

CULTURAL MEMORY OF SORROW IN ADVERTISING AFTER THE TERRORIST ATTACKS

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***Abstract:* The general objective of this research study is to do a comparative research to investigate the perception of sorrow in the advertising in the press after the terrorist attacks: 11/09/2001 (U.S.) and 11/04/2004 (Spain). The general hypothesis considers that there are similar perceptions of the sorrow towards the ads although there are cultural differences. On a computer program the subject was shown these images about announcement advertisement published in the press after the 09/11 and 11/04 in a random order and was asked different questions that explored their perception and attitudes with regard to these advertisements.**

***Keywords:* sorrow, emotions, advertising, cultural memory and terrorist attacks**

1. INTRODUCTION

Messages in advertising can unleash emotional changes in public deriving from subjective experiences, physiological, communicational and affectionate changes. In general, advertising spreads positive messages due to the fact that people looks for pleasure and avoids harm (Allport, 1985) generating a pleasant emotional mood (Zillmann, 1983). However, social advertising employs negative and impressive messages

to avoid traffic accidents, illness and additions, besides others, that public agrees and perceives as adequate in order to reach a posture change in those topics (Moore y Harris, 1996). These messages aspires to achieve an emotional response about what can supervene to our fellowship, as recall events that are capable to change our emotional condition (Bower, 1981). This research is focused in the advertising spread in national press days after the 11S (2001) and 11M (2004) terrorist attacks and how years after their exposure generate emotional changes in the inquired subjects.

The 11S (2001) terrorist attack in New York was perpetrated by Al Qaeda with almost 3.000 victims and more than 6.000 harmed and 11M (2004) in Madrid was perpetrated by yihadist terrorist with 191 victims and 1.858 harmed. Both attacks remain in the memory and recall of the occidental culture due to their high impact. Following Bower (2001) emotional conditions affect in cognitive processes because “perception, attention, learning, recall and judgments related to ordinary experiences can be high influenced by the state of mind that we perceive when those cognitive processes take place (Fernández Abascal, 2010: 175).

Memory and state of mind are closely connected and both effects can unleash a “recall effect

dependent of the state of mind”, i.e. that emotional mood while codification is associated and will be the same during recovery. Our semantic memory disposes information in associative networks made up by multiple nodes, where each of them represents an event and their emotional and cognitive significance (Collins y Loftus, 1975 y Collins y Quillian, 1969). Moreover, emotions can influence over memory through: contents, codification and recovery. Contents indicate that recall with higher emotional burden are recalled before, information codification causes on intense emotions the recall of main details and information recovery can affect on the emotional mood that take place in the recall moment.

This is why, our study analysis was focused in the 11S and 11M terrorist attacks and the advertisings spread on the following 10 days, ten years after the incidents. Contents where shocking, their codifications included the more impressive media moments and recovery bring back to the survey respondents’ to the immediate where keep and codify the information, independently of the emotional mood.

II. METHOD

The main objective of this study is to know if the emotional mood of the survey respondents’ changes after watching the advertisements spread related to the 11S and 11M terrorism attacks.

The secondary objective is to know if there is an advertisement of the exposed one’s that turns on more significative emotional mood changes.

To deal with with these two objectives, we suggest the following hypothesis and we will corroborate with the data obtained through a survey over the

Rey Juan Carlos of Madrid (Spain) and the Vermont University (USA) students considering a wide range of ages and characteristics.

Hypothesis (H1): cognitive recall of memory related to a tragic event, as a terrorist attack, and the exposure to advertisements that invokes them generates a negative emotional change of mood in the survey respondents.

Hypothesis (H2): sorrow is the main emotional mood sensed in the exposed advertisements.

The method considered to make this experiment was break down in three steps:

1. Advertisement selection of the press commercials spread after the 11S and 11M terrorism attacks related to the attempts. In the USA and Spain, a cast was done over the press advertisement of general newspapers and a classification was done according to topics. In the case of the USA advertisements, the sample was selected from the advertisements spread on the days 11, 12 and 13 of September 2001 in the New York Times, Wall Street and Washington Post journals. In the case of the Spanish advertisements, the sample was selected from the advertisements spread on the days 11, 12, 13 and 14 of March 2004 in the El Mundo, El ABC, El Pais, La Vanguardia and La Razon generalist journals. Latterly to these dates, there was not a significant number of advertisements spread on generalist journals.

2. Advertisements classification for both Spanish and USA press commercials related to the terrorist attacks. The following groups where considered for the advertising classification: mourning, sympathy, solidarity, commercial or mixed between commercial and mourning.

