Analyses of the Relationship between Virtual Influencers' Endorsements and Customer Brand Engagement in Social Media

Laila Zhong

Department of Media and Communication, Xi'an Jiaotong-Liverpool University, Suzhou, Jiangsu, China, 215028 *Corresponding author. Email: Laila.ZHONG19@student.xjtlu.edu.cn

ABSTRACT

This article studies how virtual influencers' endorsements affect consumer brand engagement on social media. Existing studies have found that consumers' participation in social media brand activities has both internal and external motivation, that is, the internal needs of the audience and social network recommendation. However, there is relatively little research on what characteristics of virtual influencers' endorsements can influence the motivations. To enrich the relevant content, by using qualitative research and a case study, 20 respondents aged 18-29 were invited to participate in semi-structured interviews to discuss their perceptions of customer brand engagement on social media. The findings reveal that, the visibility, authenticity of appearance, and brand fit of virtual influencers, as well as interactivity, creativity, and brand storytelling in advertising content design, were positively correlated with customer brand engagement is mainly related to the audience's needs for love and belongingness, cognitive and self-actualization. This research can provide insights into the increasing popularity of virtual influencers in social media marketing and provide direction for future research.

Keywords: virtual influencer, customer brand engagement, social media marketing, hierarchy of needs

1. INTRODUCTION

With the rise of social media marketing and the development of technology, an increasing number of brands are adopting virtual influencers as spokespersons on social media to accommodate COVID-19's hindrance to offline advertising production and branding and to avoid the uncontrollable nature of human endorsers. Thus, virtual influencers' endorsements are a novel and vital marketing approach. Moreover, one study showed that virtual influencers have three times the fan interaction rate of real influencers [1]. Therefore, companies must be aware of the connection between virtual influencers' endorsements and customer brand engagement. It is imperative to study the recognition of virtual influencers in social media and their related customer brand participation.

Existing studies have examined the effect of virtual spokesperson's endorsement and the motivations of customer brand engagement in social media. For instance, the storytelling and connection to the product of the virtual spokesperson will affect the marketing effectiveness of the advertisement [2]. Moreover,

psychological ownership of the brand and value alignment are key psychological motivators for consumer brand engagement [3]. Nevertheless, they have concentrated on non-simulated avatars (e.g., cartoons) in a macro context, without delving into virtual influencers, the particular form of the virtual advocate. Additionally, the existing literature has not studied in detail the effect of different features of social media advertising on the internal and external motivation of customer brand engagement.

To enrich the content of related fields, this study uses semi-structured interviews in qualitative research to systematically analyze and investigate the influence mechanism between the endorsement of virtual influencers and customer brand engagement. This research contributed empirically to the current literature that mainly focuses on non-simulated virtual images, and offered a fresh perspective on the study of brand endorsement under intelligent marketing. It expands the business value of virtual influencers, provides suggestions for brand social media advertising content marketing, and lays a foundation for future research.



2. INTRODUCTION OF RELATED CONCEPTS

2.1. Social Media Marketing

Social media marketing is a method of marketing, selling, maintaining public relations and developing customer service by using social media [4]. It is a process of gaining attention and website traffic through social media [5], which aims to influence consumers through interaction with consumers [6]. With the growing number of social media users, social media marketing has become a popular issue for companies, which enables companies to establish communication channels with their customers, promote their products, establish brand equity, and increase customer loyalty [7].

2.2. Virtual Influencer

2.2.1 Definition

Virtual influencers are surreal human personas created through artificial intelligence (AI) or computergenerated imagery (CGI) [8]. With massive followings on social media, they have varied identities, lifestyles, and mindsets [9]. Virtual influencers maintain para-social relationships with netizen, which implies intimate relationships between audiences and celebrities through virtual media [10]. For instance, Lil Miquela is a wellknown virtual influencer, boasting 2.6 million followers on Instagram [11].

2.2.2 Marketing Value

Based on the two-step flow of communication theory, information is typically passed towards followers via opinion leaders, who usually supply information and inflict impact on others [12]. As brand advocates and opinion leaders, virtual influencers are vehicles of brand culture, character, and values, and are indispensable channels of communication linking brands and consumers [13]. They produce precise social media content such as graphic or video advertisements, with increasing marketing value [14]. Thus, studying the advocacy of virtual influencers is crucial.

2.3. Customer Brand Engagement in Social Media

The definition of customer brand engagement is still controversial. However, the academic consensus is that customer brand engagement within marketing should be considered as a multidimensional construct, consisting of cognitive, affective, and behavioral aspects [15]. For example, Hollebeek describes customer brand participation in social media as the level of customers' motivation, brand related and context related psychological states, which is characterized by the specific degree of perception, emotion and behavioral activities in the process of brand interaction [16].

