

Title: Exploring the Role of Virtual Influencers in Promoting Adaptive Sustainable Clothing through Visual Narrative Transportation

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Abstract

Virtual influencers (VIs) are increasingly utilized in digital marketing due to their cost-effectiveness and ability to foster customer engagement like human influencers (HIs). Despite their rapid popularity, the artificial nature of VIs raises concerns regarding authenticity and credibility, particularly in contexts that emphasize inclusivity and sustainability. VIs, like HIs, present themselves on social media with unique personas and storylines using transmedia storytelling to connect with customers and promote products. With this research, we seek to understand better the role of visual narrative transportation in influencer marketing (human versus virtual) to promote adaptive sustainable clothing. Using a 2x2 between-subject experimental design, we manipulate both influencer type (diverse virtual vs. diverse human) and the presence of visual narratives to assess their impact on consumer perceptions. Additionally, we investigate the mediating roles of perceived uniqueness and transportability in shaping consumer responses, including interaction intentions, brand attitude, and choice behavior. The results suggest that VIs, combined with visual narratives, can enhance perceived uniqueness and reportability, driving positive customer behavior with adaptive clothing. This research aims to contribute to the literature on VIs by examining their effectiveness in promoting diversity and sustainability. We offer practical insights for brands that leverage VIs and HIs in socially responsible marketing strategies.

Keywords: Virtual influencer, influencer marketing, diversity, narrative transportation, storytelling, social media

Introduction Social media's evolution has amplified influencer marketing's role, where brands collaborate with social media influencers (SMIs) to increase awareness and boost sales (Lou & Yuan, 2019). Influencers effectively promote positive attitudinal and behavioral responses, introduce new products, promote trends, and drive sales (Ferraro et al., 2024; Martínez-López et al., 2020). Despite the ongoing debate surrounding the efficacy of influencers in advertising (Taylor, 2022), their role remains imperative in social media marketing as brands increasingly invest in influencer marketing (Leung, 2022). Technological advancements, especially artificial intelligence (AI), have introduced virtual influencers (VIs), known as AI-generated entities that comprise human characteristics, features, and personalities (Ferraro et al., 2024; Sands et al., 2022). These virtual influencers operated through AI, human effort, and brands, offer cost-effective alternatives to traditional (human) influencers while delivering significant results. Similar to human influencers, consumers are building genuine connections with virtual influencers (Mirowska & Arsenyan, 2023). Various brands, including BMW, Prada, Dior, Versace, Adidas, Calvin Klein, and Red Bull, use virtual influencers to promote their products while

maintaining low risk and cost compared to human influences. A worth-mentioning example is Lil Miquela, a 21-year-old virtual influencer who has gained over 2.5 million followers on influencers and is recognized as one of Time's most influential personalities on the internet (Nguyen, 2023). As virtual influencers aim to connect with their audiences, there is a growing emphasis on diversity to enhance the perception of inclusion (Hiort, 2022). In advertising, diversity represents individuals who possess physical and mental attributes. In contrast, inclusion refers to the consumer evaluations of their presence and perspectives (Eisend et al., 2023). There has been a visible reflection of diversity among virtual influencers since their inception. Examples of diverse virtual influencers include those representing various gender identities (e.g., @bangkoknaughtyboo), ethnic groups (e.g., @shudu.gram, @naina_avtr), body sizes (e.g., @brenn.gram) and minority groups such as individuals with Down Syndrome (e.g., @itskamisworld). The focus on diversity, whether real or perceived physical or socio-cultural differences, is significantly crucial across various marketing domains. However, the existing research concerning diversity within influencer marketing, particularly within virtual influencers, is still confined (Ferraro et al., 2024). Investigating how diverse virtual influencers influence consumer behavior through storytelling is crucial to engaging their audience with immersive content on social media. None of the existing research (to the best of the authors' knowledge) investigates narrative transportation in the context of diverse virtual influencers.

With this research, we seek to understand better the role of visual narrative transportation in influencer marketing (human versus virtual) to promote adaptive sustainable clothing. By using the visual narrative transportation (VNT) framework (Nikulina et al., 2024), our study aims to (1) understand how consumers respond to diverse influencers (virtual versus human) when promoting adaptive clothing and (2) examine the mediating role of perceived uniqueness and transportability in influencer consumer behavior.

Theoretical Framework - Visual Narrative Transportation Framework

One of the key elements impacting the effectiveness of VIs is storytelling. Storytelling in marketing has long been recognized for its ability to engage audiences, capture attention, and convey messages, especially through emotional and immersive narratives (Phillips & McQuarrie, 2011). With their carefully crafted personas and visual appeal, virtual influencers are a powerful storytelling source. In this context, the visual narrative transportation (VNT) framework offers a valuable foundation for understanding how VIs can create deeper consumer engagement. Visual narrative transportation (VNT) refers to the process by which visual stimuli such as images and video immerse consumers into a story, leading to emotional and cognitive engagement (Van Laer et al., 2014). Diverse VIs are highly effective at generating VNT due to their visually captivating narratives and rich storytelling techniques, especially when promoting adaptive sustainable clothing. Consumers transported into the visual story created by VIs are more likely to develop emotional connections, empathize with characters, and ultimately exhibit more favorable behavioral outcomes. Moreover, the VNT framework plays an imperative role in luxury and adaptive fashion advertising, where unique and inclusive visuals are employed to stand out