3. Students of Rey Juan Carlos University of Madrid (Spain) and Vermont University (USA)

survey. The survey was divided in three steps: the first question to the respondents was related to their emotional mood at the beginning of the inquiry, where different positive, negative and neutral emotional moods could be ranked. For the Spanish respondents, this was followed by the broadcast of ten advertisements related to the 11M terrorist attack, where the respondents were asked to rank the different positive, negative and neutral emotional moods that each advertisement evoke. The experiment was repeated with the broadcast of 10 advertisements related to the 11S terrorism attack. For the USA respondents, the experiment was identical with the difference that the 11S terrorism attack advertisements were broadcasted before the 11M terrorism attack advertisements. The emotional mood rank proposed was composed of semantic differentials where two opposed emotions, a positive and a negative, were included and the respondent must select 1 to 3 (1 the less, 3 the most) the emotion that the advertisement recall on his memory. The semantic differentials considered where: sadness-cheerful, painful-pleasant, anguished-comforted, unhappy-happy, rage-calm, repulsive-acceptance, upset-pleased, scared-brave, without hope-hope, dislike-like (Wundt, 1896; Lang, Brandley and Cuthbert, 1999). The categorization of the selected emotional moods was made according to the models proposed by Kleinginna and Kleinginna, 1981; Batra and Holbrook, 1990; Izard, 1977; Holbrook, Morris y Rajeev Batra; 1987; Lazarus, 1994. The third step of the survey was the inquiry of the emotional mood of the respondent at the end of the survey.

The survey respondents are divided in five groups: four of them are Spanish students and was performed in the Rey Juan Carlos University of Madrid (Spain) whose main characteristics are:

one group composed by 32 degree students with an average age of 19 years, another group composed by 31 students of communication with an average age of 21 years, a third group of 41 students of the adult university with an average age of 63 years and a fourth group of 40 students of the adult university with an average age of 62 years. The fifth group is composed by USA students with an average age of 20 years and was performed in the Vermont University (USA). In both cases, the advertisement broadcast was done considering their nationality, showing first those advertisements related to their country in order to attain a higher emotional link and a higher concentration in the experiment, followed by the advertisements related to the other country. The group selection was done in order to investigate the possible relation to emotional changes with the country or age groups choice or the independence to gender, generational or cultural differences.

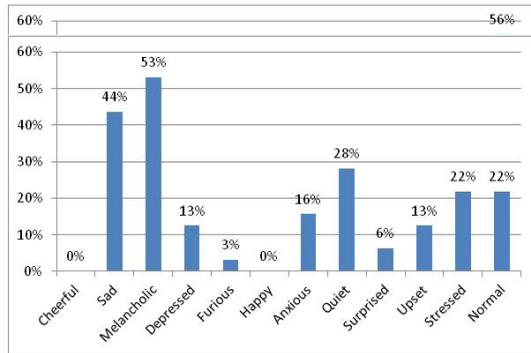
Group	Size	Age ()	Sex (%H)
I	32	(19.33,0.9)	25%
II	41	(63.32, 4.3)	46%
III	40	(62, 3.88)	47%
IV	31	(20.4, 3.93)	52%
V	20	(20.23,1.67)	40%
Total	164	(34.07,20.45)	42%

Fig. 1 Survey respondents are divided in five groups.

3. Results and Conclusions

1. There is a emotional mood change before and after

the exposure of the terrorism attack advertisements (H1). In order to corroborate the hypothesis, a Chi squared test was done in groups I, II and III.



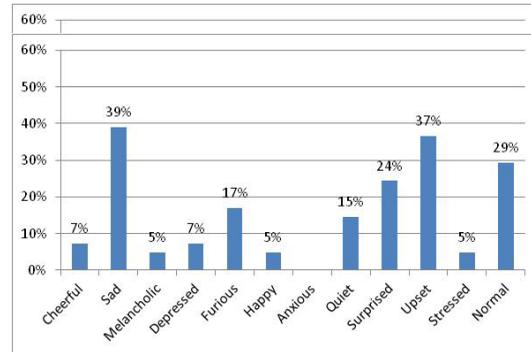
Graph 1: Frequency respondent’s distribution in group I emotional mood change before and after the exposure of the terrorism attack advertisements.

Pearson’s Chi-squared test		
T Statistic value	Chi-squared distribution value	P-Value
T = 38.8512	$e^2_{11, J=0.05} = 19.68$	p-value = 5.615e-05

Table 2. Chi squared test in group I emotional mood change before and after the exposure of the terrorism attack advertisements.

Table 2 presents the Chi Squared test result, showing a significant emotional change of mood before and after the exposure of the terrorism attack advertisements. We can observe in Graph 1, a considerable increase of the negative emotional mood related to soreness

as are sadness (44%) and melancholic (53%) and a decrease in positive emotional moods as related to cheerful (0%), happiness (0%) and normal (from 56% to 22%).



