

The effect of high arousal advertising design on brand recall and ad recall

Name1 Surname1^a, Name2 Surname2^b and Name3 Surname3^c

^a *Facultad de Ciencias Sociales y Humanas, Universidad de Zaragoza, Ciudad Escolar s/n, Teruel 44003 Spain; Email: email1@unizar.es*

^b *Facultad de Economía y Empresa, Universidad de Zaragoza, Gran Vía 2, Zaragoza 50005 Spain; Email: email2@unizar.es*

^c *Facultad de Economía y Empresa, Universidad de Zaragoza, Gran Vía 2, Zaragoza 50005 Spain. Email: email3@gmail.com*

Full paper

Abstract

Professionals of advertising create emotional ads to get the attention of consumers and increase advertising effectiveness. This research explores the concept of arousal on video ads and analyzes its relationship with brand recall and ad recall. Specifically, our work in progress studies how different temporal sequences of high arousal and brand logo presentation may affect brand recall and ad recall. Skin conductivity and survey techniques are combined in the research methodology. Preliminary results of two experiments confirm that post-arousal brand logo presentation increases brand recall compared to pre-arousal and during arousal brand logo presentation conditions. Nevertheless, when brand logo is presented after the high arousal peak, the time length between both moments does not affect brand recall. In addition, the different sequences of brand logo presentation and high arousal do not influence ad recall. The conclusion section discusses the role of arousal on consumers' attention and cognitive information processing. Results also suggest interesting implications for ad design and further research lines in consumer behavior to advance on the study of advertising arousal, attention and memory.

Keywords: arousal, advertising, brand recall, ad recall, skin conductivity

1. Introduction

Companies invest a great amount of their budgets to deliver their messages effectively and be elected against their competitors by consumers. Advertising is one of the most common instruments used in marketing to build brand values and brand image (e.g. TV commercials). In 2013, global advertising investment has reached 505,000 million (US Dollars) which represent a 3.5% increase compared to 2012 (ZenithOptimedia 2013). Nevertheless, users' interaction with multiple devices and adverting overexposure have led to a smartest consumer control of the media and a decrease of interest in the ads (Astolfi et al. 2008). Nowadays, one of the biggest challenges that professionals of

advertising have to face is to get potential consumers' attention to increase advertising efficiency. Attract consumers seems to be a requirement to help them engage in advertising processing but it is not always enough to achieve the business objectives (e.g. brand recall) (Heath, Brandt, and Nairn 2006). For example, in the TV commercial design it is essential to know what messages are relevant to consumers, what moment is the best to show them and how to stimulate consumer's mental processing of advertising (Ohme et al. 2009). This way, companies try to improve ad recall, attitude toward the brand and purchase intention, which are known as advertising effectiveness variables (Till and Baack 2005).

...

2. Literature review

Today, people are exposed to a continuous information overload (Plassman, Ramsøy, and Milosavljevic 2012). Companies are aware of this bombard with ads and explore new commercial strategies, such as using a different high-impact emotional stimulus, to get the attention of their audiences. In this sense, attention and arousal have been proposed as determinants of advertising effectiveness.

...

2.1. Attention: theoretical background

Attention is a human basic psychological process difficult to conceptualize and measure (Bialkova and van Trijp 2010). After years of discussion, the scientific community has reached a consensus (Bialkova and van Trijp 2010) to define attention as “a mechanism, or a set of mechanisms for selecting representations, which constitute the psychological and neural mechanisms that mediate perceptual selectivity” (Allport 1987; Yantis 2000).

...

