Does Sponsorship Generate Brand Engagement? Evaluating Drivers of Sponsor Brand Mentions in Formula 1 Races Across Social Media Platforms

Cherie Chick[a]*, Ewa Maslowska[a], Patrick Vargas[a], and Harsh Taneja[a]

[a]*Charles H. Sandage Department of Advertising, University of Illinois Urbana-Champaign, Urbana, United States.*

*Corresponding author:

Cherie Chick
University of Illinois Urbana-Champaign
Department of Advertising
119 Gregory Hall
810 S. Wright St.
Urbana, IL 61801
cchick2@illinois.edu

Abstract

In a digital environment where attention is rapid, fragmented, and socially amplified, traditional sponsorship metrics, struggle to capture real-time consumer response. This study advances a behavior-based approach to Return on Sponsorship Investment (ROSI) by linking objective, physical sponsorship exposure to spontaneous digital consumer expression. Using Formula 1's 2025 season, we analyze fan comments from nine races across X, Reddit, and YouTube using computational methods. Brand engagement is operationalized as consumer-generated sponsor brand talk and measured primarily as brand-mention volume. Using publicly accessible behavioral data along with computational analyses of images and text, we test how two classes of signals shape this outcome: brand exposure signals (logo prominence, logo repetition, and brand salience), which we find matter more than team-context signals (team performance, team popularity, and team social media activity).

Keywords: sports sponsorship, return on sponsorship investment, social media analysis, computational analysis, brand engagement