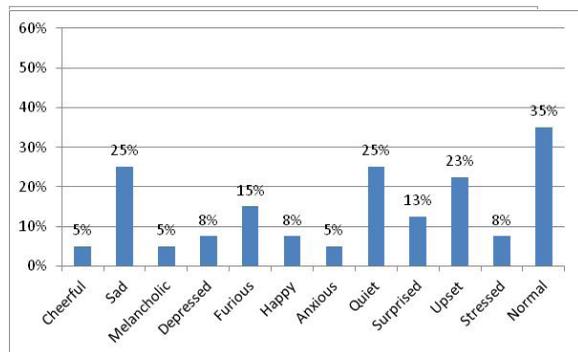
Graph 2. Frequency respondent’s distribution in group II emotional mood change before and after the exposure of the terrorism attack advertisements.

Pearson’s Chi-squared test		
T Statistic value	Chi-squared distribution value	P-Value
T = 39.8973	$e^2_{11, J=0.05} = 19.68$	p-value = 3.725e-05

Table 3. Chi squared test in group II emotional mood change before and after the exposure of the terrorism attack advertisements.

Table 3 presents the Chi Squared test result, showing a significant emotional change of mood before and after the exposure of the terrorism attack advertisements. We can observe in Graph 2, a considerable increase

of the negative emotional mood related to soreness as are sadness (39%), depressed (7%), furious (17%) and upset (37%) and a decrease in positive emotional moods as related to happiness (from 10% to 5%), quiet (from 49% to 15%) and normal (from 49% to 29%).



Graph 3. Frequency respondent's distribution in group III emotional mood change before and after the exposure of the terrorism attack advertisements.

Pearson's Chi-squared test		
T Statistic value	Chi-squared distribution value	P-Value
T = 13.8176	$e^2_{11, J=0.05} = 19.68$	p-value = 0.2432

Table 4. Chi squared test in group III emotional mood change before and after the exposure of the terrorism attack advertisements.

There is a single increase in sadness and anxious emotional mood before and after the exposure of

the terrorism attack advertisements, but is not a significant change as pointed by the Chi Squared test.

There is a significant emotional change in groups I and II because after the broadcast of the terrorism attack advertisements there is an emotional change to sadness taking precedence sadness, melancholic, depression, fury and upset emotions. Both groups agree in the sadness category whereas depression, fury and upset are negative emotions that produces an unpleasant mood in the respondents. That is, negative hedonist tone prioritizes the "negative emotions, experimented when a target is blocked or a loss is produced" (Fernández- Abascal, et. Al: 89) in this case the loss of several innocent citizens. In group III there is no a significant change because during the experiment some respondents were arguing and expressing their annoyance related to the topic of the survey and some of them leave the room quite affected. This could be an uncontrollable variable that contaminate the validity of the results, due to the fact that there are no differences between the emotional mood of the respondents before and after the exposure of the terrorism attack advertisements.

2. Sorrow is the main emotional mood sensed in the exposed advertisements (H2). In order to corroborate this hypothesis the Chi Squared test was done taking into account all the groups in the study.

The survey is divided in ten questions related to the emotional effect in the respondents after the exposure of the terrorism attack advertisements. For each advertisement, the respondents must rank in a Likert scale 0 to 3 (where 0 means indifference and 3 maximum affinity) categories related to the emotional effect produced by the advertisement. The emotional categories are presented in countered pairs and the respondents must select those ones that recall more affinity with the advertisement, as presented in Table 5.

Negative Category	Likert Scale (-3 maximum negative category affinity, 0 indifference, +3 maximum positive category affinity)	Positive Category
Sad	-3 -2 -1- 0 +1 +2 +3	Cheerful
Painful	-3 -2 -1- 0 +1 +2 +3	Pleasant
Anguished	-3 -2 -1- 0 +1 +2 +3	Comforted
Unhappy	-3 -2 -1- 0 +1 +2 +3	Happy
Rage	-3 -2 -1- 0 +1 +2 +3	Calm
Repulsive	-3 -2 -1- 0 +1 +2 +3	Acceptance
Upset	-3 -2 -1- 0 +1 +2 +3	Pleased
Scared	-3 -2 -1- 0 +1 +2 +3	Brave
Without Hope	-3 -2 -1- 0 +1 +2 +3	Hope
Dislike	-3 -2 -1- 0 +1 +2 +3	Like

Table 5. Categories relative to each advertisement.

Through the ANOVA table it can be observed that the group differentiates in the changes in emotions, presenting significant differences between the first group and the remaining ones.

The results in the surveys of the five groups show the non existence of significant differences between

categories for each of the advertisements. That is, the advertisement type doesn't influence in the emotional mood of the respondents. However, there are significant differences between the categories for each advertisement.

