Real but Fictional: A Research Agenda of Virtual Influencers for Brand Communications in Social Media Marketing

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ABSTRACT

With the rise of virtual influencers (VIs) and their impacts on influencer marketing, this paper proposes a future research paradigm on how to develop brand communication strategies through a novel understanding of VIs from both the consumer and company perspectives. Built on the parasocial interaction theory and the human brand theory, six propositions aim to provide research guidelines for influencer and social media marketing by leveraging the use of VIs in a brand-consumer relationship. The theoretical and managerial implications are also discussed.

Keywords: Virtual influencer, Influencer marketing, Social media marketing, Human brands, Parasocial interaction, Source credibility

INTRODUCTION

Over the past two decades, the rise in technology has impacted every facet of our lives. One of the most significant impacts on marketing is the shift from traditional media, such as television and radio, to digital marketing on mobile devices and social media platforms. This shift has presented both opportunities and challenges for marketing scholars and professionals to balance.

Traditionally, celebrity endorsements have been a strategic way for brands to promote themselves. By partnering with the hottest and trendiest figures in pop culture, brands can strengthen brand attitude and awareness through communication with their credibility endorsers (Ozdemir, Kolfal, Messinger, and Rizvi, 2023). The rise in technology and digital channels has given way to a new type of “celebrity,” the social media influencer. These human influencers post about their everyday lives or specific interests on social media platforms such as Instagram, Facebook, YouTube, and TikTok (Haenlein, Anadol, Farnsworth, Hugo, Hunichen, and Welte, 2020). The organic nature in which social media influencers make their start and grow their followers has made such influencers attractive to consumers. Most social media influencers are everyday people who showcase their everyday lives, making them seem more relatable to consumers (Hughes, Swaminathan, and Brooks, 2019; Leung, Gu, Li, Zhang, and Palmatier, 2022). This relatability manifests in perceived credibility, accessibility, and a feeling of friendship with their followers (Lou, Kiew, Chen, Lee, Ong, and Phua, 2023). These human influencers have become so popular that brand partnerships and sponsorships have become commonplace, for instance, with some charging thousands of dollars for a singular, sponsored post on Instagram (Haenlein et al., 2020).
Given the age of technology of the 21st century, digital media and social media are continuously evolving in their use and practices. A new type of influencers who build off the success of human social media influencers and their opportunities for brand promotion are virtual influencers (Thomas and Fowler, 2021). Virtual influencers (VIs) are essentially computer-generated robots who are given unique human characteristics, personalities, and physical traits (Lou et al., 2023; Sands, Ferraro, Demsar, Chandler, 2022). These influencers are made possible by the recent advances in computer-generated imagery technology as well as the rise in virtual-based business models caused by the COVID-19 pandemic. The entrance of these VIs is critical to analyze because the artificial intelligence (AI) technology industry is showing signs of continued progression (Thomas and Fowler, 2021; Lou et al., 2023).

VIs currently generate about three times more engagement on social media than human influencers (Ozdemir et al., 2023). The most successful VI is Lil Miquela, for example, who has amassed more than 3 million followers on Instagram and was named one of Time Magazine’s most influential people on the internet in 2018 (Drenten and Brooks, 2020). This VI, depicted as a 19-year-old living in Los Angeles showcases her daily life via social media, whether that be hanging out with friends at a concert or eating a meal at a restaurant (Kugler, 2023). Brands like Prada, Dior, Calvin Klein, and Samsung have already worked with her (Cruz, 2022). The AI robot even promotes brands and shows support for social causes such as the Black Lives Matter movement (Lou et al., 2023; Franke, Groeppel-Klein, and Müller, 2023).

Influencer marketing grew to have an estimated market size of $16.4 billion in 2022. Furthermore, this is expected to jump a further 29% to an estimated $21.1 billion in 2023 (Geyser, 2023) accounting for 6.4% of the total U.S. advertising market (Platter, 2023). According to Territory Influence, the virtual influencer market is currently valued at $4.6 billion and is projected to increase by 26% by 2025 (Kuzminov, 2023). Firms utilize VIs to promote their goods because there is the potential to influence millions of users on social media. Thirty-five percent of American consumers made a purchase in 2022 after hearing a VI advocate a good or service. Millennials and members of Generation Z made up 40% of these customers (Kuzminov, 2023). Among the products and services endorsed by the top 12 most popular virtual influencers, industries such as fashion, luxury, beauty, technology, and retailing are most likely to benefit from employing VIs (Molenaar, 2023) to actively engage customers, fostering brand loyalty, drive sales, and enhance brand recognition (Hiort, 2022).

VIs are thus important from a business perspective due to their usage opportunity to promote brands in the same way as human influencers (Franke et al., 2023). However, these AI figures come with their own set of risks and benefits that can impact a brand’s marketing and promotional strategies (Thomas and Fowler, 2021). VIs present challenges and opportunities in relation to important business and marketing considerations such as brand awareness, innovativeness, credibility, engagement, perceptions of authenticity, brand fit with the endorser, consumer purchase intention, convenience, and the human perception of AI relating to human resemblance.

A systematic literature search in the Scopus database was conducted to collect academic papers that were published on the topic of virtual influencers in marketing up to March 2023. This search generated 34 relevant papers that were further analyzed not only to obtain a clear insight into the general tendencies in the research on virtual influencer marketing but also to clutch contemporary knowledge on the strategic use of virtual influencers. Based on the parasocial interaction theory (Giles, 2002; Horton and Wohl, 1956) from communication, the attachment theory (Bowbly, 1982) from social psychology, the source credibility theory (Djafarova and Rushworth, 2017; Ohanian, 1990; Yoon et al., 1998) and the human brand theory (Thomson, 2006) in marketing, this current research aims to propose insight into the efficiency, target audiences, the back stories and personalities, legal and ethical concerns, and persuasion of virtual influencers. From the perspectives of consumers and marketers, this research investigates the components of transferring from an influencer-follower relationship to a brand-consumer relationship.

The rest of this article is organized as follows: the two most relevant theoretical foundations of this research are introduced, and then a literature of the major findings from the existing research followed by the six research propositions focusing on VIs in the brand-consumer communication relationship is presented. Discussions about the complementary usage between VIs and human influencers are also provided. Finally, the theoretical contributions with future research directions and managerial implications of VIs in influencer marketing are included.
THEORETICAL BACKGROUND

Parasocial Relationship and Parasocial Interaction Theory

Horton and Wohl (1956) originally referred to a parasocial relationship as a one-sided relationship in which a media user or audience engages in friendship-like bonds with a favored media persona, typically a celebrity, an influencer, or a popular fictional character. Social media influencers are both content creators on social media and managers of the audiences they build on several platforms. They are seen as independent third-party endorsers who have the ability to utilize their social media platforms, such as Twitter, Instagram, TikTok, YouTube, Facebook, and other type of social media tools to influence the attitudes and behavior of their fans and followers (Freberg et al., 2011).

According to the parasocial interaction theory, parasocial interactions are defined as the approximation of "conversational give and take" between a media user and a media persona (Giles, 2002). Media users or audiences can establish parasocial relationships with social media influencers through social media consumption although such relationships and interactions may not be instantly mutual (Dibble, Hartmann, and Rosaen, 2016). Parasocial interactions take place exclusively while interacting with a persona via media and psychologically resemble real-life face-to-face interactions. One outcome of parasocial interactions is parasocial attachment when a media persona becomes a source of comfort, felt security, and safe haven (Stever, 2021).