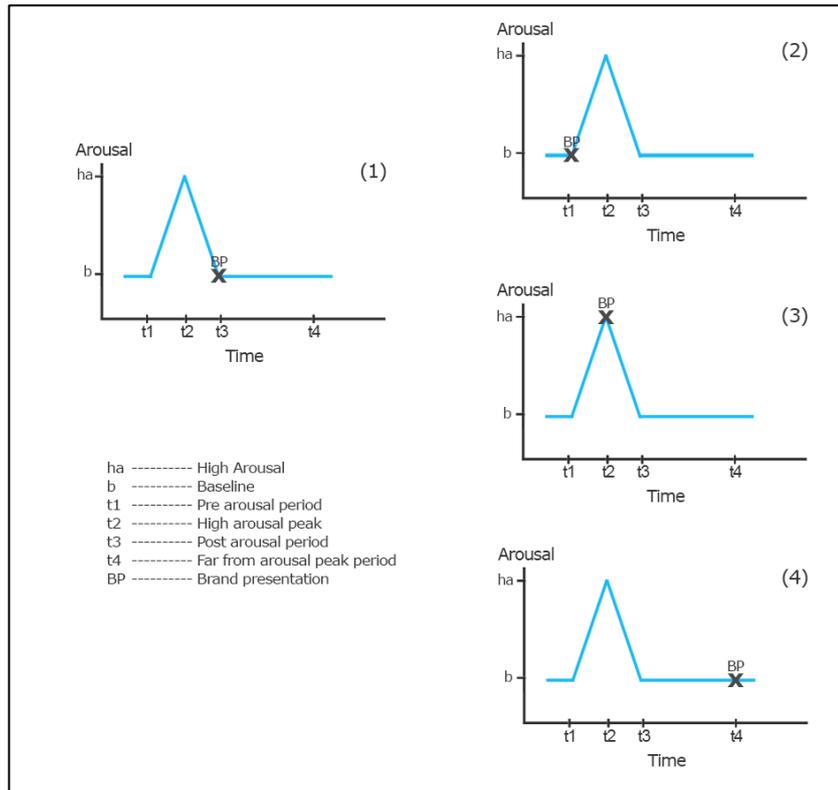
3. Hypotheses formulation

From a different perspective, ad recall may depend of its differential characteristics, such as plot, character interaction, etc. (La Ferle and Edwards 2006). However, the sequential time of brand logo presentation seems to no influence ad recall. In other words, ad recall is due to the set of spot elements and to the stimulus that generates a high arousal peak and not to the specific moment in which the brand is presented. Consequently, we propose that the different ad designs where the brand is presented do not alter ad recall.

H1a: The brand exposure in a return-from-arousal period (Graph 1) produces a higher brand recall than the exposure in a pre-arousal period (Graph 2).

...

Figure 1. Graphical description of sequences employed for hypothesis test: (1) Post-arousal condition, (2) Pre-arousal condition, (3) High arousal condition, (4) Far from arousal condition.



4. Method

4.1. Pretest: arousal measurement and ad selection

The objective of the pretest was to select the video ads that will be used in the experiment. A sample of 42 persons participated in the pretest, who were informed about the study objectives and signed the consent forms. The instrumentation used were: a) 32 water-based EEG channels amplified with a unipolar CAR amplifier, b) a skin conductance sensor and c) other bio-instrumentation like electrocardiogram, SpO2, etc. All the instrumentation and video presentation was synchronized within the common amplifier and the software.

...

4.2. Study 1

Experimental Design

A first study was carried out to test hypotheses 1 and 2. Taking as a basis the first movie ad video obtained from the pretest, three experimental scenarios was created. The first manipulated scenario presented the brand logo 5 seconds after the high arousal peak, which correspond with post-arousal condition (Graph 1 of Figure 1).

Measurement

Ad recall was measured by three items using 7-point Likert scales. Specifically, respondents had to indicate their level of agreement with the following statements: “This ad is easy to remember”, “I remember the details of this ad”, and “I will be able to remind this ad after one week”.

...

Table 1. Summary of studies conditions, hypotheses and results.

Study	Conditions and graphs	Hypothesis	Dependent variable	Proposed effect	Result
	Post-arousal (Graph1) vs.				
Study 1	Pre-arousal (Graph 2)	H1a	Brand recall	Higher in post-arousal	Supported
		H1b	Ad recall	Not significant difference	Supported
Study 1	High arousal peak (Graph 3)	H2a	Brand recall	Higher in post-arousal	Supported
		H2b	Ad recall	Not significant difference	Supported
Study 2	Far from arousal (Graph 4)	H3a	Brand recall	Higher in post-arousal	Not supported
		H3b	Ad recall	Not significant difference	Supported

5. Conclusions and discussion

Previous literature on advertising effectiveness indicates that arousal may favor recall, but also proposes that a high arousal impact can sometimes harm recall (Shapiro and MacInnis 2002).

...

6. Implications and further research lines

The preliminary findings of our research have management implications specifically remarkable for advertising design. Initially, our studies supports that a high arousal scene increase advertising effectiveness but only depending on ad sequential order design. Our conclusions that a higher brand recall is achieved when the logo brand is presented after a high arousal stimulus suggest that the principal information that advertisers aims to communicate should be placed after this high arousal stimulus.

...

Acknowledgments: The authors gratefully acknowledge the financial support

References

- Aaker, D. A., D. M. Stayman, and M. R. Hagerty. 1986. "Warmth in advertising: Measurement, impact, and sequence effects." *Journal of Consumer Research* 12 (4): 365-381.
- Ariely, D., and G. S. Berns. 2010. "Neuromarketing: the hope and hype of neuroimaging in business." *Nature Reviews Neuroscience* 11 (4): 284-292.
- Astolfi, L., F. De Vico Fallani, F. Cincotti, D. Mattia, L. Bianchi, M. G. Marciani, and F. Babiloni. 2008. "Neural basis for brain responses to TV commercials: a high-resolution EEG study." *Neural Systems and Rehabilitation Engineering, IEEE Transactions on* 16 (6): 522-531.
- Boucsein, W. 1992. "Electrodermal activity." *New York: Plenum University Press*.
- Damasio, A. 2008. "Descartes' error: Emotion, reason and the human brain." *Random House*.
- ZenithOptimedia. 2013. "Advertising Expenditure Forecasts September 2013". Accessed December 5. <http://www.zenithoptimedia.com/wp-content/uploads/2013/09/Adspend-forecasts-September-2013-executive-summary.pdf>