In group I, for the pair sad-cheerful most of the answers are assembled around sadness, for the pair painful-pleasant most of the answers are assembled around pain, for the pair anguished-comforted most of the answers are assembled around anguish, for the pair unhappy-happy most of the answers are assembled around happiness, for the pair repulsive-acceptance most of the answers are assembled around repulsion, for the pair scared-brave most of the answers are assembled around bravery and for the pair without hope-hope most of the answers are assembled around hopelessness. For the remaining categories, answers are concentrated around indifference as can be seen in Table 6.

In groups II, III, IV and V, for the pair sad-cheerful most of the answers are assembled around sadness, for the pair rage-calm most of the answers are assembled around rage, for the pair repulsive-acceptance most of the answers are assembled around high acceptance and high repulsion and for the pair without like-dislike most of the answers are assembled around likeness. For the remaining categories, answers are concentrated around indifference (see Table 7).

Table 6 Answer percentages of each category in each of the ten advertisements for group I.

Category	Percentage	Category	Percentage	Category	Percentage	Category	Percentage	Category	Percentage
High sad	10,58%	High pain	8,94%	High anguished	6,93%	High unhappy	5,84%	High rage	10,33%
Medium sad	11,17%	Medium pain	9,44%	Medium anguished	8,45%	Medium unhappy	8,64%	Medium rage	9,14%
Low sad	16,37%	Low pain	16,37%	Low anguished	13,69%	Low unhappy	14,14%	Low rage	14,26%
Indifference	44,67%	Indifference	49,37%	Indifference	49,37%	Indifference	54,02%	Indifference	45,77%
Low cheerful	9,49%	Low pleasant	9,52%	Low comforted	12,00%	Low happy	8,55%	Low calm	12,38%
Medium cheerful	4,20%	Medium pleasant	3,43%	Medium comforted	5,92%	Medium happy	5,08%	Medium calm	5,47%
High cheerful	3,53%	High pleasant	2,92%	High comforted	3,63%	High happy	3,73%	High calm	2,65%

Category	Percentage	Category	Percentage	Category	Percentage	Category	Percentage	Category	Percentage
High repulsive	10,34%	High upset	8,52%	High scared	4,80%	High without hope	5,49%	High dislike	7,19%
Medium repulsive	6,32%	Medium upset	7,78%	Medium scared	4,88%	Medium without hope	5,83%	Medium dislike	5,37%
Low repulsive	10,67%	Low upset	13,90%	Low scared	7,54%	Low without hope	10,64%	Low dislike	9,34%
Indifference	43,84%	Indifference	43,09%	Indifference	64,35%	Indifference	51,94%	Indifference	47,69%
Low acceptance	11,90%	Low pleased	11,33%	Low brave	6,86%	Low hope	11,32%	Low like	11,90%
Medium acceptance	7,72%	Medium pleased	7,53%	Medium brave	5,91%	Medium hope	7,69%	Medium like	8,10%
High acceptance	9,20%	High pleased	7,86%	High brave	5,66%	High hope	7,09%	High like	10,41%

Category	Percentage	Category	Percentage	Category	Percentage	Category	Percentage	Category	Percentage
High repulsive	10,34%	High upset	8,52%	High scared	4,80%	High without hope	5,49%	High dislike	7,19%
Medium repulsive	6,32%	Medium upset	7,78%	Medium scared	4,88%	Medium without hope	5,83%	Medium dislike	5,37%
Low repulsive	10,67%	Low upset	13,90%	Low scared	7,54%	Low without hope	10,64%	Low dislike	9,34%
Indifference	43,84%	Indifference	43,09%	Indifference	64,35%	Indifference	51,94%	Indifference	47,69%
Low acceptance	11,90%	Low pleased	11,33%	Low brave	6,86%	Low hope	11,32%	Low like	11,90%
Medium acceptance	7,72%	Medium pleased	7,53%	Medium brave	5,91%	Medium hope	7,69%	Medium like	8,10%
High acceptance	9,20%	High pleased	7,86%	High brave	5,66%	High hope	7,09%	High like	10,41%

Table 7 Answer percentages of each category in each of the ten advertisements for groups II, III, IV and V.

It can be stand out in group I that negative emotions precede over positive ones, specially: sadness, anguished, unhappiness, upset, bravery and hopeless. For the remaining groups, the negative emotions that precede over positive ones are: sadness, rage, repulsion and sympathy. It stands out that the emotional mood that coincides in all the groups regarding the broadcasted advertisements is sadness which is consistent with the “effect of the recall depending on the emotional mood” or “memory dependent on the emotional mood” (Bower 1981) of the sadness emotions recalled from

the terrorist attacks through the advertisements messages.

Maybe the most surprising results are related to the fact that anguished emotions take precedence to comfort emotions and bravery, sympathy and hopeless emotions are perceived from the broadcasted advertisements.

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