Based on the theory of attachment that focuses on relationships and bonds between people (Bowlby, 1982), an important component of parasocial attachments is proximity seeking, which occurs when audiences are constantly exposed to the characters in various media environments and repeat parasocial interactions. Different from direct interaction, the proximity in parasocial attachments between followers and influencers is achieved through mediated means by keeping up with the influencer’s social media accounts (Stever, 2021). Thus, influencer counts on social media platforms where the follower-influencer’s parasocial relationship is formed through one-sided parasocial interactions, such as views, likes, reposts, and/or comments (Jin and Ryu, 2020). As social media influencers constantly interact with their followers by posting on social media on a daily basis, parasocial relations thus can be built.

Compared with traditional celebrity endorsements, influencers emphasize meeting on an equal basis and establishing intimate connections and relationships with their followers through constant parasocial interactions. Like in-person relationships, parasocial relationships start when an audience meets and gets acquainted with an influencer. This initial parasocial interaction might involve following the influencer on social media, or even interacting with them online or in real life. If the influencer makes an impression that causes the individual to think about them beyond the interaction, parasocial interactions can thus lead to a parasocial relationship (Giles, 2010). In turn, parasocial relationships can be strengthened by further parasocial interactions (Hu, 2016) that may sometimes lead to parasocial attachment (Hu, 2016). A parasocial relationship built on parasocial attachment forms a follower’s emotional responses to an influencer, including trust and attachment.

Source Credibility

Source credibility has been widely expanded in influencer marketing research to determine whether the sender or source of information is attractive and trustworthy, and has expertise (Djafarova and Rushworth, 2017; Ohanian 1990; Yoon et al., 1998). From the perspective of credibility theory, the parasocial relationship between followers and influencers affects the establishment of perceived credibility (Djafarova and Rushworth, 2017), which will further affect willingness to accept the advertisement messages published by influencers as well as the attitudes and behaviors towards the brands endorsed by influencers. For instance, Djafarova and Rushworth (2017) find that consumers feel that their purchase decision is less risky because they have seen Instagram reviews about a product posted by their admired and trusted influencer. However, an Instagram influencer who posts an advertisement or a review for a product without having demonstrated strong knowledge of the product features may not necessarily be considered a credible source for endorsing that product.

Source credibility also involves the professionalism and credibility of influencers as a source messenger and the effectiveness of persuasive communication (Sternthal, Dholakia, and Leavitt, 1978). When the followers and the
influencer establish a parasocial relationship, the followers view the influencer as their friend, as well as an information source continuously influencing the information reception. For instance, some studies suggest that consumer perception of an influencer’s trustworthiness, attractiveness, and similarity to the consumers themselves have a positive influence on consumer trust in relation to the influencer’s branded posts (Lin and Xu, 2017; Lou and Yuan, 2019). The parasocial relationship can heighten the persuasive power of social media influencers by increasing their credibility as the credibility of the information source is often used to measure the degree to which consumers believe the product and service information provided by the influencer is trustworthy (Gong and Li, 2017). In turn, the intimacy and understanding that the followers gain through parasocial relationships enhance the perceived credibility of the influencer’s posts and their brand promotion (Chung and Cho, 2017).

As social media influencers foster credible and attractive social media personas, social media influencers' trustworthiness, attractiveness, and perceived similarity positively influence their followers' trust in their branded posts (Lou and Yuan, 2019). Signal theory suggests that the spokesperson’s credibility can transfer to the brand’s credibility (Spry, Pappu, and Bettina Cornwell, 2011). A strong parasocial relationship impacts the perceived credibility of influencers, which, in turn, positively translates into advertising outcomes (Breves et al., 2021; Labrecque, 2014; Reinikainen et al., 2020; Sokolova and Kefi, 2020). Gong and Li (2017) suggest that the credibility of sources can promote endorsement effects in the context of parasocial interaction between fans and celebrities. Jin and Muqaddam (2019) argue that influencers can use their impacts to increase the audience’s perceived credibility, likeability, and attractiveness towards the brand. Thus, strong parasocial relationships make influencers' brand endorsements more effective (Chung and Cho, 2017; Munnukka et al., 2016).

Human influencers have the upper hand in that they can express true emotion and this resonates better with consumers. Mostly because these consumers can relate to the human influencers (Ozdemir et al., 2023). In trying to grow credibility for a VI, however, one needs to first examine factors that increase this credibility among human influencers. Herein lies a great beneficial opportunity for brands to shape their VI to match these qualities in a way that would be harder to do with a human influencer. One of the most important factors in marketing is brand reputation (Jones, 2005) and brand equity (van Riel, Mortanges, and Streukens, 2005). In trying to grow the brand reputation and brand equity, product-endorser fit is of utmost significance (Kim and Park, 2023). Product-endorser fit in the digital marketing context can be defined as the level of relevance between a brand or product and the influencers they work with (Leung et al., 2022; Campbell and Farrell, 2020). For example, a mountain bike company may want to work with a popular biking or exercise influencer for a high level of product-endorser fit. Kim and Park (2023) find that not only does a good product-endorser fit create feelings of optimism for the brand, but that purchase intention and brand attachment also benefit from this relationship. This is where VIs can play a big role for brands. Sands et al. (2022) argue that these tailored beliefs, which positively reflect on the image of the brand, can strengthen the relationship between the brand and the audience.

**A LITERATURE REVIEW OF INFLUENCERS IN BRAND COMMUNICATIONS**

Influencers, as given within the word, have the ability to influence individuals to feel a certain way. Organizations of all kinds have started to become able to connect with their target audience in new ways through influencers, and this is only the beginning. Human influencers create connections with their followers, share products or services they love, and in turn promote a brand (Campbell and Farrell, 2020). From the consumer perspective, brand-influencer connections help a brand’s marketing success by connecting with its target audience (Kim and Kim, 2021). It is one thing for a consumer to be influenced by the brand’s own advertisements, but for the consumer to see promotional messages through a relatable figure and as part of their consumer base. This helps establish a closer relationship between the brand to the consumer. From the influencer perspective, he benefits through gaining popularity, making money, and working alongside his favorite organizations (Kim and Kim, 2021). Ultimately, the brand benefits by having a more genuine form of marketing compared to what consumers have seen traditionally in previous years, reaching a larger audience, and getting their name out quickly and effectively (Campbell and Farrell, 2020).

In recent years, VIs have been added to the marketing mix. VIs are computer-generated avatars that are created to look and act like real people, used for promotion and interaction on various social media platforms (Lou et al., 2023; Sands et al., 2022). They are seemingly and surprisingly similar to human influencers, the main and most obvious
difference being that they are not human although there are suspicions about whether or not they will someday replace human influencers entirely (Ozdemir et al., 2023).

The potential impact of VIs is currently being explored in the industry by both large companies and small-medium-sized firms. They are considerably more sophisticated as technology develops, producing hyper-realistic images, interactive experiences, and individualized involvement. They are a popular issue because of their potential for development and innovation. This review will delve into the unique qualities and attributes of VIs and what human influencers versus VIs lack from the other.

**Human Influencers**

Human influencers are influencers who exist outside of the virtual world. They are actual people who have a physical presence and can directly address followers in their social media posts (Campbell and Farrell, 2020). By increasing and implementing their real-world experiences, senses, and interpersonal skills to connect with their audience in an authentic and relatable manner, human influencers provide sincere endorsements, develop trust, and create a bond with their followers which then allows for both the brand and the influencer to capitalize from successful product promotion, leading to mutually beneficial partnerships (Sands et al., 2022).

