related								
Positive	36.4	52.8	55.2		32.4	46.5	64.4	
Neutral	34.3	26.1	25.5	.016	46.0	24.6	16.1	.000
Negative	29.4	21.1	19.3		21.6	28.6	19.5	

Cell entries are percentage of respondents reporting cognitions. Significance levels refer to chi<sup>2</sup> tests.

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