How the Brain Sees Diversity Ads: fMRI Insights into Social Desirability and Implicit Preference in Audience Reception

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Abstract

As diversity and inclusion become increasingly prominent in advertising, consumer responses remain mixed and are not fully captured by self-report measures. Drawing on the dual-attitude model, this study investigates whether diversity advertising elicits greater implicit cognitive effort than traditional advertising. Using an event-related fMRI design, 22 Chinese participants viewed fast-moving consumer goods advertisements under two conditions: traditional in-group portrayals and diverse representations across six domains. Neural responses were examined alongside self-reported ad favorability and purchase intention. Results showed that diverse advertisements recruited broader parietal and occipital activation, with a pronounced right parietal response as evaluations became more negative, indicating greater attentional and evaluative effort. By contrast, in-group advertisements elicited more limited, primarily left-lateralized parietal responses. Behavioral results revealed no significant difference in purchase intention between conditions, although responses to diverse advertisements showed greater dispersion. These findings suggest that diversity advertising may heighten evaluative effort even when explicit judgments remain comparable.

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