One of the key advantages of human influencers is their capacity to convey authenticity and reliability while promoting a product or service (Kim and Kim, 2021). As they are physically present in the world, they can interact with the items they endorse, thoroughly examine their features, and provide firsthand accounts of their experiences. This tangible connection to the product or service creates a sense of trust and credibility among their followers.

The bond between a human influencer and their audience is often built upon mutual trust and relatability which develops throughout the influencers’ career using social media. Human influencers are seen as individuals who are relatable to their audience (Kim and Kim, 2021). They often experience similar challenges, desires, and goals just like their followers. This mutual experience that is shared between human influencers and their followers allows them to connect on a deeper level and establish a genuine rapport. As a result, when a human influencer promotes a product or service, their audience is more likely to trust their recommendations and make purchasing decisions based on their endorsement (Ki, Cuevas, Chong, and Lim, 2020; Campbell and Farrell, 2020).

Successful promotions by human influencers benefit both the brand and the influencers themselves. By collaborating with a human influencer, the brand can gain exposure and broaden its audience. This is because the influencer produces content that reaches and influences its followers which can contribute to increasing sales and brand recognition (Campbell and Farrell, 2020). Furthermore, the brand can then assimilate into the influencer's authenticity and credibility (Kim and Kim, 2021). Doing so will then help the brand to potentially create a positive reputation and also increase its chances for customer loyalty. If human influencers can successfully promote the brand’s product or service, they have a higher chance of being financially rewarded for their promotion by their endorsed brands (Campbell and Farrell, 2020; Ki et al., 2020).

**Virtual Influencers (IVs)**

Although human influencers came before virtual influencers (VIs), VIs are attempting to replicate and enhance the influence that human influencers possess. “They [virtual influencers] are designed and provided with a human-like personality by a team of people” (Ozdemir et al., 2023). Both types of influencers have the same goal and are intended to deliver the same results of persuasion of a target audience toward a brand. So why bring the virtual aspect? Ozdemir and his associates (2023) examine the overall research question of whether individuals perceive VIs as persuasive as human influencers. “Unlike humans, virtual influencers do not suffer from physiological limitations like sickness, fatigue, and aging, and their images in promotional social media posts are more easily controlled to align with brand interests.” Therefore, having the virtual aspect of VIs is more predictable, programmable, and reliable.

Brands communicate exactly what they want to be displayed by the VI without the fear of factors such as the influencer not following directions and the influencer becoming controversial because of outside factors and losing the audience. From this perspective, VIs can be in perfect alignment with a brand’s personality (Franke et al., 2023). It is important
for a brand to be able to trust the influencer to express the brand and/or its product or service in the way the brand intends and wants (Campbell and Farrell, 2020; Kim and Kim, 2021). VIs can be programmed to do just that, unlike humans.

Brands are trusting the reputation of their image with an influencer that was previously outside of their organization. This is why VIs are increasingly becoming more appealing to brand marketers because of the controllable variables. Existing literature suggests that consumers nowadays have become more familiar with virtual agents in brand communications and viewing VIs significantly in favor of marketing efforts (e.g., Kim et al., 2023). Human influencers have environmental, physical, mental, and emotional factors that are uncontrollable (Ozdemir et al., 2023). These factors can prohibit the success of a human influencer from conveying the brand promotion to its target audience.

On the contrary, VIs can provide brand managers with more control over their behavior and content as they are AI robots and do not have hazards in which offline life may potentially have negative impacts on the online identity (Kim et al., 2023) in cases where a human influencer may be difficult to work with due to poor attitude, a high maintenance or egotistical persona, or reputational damage caused by misconduct. A company can use the VI whenever it is convenient to them without having to get another human involved and work around time or physical constraints, which leads them to create posts regularly (Kim et al., 2023).

Importantly, recent technological advancement has deepened the anthropomorphism of AI through the creation of digital humans (Crolic, Thomaz, Hadi, and Stephen, 2022) who are computer-generated virtual entities that take full human form and mimicking human behavior, communication, mannerisms, facial expressions and more (Seymour, Lovallo, Riemer, Dennis, & Yuan, 2023). These personalities exist across a wide spectrum of not only use and function, but aesthetic and realism. With such anthropomorphic technologies, marketers can easily create VIs based on a desired brand image and use them for communication and social media activities because a team of human coders can design VIs by customizing them to the target audience however the coding team wants or the brand wants for the message being sent through the sponsorship (Franke et al., 2023).

As a result, the anthropomorphism of VI can increase a brand’s awareness and consumer engagement with a higher competitive advantage and provide more attributes than their human counterparts. For a brand looking to implement VIs in its strategy, the spectrum of function and design and its application to the individual VI will be an important aspect that can differ across industries. For instance, Kim and his colleagues (2023) provide the related empirical evidence that if a VI possesses greater human characteristics, then the message in a social media post will be more effective for its audience.

Based on the evolving development of VIs and the accompanied benefits, the future research paradigm presented in the next section is thus focused on the VIs in the context of brand-consumer communications.

**A RESEARCH AGENDA OF VIRTUAL INFLUENCERS IN BRAND-CONSUMER RELATIONSHIP**

In the eyes of social media users, VIs and human influencers have a lot in common by sharing their personal life experiences and interacting with their followers (Ozdemir et al., 2023). The most imperative aspect of the utilization of VIs to understand is that they will continue to evolve. As time goes by, the ability to use them will only get easier as technology advances and becomes more accessible to everyone. VIs can have substantial benefits to a brand and their respective marketing and promotional strategies. First of all, the VI can be created and manipulated to be a near-perfect fit for the company (Ozdemir et al., 2023). Because it is not a real human, an entire backstory, personality traits, thoughts, and opinions can be constructed that align with the exact brand image that the company wants. This allows for the brand communications to be stronger due to their consistency and alignment with company values, mission, and strategy. This versatility makes VIs an invaluable asset to a brand.

**The Adoption of VIs for Brand Connection**

When taking a first look at establishing an emotional bond between the consumer and the brand, some may assume that human influencers are better for such a job on social media. The logic behind this is that human influencers can
form a relationship with their following, sometimes to the point where the followers feel like they know the influencer personally, making this influencer seem trustworthy in their minds, and giving off the impression that they are a trusted source of information (Kim and Kim, 2021). This emotional connection makes followers excited and eager to hear about the influencers' thoughts or opinions, and they often feel a high level of satisfaction if their favorite influencer interacts with them (Ki et al., 2020; Hughes et al., 2019). This is good for the influencers as well as the brand. The influencer gains trust through that emotional connection and thus has more ‘control’ over their followers, and the brand gains revenue through the sales these influencers are pushing their followers to make through the use of marketing campaigns (Leung et al., 2022).

If one takes a further look at VIs, however, one may find that VIs actually experience the same phenomenon in certain circumstances. Kugler (2023) argues that the more the VI is anthropomorphized, the more followers become engaged and emotionally attached to them. That is, the more these VIs start to resemble humans in the ways they act, talk, interact, move, and look, the more their followers are prone to feel more connected to them the same way they would any other human influencer (Crolic et al., 2022). Franke et al. (2023) suggest that some VIs are given fully developed fictional lives with elaborate personalities and they display human emotions, such as heartbreak and affection, on social media sites. While these VIs are starting to resemble human influencers in many ways, they are also similarly gaining an emotional brand bonding with the followers. Such brand connection may lead to increased engagement on posts (Delbaere, Michael, and Phillips, 2021), which causes over time strong brand loyalty with the brand community (Habibi, Laroche, and Richard, 2014; Munnukka, Karjaluoto, and Tikkanen, 2015). All of these outcomes from the adoption of VIs are particularly beneficial to the endorsed brand by generating more steady sales.

