





BACKGROUND & OBJECTIVES

Out-of-home (OOH) advertising references advertising campaigns that take place outside of the home. Establishing brand presence in designated areas is paramount for an advertiser to ensure the effectiveness of a campaign. A common question is if a consumer exposed to an advertisement will act on it.

To answer this, we must know the consumers retention and perception after being exposed to the advertisement. We know that consumers are overwhelmed by constant ads and brand messages both inside and outside the home. The human brain compensates this by automatically paying less attention to redundant information which eases cognitive overload.

This phenomenon is also known as creative fatigue, which often leads to poor campaign performance and reduced return on investment (ROI). Even ads with high levels of engagement can generate low recall levels if the cognitive load is high. There are many variables to this including the advertisement site itself, creative design, and how long the campaign runs.

We firmly believe that despite the creative, the sites and advertising formats play a key role in OOH's success from grabbing viewers' attention to ad perception. To this end, KEVANI commissioned Axona Lab to investigate on a neuroscientific level the role of the OOH site in ad retention and its impact on creative fatigue. Factors considered include cognitive load, brand recall, and emotion.

This study can also help understand how consumers react to OOH as well as how to measure and predict OOH effectiveness before launching a campaign.

KEVANI° 2



METHODOLOGY & PROCEDURE

For this study 104 participants were recruited, with an average age of 29.7, and all of which resided in Los Angeles, California where the study occurred.

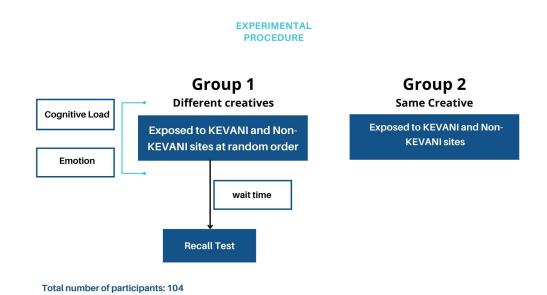
In order to investigate the impact of different OOH sites on the subconscious behavior of participants, we designed an event-related potential study which measures brain response that is the direct result of a specific sensory, cognitive, or motor event. Electroencephalography (EEG) was used to map participant brain responses and behavior to provide accurate and bias-free results which could not be acquired with self-reported questionnaires or surveys.

Upon obtaining an informed consent, and without knowing the objective of the study, the participants were randomized into two groups.

Group 1 consisted of 54 participants exposed to different OOH sites in L.A. including both KEVANI and non-KEVANI sites in random order. Post exposure, the participants completed a surprise brand recall test.

Group 2 consisted of 50 participants exposed to KEVANI and non-KEVANI sites with the same creative to emphasize the impact of the sites on ad retention and to eliminate the creative effect

Figure 1: Experimental procedure



KEV/NI°

Data was collected using 14 channels of EEG from different areas of the brain and investigated with the metrics that were the most crucial for our analysis.

Cognitive Load: Relates to the amount of information that working memory can hold at a given time. Neuroscience evidence revealed that a low cognitive load is associated with better ad performance.

Emotions (Excitement): Awareness or feeling of physiological arousal with a positive value.

Memory was measured with a surprise brand recall test for the participants of Group 1. **Memory recall** is the ability to recall a piece of information (in this case the brand) after being exposed to OOH.

As per **visual attention**, a predictive eye-tracking A.I. (with specific filters for OOH) was used to monitor how much **selective visual attention** each location receives.

KEV\NI°



RESULTS & DISCUSSION

KEVANI vs non-KEVANI Sites

We tested 10 billboards in 8 locations. KEVANI sites were grouped into **prime sites** including digital and full-motion sites and **standard sites** which include non-digital sites and murals comparing it with other sites with similar specs.

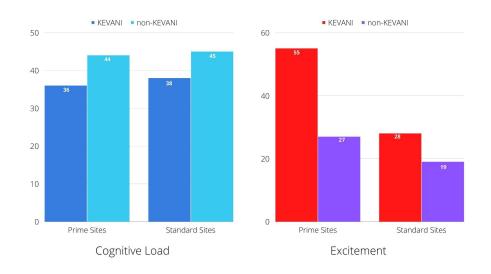


Fig 2: Cognitive Load and Excitement Levels for KEVANI vs non-KEVANI sites

Both KEVANI's prime sites and standard sites outperformed with respect to other sites with similar specs.

The significantly lower cognitive load recorded is a clear indicator that OOH campaigns will perform better on KEVANI's sites where prime sites scored 8% less cognitive load and standard sites 7%. This is true regardless of the creative, since there was no significant difference in cognitive load measures between the two experimental groups where the second group of participants were exposed to the site with the same creative (p value>0.05). Note, there was a significant difference in excitement levels between the two groups which suggests that excitement levels can serve as a metric to measure the creative's performance for a specific site, but this needs further investigation.

As per excitement levels, both prime sites and standard sites scored significantly higher for KEVANI sites with respect to the other sites in Group 1, hence KEVANI sites induced higher emotional arousal.

KEV/NI°

Memory Recall

As was expected, the sites with low cognitive load had a higher memory recall during a surprise memory test and had a higher recall rate.

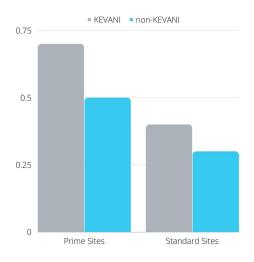


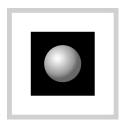
Fig 3: Brand recall after being exposed to OOH sites during surprise response test

Prime sites, which included digital and full-motion digital sites, had a considerably higher brand recall rate compared to standard sites.

Visual Attention

Visual attention refers to directing the viewers' attention to the site/billboard after the brand messaging results in cognition and emotion induction.

Although higher visual attention means better performance, we did not find any direct correlation between Cognitive load and Visual attention.



CONCLUSION

The objective of this study was to investigate the role of the sites in ad retention and perception. Our findings showed that prime sites resulted in lower cognitive load which is crucial for ad retention and perception, and in the long run combats creative fatigue. Our findings also showed a higher brand recall in the case of prime sites due to the low cognitive load.

Interestingly, the excitement levels were different. This leads us to believe that excitement levels can be used as a metric to measure and predict a creatives performance for a specific site.

Overall, this study highlighted the uniqueness of KEVANI's sites and can serve as a reference for media planners, buyers, and agencies to be able to predict their campaign performance and provide metrics for the effectiveness of a site for ad retention using the same methodology.



KEVANI®

1013 South Los Angeles Street Suite 8A Los Angeles, CA 90015

> www.kevani.com 310.579.9343 info@kevani.com

Study Performed by:

AxonaLab 609.337.4629 www.axonalab.com

Study Powered by:

Emotiv 415.801.0400 www.emotiv.com