from traditional techniques. Featuring inclusivity through diverse models helps foster a unique narrative that enhances perceived brand uniqueness and transports consumers emotionally into stories that resonate with them (Green & Brock, 2000). For instance, virtual influencers representing diverse personas embody an atypical presence in the fashion industry, which can be visually appealing and foster greater narrative immersion. This immersion enhances the effectiveness of the advertising campaign by enhancing empathy and emotional engagement (Edson Escalas, 2004; Nikulina et al., 2024). Perceived uniqueness is the consumer perception that a product or a brand is rare, special, or different from the norm (Jebarajakirthy & Das, 2021). Inclusivity in advertising, representing models with disabilities, can enhance perceptions of uniqueness. Disability in the fashion industry is considered inspirational and distinctive, contributing to brand differentiation and increased consumer engagement (Foster & Pettinicchio, 2022). This sense of uniqueness often results in positive brand attitudes and consumers' willingness to buy (Brown et al., 2018). The existing literature does not investigate the mediating role of transportability and perceived uniqueness of VIs and HIs when endorsing sustainable adaptive clothing. While the existing literature provides evidence of the effectiveness of VIs in engaging consumers and conveying narratives, the mechanism through which perceived uniqueness and transportability influence consumer behavior (e.g., interaction intention, brand attitude, and choice behavior) in the context of adaptive, sustainable clothing remains under-explored.

Hypothesis 1: Diverse virtual influencers (vs. diverse human influencers) will result in higher influencer (H1a interaction intention) and brand-oriented (H1b brand attitude H1c choice behavior) outcomes.

Hypothesis 2: Perceived uniqueness mediates the effect of a virtual (vs. human) influencer's diversity on influencer (H2a interaction intention) and brand-oriented (H2b brand attitude H2c choice behavior) outcomes.

Hypothesis 3: Transportability mediates the effect of a virtual (vs. human) influencer's diversity on influencer (H3a interaction intention) and brand-oriented (H3b brand attitude H3c choice behavior) outcomes.

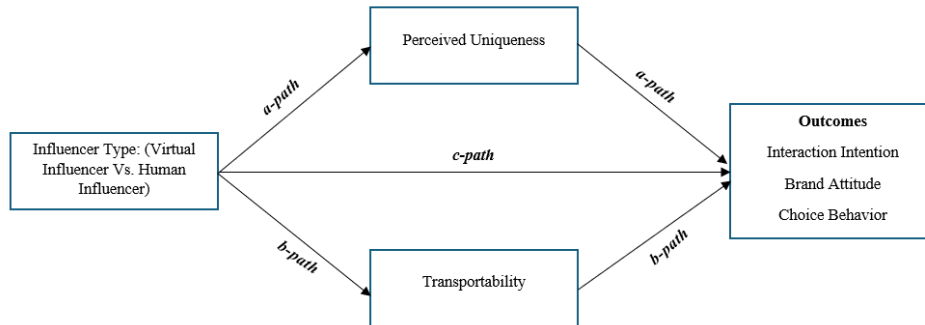


Figure 1: Theoretical Framework

Methodology - Experimental Design and Procedure. This study adopts a 2x2 between-subjects experimental design to examine the impact of diverse virtual influences versus diverse human influencers in promoting adaptive, sustainable clothing. Participants are exposed to one of the four experimental conditions: diverse influencers (virtual versus human) with visual narrative transportation or without visual narratives in the advertising content (stimuli). We aim to examine how both types of influencers and visual narratives affect influencer and brand outcomes, including interaction intention, brand attitude, and choice behavior, focusing on the mediating roles of perceived uniqueness and transportability. The existing measurement scales will be utilized to measure variables in our theoretical framework.

Expected Findings. With our findings, we expect to demonstrate that diverse virtual influencers generate higher levels of perceived uniqueness and VNT due to their novel and visually appealing personas when promoting adaptive sustainable clothing. These factors are expected to impact interaction intention positively, positive brand attitudes, and increased purchasing behaviors. The emotional engagement facilitated by VNT, especially through inclusive storytelling, will likely impact consumer behavior significantly. Perceived uniqueness and transportability will positively mediate the relationship between diverse virtual (vs. human) influence and the resultant influencer (interaction intention) and brand-oriented (brand attitude, choice behavior) outcomes.

Conclusion and Implications. Our findings offer practical and theoretical implications by highlighting the significance of diversity and visual narrative transportation in influencer marketing. By employing virtual influencers, brands can foster emotional connections, create resonating stories, and engage with diverse consumer segments. This approach is particularly effective for promoting adaptive clothing, a segment where inclusivity and social sustainability play a key role. By investigating the mediating roles of perceived uniqueness and VNT, this research highlights how visually immersive narratives can enhance consumer engagement with virtual/human influencers. The findings offer implications for brands seeking to employ virtual influencers for diversity and inclusion in their marketing strategies, particularly by using innovative AI-generated influencers.

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