Furthermore, as VIs gain more popularity in digital promotion campaigns and the technology surrounding them advances, they have the potential to not just be seen as VIs, but instead viewed as real people in the growing metaverse. Firms indeed have taken steps to provide the same resources that human influencers do, which includes the authenticity of a VI’s humanistic look and the behavior that can be predicted by the consumers. With the anthropomorphism of VIs, the current VIs are not just chatbots; they are fully-fledged visual and conversational personas with complete visual bodies and faces, unique personalities, and entire backstories (Crolic et al., 2022). Um (2023) suggests that with the right amount of authentic human-likeness, consumers are in favor of the brand communications endorsed by the VI.

As a result, VIs have become highly technology-based marketing experts who are capable of increasing engagement by creating content that features the endorsed brand in real-world settings (Delbaere et al., 2021). From a firm perspective, VIs do not have the potential for negative behavior that human influencers do, and they can be fully managed and controlled by the brand (Kim et al., 2023). This approach can help brands avoid the risks associated with human influencers and still benefit from the power of social media marketing. As social media continues to evolve, we will likely see more brands turning to VIs to help them build and maintain their online presence.

In today's ever-changing world, the possibilities are endless as to what the future holds for VIs. In those online brand communities, for instance, social media enables users to communicate not only with closely tied friends and acquaintances but also with other individuals who are with predisposition to sharing common interests (Habibi et al., 2014; Munnukka et al., 2015). VIs can communicate with humans the same way other humans would as well, further blurring the lines between human and virtual influencers in general in the digital space (Franke et al., 2023). Moreover, a number of researchers suggest that virtual influencers are more effective at eliciting parasocial interactions than human influencers because they are not subject to the same limitations as humans, such as aging, sickness, fatigue, and other physiological limitations of human influencers, or making mistakes (Um, 2018; Kosenko, Binder, and Hurley, 2016; Kadirov, Varey, and Wooliscroft, 2014). Additionally, VIs are beyond temporal or geographical constraints and are thus accessible anytime and any place for marketing brands (Appel et al., 2020; Moustakas et al., 2020). Hence, VIs are swiftly gaining a substantial number of followers on social media platforms and making them appealing alternatives to human influencers for marketing communication campaigns (Ozdemir, Kolifal, Messinger, and Rizvi, 2023).

Compared to coping with human influencers, especially those with sizable followings, hiring VIs might be more cost-effective. Additionally, VIs operate around the clock and produce content without being constrained by time constraints, require fewer resources once developed, and do not pay agency fees. From both academic and industry
perspectives, it is thus crucial to conduct empirical research and managerial practices in developing robust measurements of the efficiency and return on investment of adopting VIs in a marketing campaign. Therefore,

**Proposition 1:** While both human influencers and virtual assistants (VIs) play a crucial role in building emotional bonds with their followers, VIs may offer advantages in terms of cost efficiency and risk reduction for social media marketing campaigns.

**The Novelty of VIs for the Niche Market**

As an emerging technology seeing rapid growth, VIs have the ability to capture attention through their novelty. Here, novelty is defined as an attractive feature that a product or technology possesses based on its recent release (McQuiston, 1989). VIs represent a novel and innovative concept in the world of social media and influencer marketing. They are computer-generated characters brought to life through advanced technologies such as artificial intelligence, 3D modeling, and animation. This unique approach has attracted considerable interest from both individuals and businesses. Importantly, the recency of the technology and its public use provide this novelty-based attraction of VI that draws in consumers.

In a recent study, Franke et al. (2023) found that a VI is more effective for a technology-based product than a cosmetic one, where the human influencer performs better. In their study, consumers find it difficult to trust the recommendation of a cosmetic product from an artificial, although human-like, being that could not personally utilize the product and vouch for it. However, because of the technology background of VIs, recommendations in the technology-based product category are more effective in persuading customers to purchase. This is caused by the match-up effect on the brand-influencer congruency, wherein it is important to recognize the knowledge and expertise of the influencer and match it as best as possible to the nature of the brand that the influencer endorses (Ozdemir et al., 2023). Lou et al. (2023) find that novelty can support pre-existing knowledge of technology to result in higher brand success. Their studies show that those who know of the information-seeking abilities of VIs are more likely to use VIs for those reasons over other sources due to the novelty of the technology. This provides interesting opportunities for brands looking to stick out in a competitive market. If the product or service offered by a brand is matched in quality by competitors, increasing novelty can result in drawing more attention without having to change the product or service itself among the consumers with the related pre-existing knowledge. For example, an automobile tire company may draw attention by having a VI mascot be the face of their social media. The novelty of this action may increase the perceived brand differentiation, and therefore attraction, of the brand compared to otherwise equal market competitors (Franke et al., 2023).

Thus, novelty is an important factor in the effectiveness of the VI campaign and should be weighed heavily in deciding to launch said digital marketing campaign. For a long-existing brand, the slow fade of its novelty over time should be tracked and measured. Firms looking to use a VI in brand communications should make decisions with the temporary nature of novelty in mind. Going back to the previous example, if the tire business was too skeptical of the long-term success of VIs to dedicate their social media accounts to it, they could instead launch a campaign to interact with their VI for a limited time only. This would not only account for the novelty of VIs but also increase the brand attractiveness.

Virtual influencers can offer unique marketing opportunities for brands, as they can be customized to fit a specific audience or niche (Leung, Gu, and Palmatier, 2022). It is possible to customize VIs to appeal to targeted audiences and specialized interests such as technological-related products or services. Firms may interact with audiences who may be neglected or ignored by human influencers by developing characters that represent specific features or interests. They may resonate VIs with particular audiences by resembling other cultures, subcultures, or even fictitious realms. Novelty is a strong driver of commercial interest and can provide a brand with the image of being advanced or up-to-date with technology. This can be especially, for instance, beneficial for brands that want to be differentiated and appeal to younger generations (Franke et al., 2023). From the marketer’s perspective, VIs provide firms with the chance to work together in novel and adaptable ways. They can easily cross-promote various items, work with several brands at once, and support a broad range of offers because they are virtual entities and do not have to be concerned much about possible conflicted obligations. Therefore,
Proposition 2: When utilized effectively, virtual assistants (VIs) have immense potential to reach and engage large audiences and target markets, particularly for brands that align with the tech-savvy nature of VIs.

The Role of VIs in Influencer Branding

Congruity between the brand or product nature and the influencer is another factor to consider to induce the right mindset in the consumer. Though novelty is a broad factor that affects the entire industry as it emerges, there are more minute and specific aspects of VIs that need to be considered in the digital promotion plan. In the above sections, the VI serves to draw attention to the brand through the use of a novel technology among consumers with pre-existing knowledge. However, the effectiveness of VIs changes with the digital promotion approach and it is necessary to analyze different modes of implementation for VIs to capture the scope of their use. In the context of brand communications, another important aspect of congruity is the fit between the appearance and attitude of VIs and the consumers for an endorsed brand (Ozdemir et al., 2023).

