TV SPECTATORS' VISUAL ATTENTION TO IN-STADIUM SPONSORSHIP MESSAGES

Submitting author: Mrs Bartsch Katja
Technische Universität München, Department of Sport & Health Management
Munich, 80992
Germany

All authors: Bartsch Katja (corresp), Joerg Koenigstorfer

Type: Scientific
Category: 5: Marketing In and Through Sport

Abstract

AIM OF THE PAPER
More and more perimeter advertising in sport stadiums is enabled by light-emitting diode technology. One of the goals of this technology is to use animated content in sponsorship messages. This study investigates whether animated (vs. non-animated) perimeter advertising increases TV spectators' visual attention to sponsorship messages, and how game activity influences visual attention to the advertising.

THEORETICAL BACKGROUND
Eye movement research has advanced over the past decades. Eye tracking devices record foveal fixations as measure of visual attention. Sponsorship-linked marketing has embraced the technology, using visual attention as indicator for sponsorship impact on recipients. D'Ydewalle and Tamsin (1993) and Breuer and Rumpf (2012) examined the relationship between visual attention and recall of sponsors in TV telecasts. To date, however, there is little research into how stimulus-driven attention can be influenced by characteristics of the advertising (here: in-stadium perimeter animation) in the sponsorship domain. Human visual attention is selective and guided by visual onset. Visual onset models of attention use the measure of salience, meaning that "regions with different properties from their neighboring regions are considered more informative and are supposed to attract attention" (Oliva, Torralba, Castelhano & Henderson, 2003, p. 253). The characteristics of (advertising) stimuli, such as color, size, and motion, influence this process (Wolfe & Horrowitz, 2004). This study looks at motion as part of perimeter advertising. Based on recent visual onset models, we predict that animated perimeter advertising (with motion features) increase visual attention duration in TV spectators as compared to non-animated perimeter advertising (without motion features).
The game itself is the prevailing scene in the visual field when TV

spectators follow a sports game (Breuer & Rumpf, 2012). The scenes can be more or less active, ranging on a continuum from high activity (e.g., many game actions happening at the same time) to low activity (e.g., game breaks) (d'Ydewalle & Tamsin, 1993). We consider the degree of game activity as one variable that potentially influences the relationship between animated (vs. non-animated) perimeter advertising and visual attention. We predict that animation will have strongest effects when game activity is low (as opposed to high game activity), because visual onset is more likely to be triggered when recipients perceive little actions in the sports games (Oliva et al. 2003).

RESEARCH DESIGN AND METHODOLOGY

Thirty-six participants took part in the laboratory study using stationary eye-tracking equipment. The animation of perimeter advertising was manipulated within participants, that is, each participant saw one video cutting of a soccer game with and one without animated perimeter advertising. The order of the videos was randomized between participants and did not influence the results. Participants were not informed about the goal of the study, but were debriefed after participation.

The videos showed scenes with game actions in offense, midfield, and defense. Different in-stadium advertisements for different competitions (here: cup and league game) allowed us to study two 2013/14 season games with same team pairings (home and away team) in the same stadium. In both games, the home team won. The number of goals shown in the video was identical between the video cuttings. They had about the same length and were controlled for confounding variables.

To assess game activity, soccer experts rated each scene's intensity and the resulting variable was used as independent variable. Fixation duration to sponsorship was expressed as a percentage of total video duration and used as dependent variable in the following analyses.

RESULTS, DISCUSSION, AND IMPLICATIONS

A 2 (animation: yes vs. no) × 2 (game activity: high vs. low) × 2 (order of videos: animated video first vs. non-animated video first) mixed ANOVA was conducted. The results showed that animation increased visual attention to sponsorship ($F(1,34) = 43.27$, $p = .000$) and, more importantly, the interaction effect between animation of perimeter advertising and game activity was significant ($F(1,34) = 12.98$, $p = .001$). The increase in visual attention was larger in the low game activity condition (from 1.32% to 2.98%; $t(35) = –5.45$ $p < .001$) than in the high game activity condition (from 2.45% to 2.93%; $t(35) = –2.31$, $p = .027$). The results thus support our assumptions.

The findings contribute to state-of-the-art visual attention onset models and their applicability to advertising in sports. Animated content is an effective measure to increase visual attention to sponsorship in TV spectators, especially when game activity is low. Sponsorship managers are recommended to make use of motion in order to increase the

likelihood to be noticed by recipients. The element is most effective when game action is low.

References

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