

**SUSTAINABLE APPROACHES IN AI-GENERATED FASHION
ADVERTISING: ASSESSING CONSUMER EMOTIONS, BEHAVIORS, AND
COGNITIVE PROCESSES THROUGH EEG AND EYE-TRACKING**

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ABSTRACT

This study delves into the psychological and sustainability impact of AI-generated fashion advertising, investigating its effects on consumer emotions, behaviors, cognitive processes, and perceptions of sustainable fashion. This study hypothesizes that AI ads enhance positive emotions, purchase intention, cognitive processes, and perception of sustainable fashion practices. Employing an experimental design, we compare AI-driven and human-created ads, focusing on EEG and eye-tracking responses toward sustainable messages. Neural and visual engagement with sustainable ad elements is measured using EEG and eye-tracking. A survey further assesses these ads' effectiveness in improving emotional response, purchase intention, brand favorability, and awareness of sustainable fashion. This study provides strategy for developing AI-generated advertising theory and business with academic and practical implications.

Keywords: Generative AI, EEG, Eye tracker, Sustainability, Psychological impact

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