According to the human brand theory (Thomson, 2006), human brand refers to “any well-known persona who is the subject of marketing communications efforts” (p. 104). Human branding is defined as a person who has “brandable features, such as a unique personality or ability, and thereby becomes the subject of marketing communications efforts” (Ki, Cuevas, Chong, and Lim 2020, p.3). As much as a brand might secure a consumer-brand relationship, so can human branding. Thomson (2006) notes that emotional attachment is a predictive factor of satisfied, trusting, and committed relationships between consumers and brands. To be an effective endorser, therefore, the influencer needs to achieve a sense of intimacy or relatedness, communicate proficiency or competence with the target market of the brand, and provide a sense of autonomy within the receiver of the endorsement. That is, the receiver is their own agent, rather than under the influence of the communication (Deci and Ryan, 2000). If these intrinsic psychological needs of relatedness, competence, and autonomy are evident, an emotional bond is developed between the consumer and the human brand (Thomson, 2006). The consequence of this is attachment transfer, wherein the emotional bond the consumer has to an influencer is transferred to the brand (Illicic et al., 2016). In influencer marketing, followers accept the influencer given its congruence with their own value systems.

Consumers may prefer having influencers who can be empathic and emotional with them. Congruity within the social media realm can be formed through some emotions. In today’s social media landscape, for instance, advertising campaigns often face criticism for upholding unrealistic beauty expectations (Ozdemir et al., 2023). One can easily see how this could be an issue in selecting an influencer to endorse a brand, as the dimensions and characteristics of the influencer are entirely up to the design choice of the brand. The majority of human influencers today are women who have unrealistic or “perfect” bodies, and uphold what some believe to be harmful beauty standards (Moustakas et al., 2020). However, this can be avoided by designing a VI with traits that are reminiscent of the “flaws” present in the physical appearance of human beings. Sands et al. (2022) provide an example of this in the popular Chinese virtual influencer Angie, who is designed with this problem in mind and instead has features like pimples, making it more relatable to the average person.

In such a case, the empathy congruency between the consumers and VI makes the endorsed brand more appealing than the outcome from a “perfect” human influencer. Mirowska and Arsenyam (2023) examine the role of empathy in consumer engagement with human versus virtual influencers. They find that individual differences in the need for empathy from human or virtual influencers play a large role in user engagement on social media. In particular, when made aware, participants who scored high on emotional contagion and cognitive empathy were more willing to follow VIs as they believed that VIs were better than human influencers. With congruent feelings of empathy between consumers and VIs, VIs are preferred compared with human influencers by consumers in brand communications.

Khedher (2014) identifies human branding as when people make the effort to market themselves via their identity, their position e.g. trend expert, and through their image. The use of social media has given rise to a new form of human branding, this being influencer branding. Ki et al. (2020) extend the literature on human brand theory to social media influencers as human brands who are content generators of marketing value (Lou and Yuan, 2019). Fertik (2020) suggests that influencers are effective in successful marketing communications and are the preferred marketing communications tool when marketing via social media. Alternatively, a follower is someone interested in an influencer, typically using the influencer as a source of information (Farivar et al., 2021). In line with these definitions,
influencer branding is about individuals who leverage their social media competencies to engage and connect with their followers through brands to create sponsored content.

Successful influencer branded content posted on platforms such as Instagram, YouTube, and TikTok leads to increased brand awareness, increase in traffic to the brand’s retail stores, and potentially increased purchase intention. For instance, Colonel Sanders, the VI created by KFC built on the KFC mascot (https://www.wk.com/work/kfc-virtual-colonel), is an attractive gray-haired humanoid showcasing a glamorous lifestyle. The content he posted on the company’s Instagram account portrayed his everyday life at work with the KFC team, as well as meeting or traveling with other famous human and virtual influencers. Colonel Sanders is a particularly interesting case. More specifically, in addition to his engagement with KFC, he also promoted other brands like Dr. Pepper or TurboTax, disclosing the partnership with #ad – similarly to any human influencers. Such freedom from KFC created a sense of authenticity in its content, probably explaining why the famous fast-food chain managed to more than double consumer engagement on its corporate Instagram account following the introduction of Colonel Sanders as a VI.

Besides Colonel Sanders, more recently, Prada created Candy, a humanlike purple-eyed virtual muse associated with their eponym perfume; while Barbie, the famous Mattel doll, gave birth to a VTuber creating beauty content with more than 10M channel subscribers. It is interesting to note that the social media management of these brand-owned VIs varies from one brand to another, ranging from the creation of a new dedicated social platform (e.g., Barbie) to taking over the brands’ existing online space (e.g., KFC).

Ki et al. (2020) identify to be effective in influencer branding, the influencer needs to have a combination of ‘brandable persona-driven qualities’ and content curation skills, both of which are important elements of being an opinion leader. Moustakas et al. (2020) suggest that sharing an engaging and woven storyline might be able to humanize VIs. Indeed, the narrative of conflicts, relationships, personal goals, and desires seems to be very effective in establishing an emotional connection with followers. Hence, the challenge brands face to maintain and develop virtual influencer personas would entail finding innovative ways to humanize them. Rather than spending large quantities of time and money to find and secure a human influencer who perfectly satisfies the product-endorser relevance, the brand can create a VI that acts based on the parameters set for it. Therefore,

**Proposition 3:** Future research may examine the effects of the backstories and personalities assigned to VIs. Specifically, how consumer attitudes towards the VIs might change with varying backgrounds and characteristics.

Additionally, the role of VIs in influencer branding is still in its nascency as a distinctive academic domain and no systematized body of empirical knowledge exists on the impact of influencer brands on their followers in the long run. Vanity metrics (likes, comments, shares, number of followers, etc.), to a certain degree, support marketers in estimating to what extent the followers take influencers’ recommendations on board, however, such metrics can effortlessly be manipulated and exaggerated; and they do not explain how influencer-follower interactions can be translated into long-term sustainable brand relationships (Levin, 2020). Therefore,

**Proposition 4:** Exploring virtual assistants (VIs) from both the firm or brand perspective and the perspective of the human team involved in their creation can offer valuable insights and a comprehensive understanding of all parties involved.

The Legal/Ethical Concerns of VIs in Brand Communications

The uncanny valley refers to the idea that humans generally enjoy the humanization of robots until they reach a point where they are very similar, but still noticeably different than a real human, at which point we become uncomfortable or disturbed (Caballar, 2019). The uncanny valley theory involves the perceptions of something fake as too closely resembling humans, even though it is known to be inauthentic (Blut, Wang, Wünderlich, and Brock, 2021). Thus, it becomes a reason for a brand to use a VI in an animated style that does not attempt to mimic human features exactly.

It is essential for marketers to balance the consequences of making a VI that looks human-like. On one hand, the perceived similarity between a VI and a real human face can increase trustworthiness and authenticity, causing more
positive brand exposure on a sponsored social media post. On the other hand, too lifelike of an appearance can come across as too perfect, resulting in feelings of creepiness and unease in consumers (Lou et al., 2023). This uncanniness leads to negative perceptions and emotions of the VI, and consequently, the sponsored brand. To avoid the issue of the uncanny valley in using the VI, a company may use a cartoon-style VI that recreates the exact features of a human. For example, the design of Miku does not try to accurately reproduce realistic human design traits and instead takes the form of an animated character similar to a cartoon. This has had no negative impact on success, however, as Miku remains one of the most popular Vls on the internet (Eisenbeis, 2012).

Sometimes the uncanniness is invoked when we are unable to tell if an entity is human or not (Franke et al., 2023). In such a case, the creepiness resulting from uncanniness can be, alternatively, avoided if the companies using the Vls disclose the origins and identities of the robots as such because the perceived uncanniness of the VI is diminished when it is made clear that the entity is indeed virtual (Franke et al., 20223). A large topic of debate regarding this is whether or not Vls should require the disclosure of their identities as robots (Franke et al., 2023) in a brand-consumer relationship.

