Would Longer Fixation Duration Lead to Better In-Game Advertising Effect? The Effects of Placement in a Change Detection Task from Eye Movement Evidence

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We used change detection paradigm to understand the effects of placement in the change detection task in order to apply to in-game advertising. First, we manipulated the location of placement (in area-of-interest or in non-area-of-interest) and the type of placement (location-change target or no-location-change non-target) to examine how placement attract our attention in a change detection task. In addition to reaction time, correct detection and recognition rate, we also used an eye tracker to examine the role of visual attention in change detection. Besides, we measure liking and purchase intention as an index of effects. The results showed that placement was in the AOI attracted participants' attention more quickly. Moreover, the results of eye movements showed that longer fixation duration and more fixation number were observed for targets than for non-targets. More importantly, non-targets and placement in non-AOI showed higher liking and purchase intention than targets and those in AOI. The results imply that in this goal-directed target-change-detection task, level of liking, and purchase intention of the placement cannot be reflected in the eye movement indexes. Future studies could add the index of unconscious processing to clarify the implicit effects of in-game advertising.

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