

## **Improved Recall of SDG-Focused Brand Messages Following Insight Moments: Exploring the Impact of Reward Responsiveness**

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### **Abstract**

Research on creative problem-solving has demonstrated that solutions via sudden insight (Aha! experience) tend to be more memorable, a phenomenon referred to as the “insight memory advantage”. This study explored whether this advantage applies to brand claims aligned with the Sustainable Development Goals, while also examining the influence of reward responsiveness. After solving problems, participants were incidentally exposed to SDG-related brand messages and later identified whether they solved the problems using insight or a step-by-step approach. The results indicated improved recall of SDG-related information following insight-based solutions compared to non-insight solutions, with reward responsiveness playing a mediating role. These findings suggest that individuals with higher reward responsiveness exhibit stronger recall of SDG-related brand messages encountered during moments of insight. The study highlights potential advertising strategies that integrate insight, reward responsiveness, and memory to enhance brand recall and promote sustainable behavior.

*Keywords: Brand purpose, advertising, insight, sustainable development goals.*

### **1. Introduction**

The modern corporate branding landscape is experiencing a significant shift as businesses increasingly align their brand narratives with the Sustainable Development Goals (SDGs) (Calder 2022). This shift reflects a movement away from purely profit-driven motives toward embracing sustainability and ethical responsibility as integral parts of competitive strategy (Anastasiadou et al. 2023). SDG-driven branding has emerged as a transformative approach that conveys a company’s values and commitment to social and environmental causes, aligning with evolving consumer expectations influenced by ethical practices and corporate responsibility (Edelman 2023; Euromonitor 2024). Advertising plays a critical role in shaping consumer perceptions, helping brands communicate their dedication to addressing global challenges (Schmidt et al. 2021). The demand for sustainable business practices from stakeholders, including customers and governments, necessitates brands to embrace a purpose that reflects these values (Iglesias et al. 2023). Beyond traditional corporate social responsibility efforts, SDG-aligned brand purposes are now integrated into brand narratives, enabling deeper, more enduring consumer connections (Ind & Payton 2021). This study investigates the effect of SDG-aligned brand purpose on consumer memory retention and reward responsiveness. Utilizing cognitive science methodologies, the

research explores the dynamics between "Aha!" moments, reward responsiveness, and memory, providing insights for effective, long-lasting advertising strategies.

## **2. Literature review**

Creativity is a key element in advertising, recognized for capturing consumer attention and enhancing memorability (Shen et al. 2020). Creative ads not only generate interest but also elicit positive emotions and improve brand recall (Smith et al. 2008). Research also highlights that creative advertisements are linked to improved purchase intentions and long-term memory consolidation, especially through emotional arousal and cognitive restructuring (Danek & Wiley 2020; Salvi et al. 2024). Insight problem solving, characterized by the sudden "Aha!" moment, plays a significant role in this process, often involving a sudden shift in problem understanding (Ohlsson, 2011). This shift results in emotional uplift and cognitive restructuring, leading to improved memory retention. Likewise, research shows that the emotional component of insight problem-solving enhances memory consolidation for both the problem's solution and adjacent information (Salvi et al. 2024). Behavioral and neuroimaging studies have shown that insights leave a persistent memory trace (Danek et al. 2013). Insights influence not only memory but also the perceived truthfulness of statements and risk preferences (Laukkonen et al. 2020). Furthermore, individuals with high reward responsiveness – those who react more strongly to rewards – are particularly affected by insights, experiencing them as more emotionally rewarding (Oh et al. 2020).