Theoretically, Vls are not capable of being genuine in the first place, which subsequently raises issues with transparency and authenticity. Although the current policies and procedures for Vls are limited in general due to their novelty, recently the Federal Trade Commission has extended its definition of endorsers to include Vls. There are also a few regulations in place due to this issue. In 2014, as part of the Dutch self-regulatory advertising system, a social media advertising code was introduced to try and help with these ethical concerns regarding transparency and authenticity. There is a specific component to this code involving disclosure to someone's following where influencers are required to disclose the relationship between the endorsed brand and the influencer although influencers are somewhat free to decide how this relationship is disclosed (Arayess, 2017). From the consumer’s aspect, this code is good news in terms of transparency as he can be assured that the partnership is a paid promotion or just an influencer genuinely sharing their thoughts on something. Owing to the dynamic nature of technology, one can expect these regulations to become more commonplace as future research is done. Therefore,

**Proposition 5:** Future research may benefit by delving deeper into the effects of the uncanny valley theory and the best legal/ethical practices of Vls in brand communications.

The Features of Vls in Brand Persuasion

The intention of using influencers, human or virtual, is to persuade consumers to purchase a company’s products or services (Hughes et al., 2019). By seeing influencers using these products or services, the followers are then tempted to try them. The success of influencers through the years can be attributed to their persuasion power. Brands take advantage of these persuasive powers and market them (Leung et al. 2022). Influencers make it their priority to get endorsements from brands and use the power that they have. Style of influence can take several forms. Kim et al. (2023) examine the effectiveness of brand endorsements when used with Vls. They find positive message attitudes toward the human-like virtual influencers. When endorsements for certain brands are displayed, however, neither anime-like nor human-like Vls are preferred. Some researchers suggest that the type of messages used by the influencer best matches the tone of messages (emotional vs rational) to the influencer type (human vs virtual). Ozdemir et al. (2023) find that when using emotional brand messages, it is best to use human influencers as they have the true ability to feel and experience such emotions, whereas Vls cannot. However, there is no significant effect on the influencer type in correlation to a rational message tone, that is, either type may be effectively utilized.

Farivar et al. (2021) identify two stages in the influencer-follower relationship. Firstly, the establishment of the relationship. Explanations for motivating factors why someone may follow an influencer include reasons of enjoyment, pleasure-enhancing, and social identification (Nedra et al., 2019) Secondly, the influencer-follower relationship involves an element of persuasion. Reasons why someone may be swayed by an influencer are the influencer’s attributes including physical and/or social attractiveness also the influencer’s perceived popularity (Lou & Yuan, 2019). Alternatively, the examination of follower characteristics as motivating factors to follow an influencer includes a propensity to engage in online interaction and empathy with the influencer (Lou & Yuan, 2019). Using word of mouth as a form of persuasion is another way to brand persuasion, and the existing research has shown that the attractiveness of an influencer plays an important role. Chiu and Ho (2023) suggest that physical attractiveness,
whether it’s a macro, micro, or VI, affects consumer purchase intention although this is most significant with macro and VIs with physical attractiveness. In a similar vein, Kim and Park (2023) investigate how brand attachment formed with a VI can also alter purchase intention. They find that VIs’ attractiveness has a positive impact on purchasing intention, and brand attachment can mediate the relationship between VIs' attractiveness and purchase intention.

On a related perspective on the creation of self-image in brand communications, human influencers may portray themselves in a portrayal that is not always reflective of who they are. This may be a potential ethical concern because followers and audiences of these influencers can be made out to believe they love or support something when in reality they do not. For example, a human influencer states that he lives a sustainable lifestyle and will only work with sustainable brands whose values align with his own. He attracts an audience of followers who share those same views and want to only buy products from those types of endorsed brands. But this same influencer may endorse a brand that is not sustainable or in line with the followers’ values whatsoever though his followers are misled to believe the endorsed brand is sustainable since the type of content this influencer normally posts is related to his claimed sustainability lifestyles. VIs, however, are controlled by some other being or programming, begging the questions of “Who is crafting this persona, can I trust it, and who would be getting held accountable if ethical concerns like I mentioned earlier do arise?” These can also be the questions that are a big topic in the ethical concern area of influencer marketing as a whole (Campbell and Farrell, 2020; Kim and Kim, 2021).

As it currently stands, VIs are like clay that can be modeled at the whim of the creator. But for any brand looking to invest in this technology, they may want to ponder future rules and regulations that have yet to be implemented, and how they could seriously impact the success of the VI down the line. But what would these regulations look like? Meta Inc., the owner of Facebook, has already started campaigning for ethical boundaries to be established for VIs and other entities, which some think could become a “virtual influencer code of ethics” (Sands et al., 2022, p.6). Callahan (2021) points out that consumers are already calling for VIs on social media to be marked with a tag that identifies them as virtual, AI-created, or otherwise. For brands with VIs already established, the implementation of these rules, whether it be by law or terms of service of the media outlets used, could result in unforeseen costs needed to overhaul the VI to comply with such guidelines. More costs could include needing to increase the number of people on the team behind the VI or paying for a hypothetical license to use the technology if regulations reach such an extent, though this is admittedly speculation. Furthermore, if these rules do indeed supersede social media terms of service and become law, future violations could result in fines or other penalties for the brand.

The success of persuasive influencer branding includes influencer content value in terms of both information and entertainment; influencer attractiveness and credibility; and influencer perceived expertise and trust (Munnukka et al., 2016). A further point to note is source similarity, that is the perceived affinity between the influencer and the follower in terms of demographic or ideological factors such as ethical, environmental, and cultural interests. The close similarity between the influencer and the follower is cited as a reason why micro-influencers (10,000–50,000 followers) achieve better engagement rates than macro influencers (500,000–1 million followers) (Elhers, 2021). However, it is not certain whether VIs are equivalent to human influencers in terms of the effectiveness of brand persuasion.

**Proposition 6:** Future research may explore alternative characteristics of VIs such as physical appearance, appearance formats, and communication styles to cultivate a VI image that aligns with a brand’s desired identity.

**CONCLUSIONS AND DISCUSSIONS**

Marketeters can effectively utilize VIs by taking into consideration consumer perceptions of the many factors involved. Carefully crafting social media content for their VIs by noting consumer motivations for following VIs such as their novelty, ability to communicate information about emerging technology, entertainment value, aesthetic appeal, social interaction, and a general desire to stay in the know (Lou et al., 2023).

The above six propositions raised in this article call for further empirical research for supporting evidence in the future. VIs are such a new topic that only little empirical evidence has been concluded due to limited knowledge and the number of studies conducted. If a person already knows about or follows a VI, for instance, the perception of this person on the VI may be biased and different from those who are unfamiliar with the same VI due to a parasocial
connection or emotional attachment (Franke et al., 2023). As VIs continue to grow in popularity, finding an unbiased population may be difficult and those skew the results of certain studies. Additional future research, therefore, could explore the differences in consumer perception from a follower as compared to a non-follower standpoint on a brand.

The most important factors marketers should consider include making their VIs relatable, balancing the effects of the uncanny valley theory, and utilizing the best-match theory in alignment with the type of brand perception, product category, and transparency in communications (Blut et al., 2021). Specifically, it is best to use VIs when striving for an innovative and novel brand image, when promoting technology products as opposed to products like cosmetics. The latter objectives have a better fit with human influencers in the minds of consumers. It is also best practice for marketers to disclose the identities of the VIs to mitigate the effects of the uncanny valley theory as well as decrease negative impressions of authenticity and credibility.

These factors will give marketers the most optimal utilization of VIs so long as they implement the correct practices. When used correctly, VIs can have just as good, if not better, outcomes as human influencers concerning brand awareness. They can also decrease the risks of working with human endorsers such as physical restraints, difficult personalities, and possible reputational damage caused by scandal. In the long run, marketers can successfully mold a VI personality to be a perfect match with their brand, a process that should be carefully thought out and considered to induce the best-case scenario outcomes.

**General Discussion**

Much has been mentioned about the ability of a brand to design its VIs in multiple ways. Namely, the majority of VIs can be divided into two aesthetic categories: human-like virtual influencers, and anime-like virtual influencers, or human virtual influencers and animated virtual influencers respectively (Kim et al., 2023). This distinction allows one to analyze the effectiveness of different VI aesthetics for particular applications. One may ask: which form should a brand choose? For brand endorsement effectiveness, human virtual influencers are found to be more successful than animated virtual influencers at getting positive engagement, however, there is no significant difference in effectiveness between the two when the sponsorship is disclosed (Kim et al., 2023). Some researchers have argued that human virtual influencers gain more trust from the audience, and are therefore more effective at marketing, due to their attractiveness and human-like features (Franke et al., 2023). A retort to that argument though would be the previously mentioned “uncanny valley,” which could make finding the proverbial sweet spot harder with human virtual influencers, finding a look that is realistic yet not unnerving. Furthermore, with sponsorship disclosure increasing on social media platforms and the aforementioned calls for VI regulation (Sands et al., 2022), any perceived benefits of using human virtual influencers over animated virtual influencers may soon be irrelevant. For these reasons, a brand invests in animated virtual influencers over human virtual influencers, as any benefits of human virtual influencers come with a risk of falling into the uncanny valley and promoting harmful beauty standards. It is also important to note that although animated virtual influencers do not try to recreate human aesthetics realistically, this has no negative effect on the amount of humanization consumers apply to the VI; in other words, consumers do not perceive animated virtual influencers as less human or “real” than human virtual influencers because humans already tend to anthropomorphize machines and apply human social norms (Sands et al., 2022).

**Contributions and Future Research**

The adoption of virtual influencers is an innovation of brand marketing communication models and a new way of reshaping social media users’ reception and consumption. Regardless of their popularity and increasing popularity on the influencer marketing landscape, surprisingly little is known about VIs and the influence they may have on marketing and consumer-brand relations. This research contributes to narrowing the gap in the literature by providing a relevant presentation of VI within its greater digital ecosystem that includes brands, followers, and social media platforms. The particular contributions of this research are threefold.

First, the current article provides a comparative analysis of the developmental routes of virtual versus human influencers to understand their similarities and differences more fully. Positioning virtual influencers as an innovative as well as cost-efficient instrument between consumers and brands, their future potential to play a prominent role in marketing is clear. What is less evident is how VIs might compare to human influencers in terms of potential impact
and appeal, and what options brands might have to incorporate them into their marketing strategy. This current paper focuses on unpacking these questions more fully to provide future research with concrete and practical takeaways. Although the data from publicly listed companies are more available than from private or small-medium-sized enterprises for researchers, VIs may be applied widely across a variety of organizations in different industries and domains.

In terms of the social media platforms for VIs, multiple choices and comparisons may be needed to test these propositions in the future and further research. While Instagram is one of the most popular mediums for influencer marketing campaigns, due to the differences between platform norms (Reich and Pittman, 2020), virtual influencers could be more effective in some social media platforms than others. Ki et al. (2020) investigate the influencer-follower attachment mechanism in the context of Instagram. Geyser (2023) points out that 76.7% of marketers use Instagram for influencer marketing making it the most popular influencer marketing platform in 2023. In comparison, 58% signposted using Facebook, 50% TikTok, 44.2% YouTube, 25.5% Twitter, and 18.5% Snapchat. Marketers anticipate this trend persisting through 2024 and beyond. Thus, all the propositions proposed in this paper could be investigated and tested among VIs on different social media platforms. Particularly, the video-sharing app TikTok has been rapidly growing in recent years, popular mainly among young audiences (Haenlein et al., 2020). However, very little research on influencer marketing, especially VIs, has incorporated the examination of TikTok as a platform. Alongside TikTok, new platforms and tactics will likely arise in the coming years. Therefore, continuous research on different VI marketing formats emerging on different platforms is necessary.

Second, building on the parasocial interaction theory (Horton and Wohl, 1956; Giles, 2002) and the human brand theory (Thomson, 2006), different personas should be used to approximate follower preferences concerning VIs that in turn can be used for purposes of segmentation (Propositions 2, 3, and 4). This research has analyzed the psychological mechanism of the influencer-follower relationship by extending the parasocial interaction theory to the domain of VI (Ki et al., 2020). One might expect consumers to be more willing to push their comfort zones toward this new form of media in the future for two reasons. Primarily, consumer awareness about and acceptance of social media influencers is increasing, indicating that people at large tend to be more familiar and comfortable with influencers. Additionally, owing to the enhanced technological savvy of consumers nowadays – referring to computer algorithms that automatically produce content (Appel et al., 2020), people are now able to manage fluent conversations and interactions with AI-driven technology to the extent that they might not even realize that they are not interacting with a human. It will be interesting to explore further how these new comfort zones might impact consumer expectations in terms of their interactions with VIs.

Third, the current research provides concrete strategic directions for brands wishing to collaborate with VIs based on the source credibility theory (Djafarova and Rushworth, 2017; Ohanian, 1990; Yoon et al., 1998) (Propositions 1 and 6). Why are people motivated to follow an entire virtual or digital persona that does not even exist? This question is at the center of the development of VIs and as such opens various avenues for future research. For instance, a large amount of research focusing on human influencers believes authenticity is a key factor to influencer success (Lee and Eastin, 2021; Pöyry et al., 2019). According to Robinson (2020), nevertheless, given that human influencers face the same issues surrounding their authenticity, the absence of the existence of VIs as well as wholly forged identities and artificial nature might not present a problem for their followers. Particularly, given their exposure to AI-enabled technology from a relatively young age, Gen Z consumers may not be as preoccupied with the question of authenticity, making such a generational shift worthy of investigation.

Moreover, VIs tend to share content that is rich and often more immersive than the ones shared by their human counterparts. While regulations associated with social media influencers have been developed in some countries and regions encouraging them to disclose their relationships with brands, there are still a significant amount of areas where the activities of VIs are not yet regulated. It will be meaningful and urgent to call for authorities’ actions on developing the disclosure rules applicable to human influencers, VIs, and their managing entities (Proposition 5). For future research, such type of disclosure and its impact need to be assessed, as well as potential complementary or alternative rules; a topic that is particularly relevant in the case of influencers that resemble humans.

The propositions presented in this paper demonstrate how VIs in social media affect consumer engagement based on the parasocial relationship through parasocial interactions with the VIs. VIs enhance consumer engagement in two
ways on social media platforms. One is to promote the source’s credibility by establishing a parasocial relationship and transforming it into credibility for the brand, thereby strengthening the brand connection and engagement. The other is through the congruent emotional bonds between the followers and VIs. Similar to human brands (Thomson, 2006), followers consume the narrative and performance of VIs’ content on social media. Immersion in influencers’ content makes the audience enjoy the brand information in the content (Ki et al. 2020) and eventually cultivates brand connection and engagement, especially when the empathy congruency between the consumers and VI exists (Mirowska and Arsenyam, 2023). It is important to note that the development of VIs continues to blur the fine line between entertainment and advertising. For instance, cartoon or animated influencers can be seen as a new form of entertaining content simply comparable with traditional animated cartoon fiction. The prominent difference is that they are created for a commercial purpose. Thus, VIs envisioned as the ultimate commodification of entertainment is an important topic to explore to anticipate potentially misleading perceptions and ensure consumer well-being.