The concept of brand purpose has gained increasing importance in today's branding strategies, especially in alignment with SDGs. Brand purpose goes beyond profitability, reflecting a company's broader commitment to societal and environmental issues. Embedding SDG-driven purposes into the core of a brand's identity creates stronger emotional connections with consumers, fostering trust and loyalty (Iglesias & Ind 2020). This emotional bond enhances consumer engagement and purchase intentions, particularly when the brand's purpose resonates with their values (Swaminathan et al. 2020). Feri, Ind, and Tjandra (2024) propose that aligning brand purpose with SDGs-driven initiatives can shape positively stakeholder responses. Therefore, creative advertising that evokes "Aha!" moments may strengthen the impact of SDG-aligned brand purposes by engaging consumers both emotionally and cognitively. These insight-driven strategies, particularly for consumers with high reward responsiveness, may help reinforce brand recall and deepen the connection to the brand's purpose. As a result, by examining how SDG-driven brand purposes and insight experiences intersect, this study explores how creative advertising strategies can enhance both consumer memory and emotional engagement, leading to more effective advertising strategies.

## **3. Research methods**

The study was conducted using the online platform Qualtrics, recruiting participants via Prolific Academic. Eligible participants were U.S. residents aged 18 and older, and English native speakers. Participants consented to the study and were administered with a questionnaire followed by a series of problem-solving tasks and SDG-aligned brand

claims. In phase 1 (SDG Items Assessment), 222 participants were asked to rate 17 SDG-aligned brand purposes on a scale measuring their preference and likelihood of purchasing each brand. This assessment helped to create a homogeneous pool of SDG-related brand messages. In phase 2 (experiment), 282 participants were presented with a series of Rebus puzzles – a common measure of insight problem solving (e.g., Salvi, et al., 2016) – paired with SDG-aligned brand purposes. After solving each puzzle, participants rated their preference for the SDG brand claim and assessed their likelihood of purchasing the brand. A surprise recognition memory test followed to evaluate how well participants remembered the brand purposes. Participants' reward responsiveness was assessed using an 8-item scale, which measures their sensitivity to rewards. This was a key variable, as the study aimed to explore how reward responsiveness interacted with insight problem solving to influence memory for SDG-related information.

#### **4. Results**

The results showed that participants had better memory recall for SDG-aligned brand purposes encountered during insight-driven problem-solving (Aha! moments), particularly for those with higher reward responsiveness. Reward responsiveness was found to moderate the relationship between insight experiences and memory retention. Participants with low reward responsiveness remembered more brand purposes after step-by-step problem solving, while those with high reward responsiveness showed better recall following insight experiences. Further analysis revealed that reward responsiveness significantly predicted participants' emotional responses and their purchase intentions for SDG-aligned brand purposes. Individuals with higher reward responsiveness exhibited greater brand preference and were more likely to indicate higher purchase intentions for these brands.

#### **5. Conclusions and implications for research and management**

This study provides valuable insights into the role of insight problem solving and reward responsiveness in consumer memory, particularly in the context of SDG-aligned advertising. The findings suggest that consumers are more likely to remember SDG-driven brand purposes when they experience an insight, especially if they are highly sensitive to rewards. This supports the “insight memory advantage” (Danek & Wiley 2020), where the emotional and cognitive components of insight experiences enhance the retention of adjacent information. For brands looking to integrate sustainability into their marketing strategies, these findings highlight the importance of crafting messages that provoke insight moments for high reward-responsive consumers. For those with lower reward sensitivity, an analytical, step-by-step approach may be more effective. The emotional responses associated with insights, such as joy and satisfaction, parallel the emotional impact of creative advertising. This reinforces the idea that emotionally arousing experiences, like insights, can lead to better memory retention, making SDG-driven brand purposes more memorable.

For marketers, this research emphasizes the potential of using insight-driven strategies to enhance the effectiveness of SDG-aligned advertising. By designing campaigns that evoke insight experiences, brands can create more memorable and impactful messages,

particularly for consumers with high reward responsiveness. Additionally, recognizing the differences in consumer reward sensitivity allows for more tailored advertising approaches that can maximize the retention of sustainability messages. This study also underlines the broader trend of embedding SDGs into brand narratives. Brands that effectively communicate their commitment to social and environmental causes are likely to establish deeper connections with their audiences, as evidenced by the positive influence of SDG-aligned purposes on emotional arousal and purchase intentions.

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