These innovative propositions may deepen the understanding of brand connection and transmission on social media platforms. However, it is necessary to refine the context of social media platforms, influencers, and brand positioning in future empirical research to obtain meaningful resolutions for the brand. Additionally, it should be noted that this article does not integrate a complete theoretical background, so there are still more potential perspectives and theories to explain the role and impact of VI in a consumer-brand relationship.

Managerial Implications

From a practical standpoint, the propositions raised in this research may be used as guidelines for firms to decide whether or not a brand should use human influencers or virtual influencers. There is one obvious advantage to using VIs of any sort, and that is longevity. Unlike their human counterparts, VIs do not suffer from fatigue, sickness, aging, or other ailments that may limit the effectiveness, efficiency, and consistency of a human influencer (Ozdemir et al., 2023). Human influencers also have other obligations that will take time away from the brand, such as other jobs and families, but also time spent eating, sleeping, etc. VIs created by a brand exist solely to serve the brand. This could be direct service to the brand, like sponsored posts and product promotions, or indirect service, getting more eyes on the brand through the popularity of the VI alone. As such, VIs can be employed by the brand at any time of day, any day of the week. This could allow a brand to, for example, have its VI target posts to certain global markets at different peak times of engagement. It could also be possible to use a human influencer, as a brand can pre-record posts or videos and post them whenever the market research says would be the most optimal. However, using VIs would allow the brand to have live engagement with its audience through chats or other means of direct communication at any time of the day around the world. This level of interactivity is not logistically possible when employing human influencers. Ozdemir et al (2023) also point out that this ease and consistency of market targeting is also cheaper than using a human influencer. Thus, for any brands worrying that this constant use of the VI would result in high costs, they would still be lower than using human influencers for the same amount of production.

The evaluation of a potential future application of VIs will serve to benefit the brand: VIs are becoming part of virtual reality realms. The brand wants to advertise on an accessible platform where their campaign will get high engagement. Though virtual reality has had a high entry price for most of its existence, it is now more accessible, and cheaper, than ever before, and especially popular among the younger generations that VIs often target (Pan and Hamilton, 2018). Interacting with entities in a virtual reality space provides researchers and doctors with an opportunity to measure the brain waves and processes of a subject while they manipulate the environment they exist in, potentially being able to diagnose certain conditions (Pan and Hamilton, 2018). Using similar measurement technology, one can see how effective marketing is in a virtual reality space. One study found that for marketing and advertising, tactics in virtual reality were more effective than advertising from social media influencers (Scholz et al., 2018). The major difference between virtual reality and social media influencer endorsement lies in their purposes. That is, social media influencers provide consumers with important information about the material aspects of products, whereas augmented reality helps consumers to imagine a product within the context of other products they use (Scholz et al., 2018). One can imagine that the confluence of these approaches would be advertising in a virtual reality space, using a VI. This way the consumer can gain both information and helpful imagery, further boosting a brand’s image. Though there is not much current literature on the use of VIs within virtual reality, there are advantages to both approaches which strongly indicate the combination of the two would create a successful marketing approach.
Brands have much to be uncertain of in the future. VIs are an unregulated technology that American legal bureaucratism will surely catch up with. Furthermore, brands must traverse the increasingly polarized cultural landscape of the internet with a fairly new technology, increasing the risk of offensive behavior (Moustakas et al., 2020). These uncertain times however create a unique opportunity for brands to capitalize on the unregulated market and seize the aspect of novelty which is so important for gaining interest (Franke, et al., 2023). More novel approaches will present themselves over time as well, like virtual reality implementation. Many other issues presented, like upholding harmful beauty standards and the presence of the uncanny valley, can be avoided by using an anime-like virtual influencer over a human-like one, a strong benefit for brands looking to avoid controversy. These VIs allow brands to work with them on their own schedule, not needing to abide by the restrictions and costs presented by working with a real human. Furthermore, one can decrease the likelihood of these influencers making offensive comments or otherwise by creating the aforementioned “blackout zones.” Recognizing bias is imperative in this discussion, as the implementation of VIs can be a way for us to reflect on ourselves, or the brand we represent. Any bias shown through the VI is simply a reflection of the biases we hold as humans (Shin et al., 2022). The presentation of this bias by virtual entities should serve as a stark reminder for us as individuals and brands to recognize these biases in ourselves and strive for social betterment. Not only is this a moral obligation, but doing so will create successful algorithms for a technology that will only grow in scope and popularity. VIs can be a great opportunity for brand growth, but one must realize the gravity that comes with creating guidelines for this new form of intelligence to follow.

**SUMMARY**

VIs can help with a company’s marketing strategy because they have more to offer than human influencers. They are adaptable, versatile, and consistent which is beneficial to marketers. VIs can easily adapt to different demographics, making it easy to adapt to any country or market (Kugler, 2023). They can be human-like, animal-like, two- or three-dimensional animations; they have high versatility and can change into different forms. And VIs stay consistent with their activity, engagement, and promotion of the company. They also stay loyal to their company and will represent them in a positive light (Seymour et al., 2023). However, VIs also have risks. If companies are not transparent enough with consumers about the artificial design of their influencers this can cause a decrease in consumer trust (Campbell and Farrell, 2020; Ki et al., 2020). If companies do not use VIs at appropriate times it can decrease their value and effectiveness on consumers behavior. A wrongly designed VI can lead to negative reactions from consumers (Seymour et al., 2023).

Human influencers are also valuable in creating successful marketing tactics. They are more organic and genuine than AIs. Additionally, they have a higher ability to create bonds with their followers than VIs are capable of (Ozdemir et al., 2023). These real-life consumer-brand relationships are important and they can only be made by humans. Consumers also generally prefer humans over AIs (Franke et al., 2023). Humans have emotions, an important factor when dealing with customers. This is an important feature that AI cannot replicate (Ozdemir et al., 2023).

When comparing each influencer’s strengths and weaknesses, it is easy to tell that each has important qualities that the other cannot obtain. Although it is up to companies to decide which is more suitable for their marketing strategy, it seems that utilizing both would be most beneficial to marketers. VIs can do more than humans, but they also have more costly risks and might have a harder time gaining the trust of viewers. While human influencers lack, they are human and can easily connect to their followers on a deeper level. Using both types of influencers would be most favorable because each complements the parts that the other does not have.

Finally, it may be especially important to keep in mind that the target audience of the VI is children or younger adults. This market represents a strong benefit of VI marketing because the technology resonates particularly with the younger crowd (Haenlein et al., 2020). One of the most successful ways a brand can engage with younger generations is “digital interaction,” or simply interacting with this generation in an online setting (Sands et al. 2022). As such, it makes sense that any company or brand trying to target a younger audience would do so in the online environment. As proposed in this article, VIs who are a good fit for the brand boost brand engagement, and can be tailored to have a good product-endorser fit (Kim and Park 2023). Furthermore, the novelty of this technology provides further interest and gives the impression of being up-to-date or “hip” with emerging technology (Franke, et al., 2023). This impression of being up-to-date with technology is specifically attractive to the younger generation (Sands et al., 2022). Thus, VIs
are effective at engaging with younger people because they exist in the online spaces those generations usually occupy. Novelty is intrinsically attractive to a younger generation, and the tailoring of product-endorser fit can further hone in on appealing to certain demographics.

REFERENCES


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