2.3.2 Influence Factors

Savage believes customer brand engagement in social media is affected by both intrinsic and extrinsic motivations [17]. The inner needs of audiences are intrinsic motivations. The use and gratification theory proposes that individuals use media to satisfy their diverse needs [18]. As a motivational theory in psychology, Maslow's expanded hierarchy of needs, which is often portrayed as a hierarchy in a pyramid, divides human needs into eight levels [19]. From bottom to top, these eight levels are biological and physiological needs, security needs, love and belonging needs, respect needs, cognitive needs, aesthetic needs, self-actualization and transcendence needs. The extrinsic needs motivations are social network recommendations. According to social learning theory, the majority of human behavior is acquired through modeling observations. By watching others, individuals develop an idea of how a novel behavior is executed, and in later cases, this encoded information becomes guidance for action [20]. Therefore, social media brand engagement behaviors can be learned and motivated by peers.

2.3.3 Measurement

According to Ho, Deng and Wang, this research suggests that the full range of consumer brand engagement on social media should be represented by four levels, from low to high, namely noticing the content on social media, actively processing the content, thinking emotionally or rationally about the content, and generating positive feedback behaviors [21]. As shown in table 1, since consumer brand engagement is difficult to measure, it can be indirectly reflected by the function of viewing, liking, commenting, and forwarding on social media.

2.3.1 Definition

Table 1. Reflection of customer brand engagement in social media

Level	Action
Notice the content	view
Active processing of content	Like, comment and forward
Generate emotional or rational thinking	
Positive feedback behavior	



2.4. Research Question

The research question is the impact mechanism of virtual influencers' endorsement on customer brand engagement in social media. Furthermore, sub-question one is what specific influence factors influence intrinsic and extrinsic motivations of customer brand engagement. Sub-question two is the influence degree of these factors.

3. METHODS

Since virtual influencer marketing is a comparatively emerging field that lacks qualitative research, this research employed a qualitative research strategy based on grounded theory to ensure the depth of the investigation and to support future systematic research. To facilitate data collection, a case study selected an IKEA advertisement featuring a well-known virtual influencer named Imma (@imma.gram) as a spokesperson to understand the relationship between virtual influencers and customer brand engagement on social media.

This research adopted generic purposive sampling to accurately and efficiently select 20 female respondents aged 18-29, who are the primary social media followers [22][23]. Semi-structured interviews were conducted to

uncover unforeseen answers to complicated questions and capture richer information. Interviews were carried out individually and face-to-face to catch the respondents' sentiments and minimize non-response. To ensure the accuracy of samples, respondents were informed of the implications of virtual influencers and customer brand engagement before the interviews, and invited to watch a video of an IKEA endorsement of Imma, generating their empathy and interest. According to the measurement of customer brand engagement, participants were asked about their willingness to view, like, comment and forward advertisements from virtual influencers on social media, as well as the main influencing factors and their degree of influence. In addition, the interview theoretically ensures data saturation and is recorded with consent for data analysis.

A qualitative content analysis of the interview texts was conducted to code and categorize the main factors that influence intrinsic and extrinsic motivations of customer brand engagement and their degrees of influence, and correspond the internal factors to the different levels of Maslow's needs. The research identified the influence mechanism between virtual influencers' endorsements and customer brand engagement based on coding and memory.

4. RESULT

Main object		Relationship customer engagement	with brand	Core argument	Answer number/ Headcount
Virtual influencer	Visibility	Positive correlation		More views, likes, comments and forwards can promote audience engagement.	13/20
Advertisement content	Interactivity	Positive correlation		 Related to the love and belonging needs; Influencing factors: the realistic nature of spokespersons, interactive plots of advertisements; 	15/20
	Innovation	Positive correlation		 (1) Related to the cognitive needs; (2) Influencing factors : novel technologies, visual conflicts; 	17/20
	Brand culture presentation	Positive correlation		 (1) Related to the self-actualization needs; (2) Influencing factors: spokespersons' brand fit, brand storytelling of advertisements; 	14/20

Table 2. Sorting of semi-structured inter	view results
---	--------------

The results are as shown in table 2.

Firstly, the higher the visibility of virtual influencers on social media, the more views, likes, comments and forwards of their endorsed advertisements, and the stronger the audience's customer brand engagement. Interviewee A mentioned that advertisements endorsed by virtual celebrities with high visibility tend to have higher popularity and influence. The higher the engagement of other audiences, the more motivated they are to view the advertisements.

Secondly, the more interactive the advertisement is, the more it can satisfy the audience's love and belonging needs, and the stronger the customer brand engagement will be. Interviewee B believed that audiences have difficulty feeling a spiritual connection with non-realistic avatars, especially non-hyper-realistic images, and thus lack the willingness to engage in interaction. In other words, audiences prefer to interact with virtual spokespersons who look more like human beings to compensate for the lack of spiritual connection caused by their virtual nature. In addition, Interviewee C argued that advertising slogans that interact with the audience can bring the virtual spokesperson closer to the audience and better motivate the audience to participate. That is to say, advertising content design that increases the interactive and communicative nature of the spokesperson's words, actions, and plots can better motivate audiences to participate in advertising interactions.

Thirdly, the more innovative the advertisement is, the more it can meet the audience's cognitive needs, the stronger the customer brand engagement will be. Interviewee D considered that numerous audiences are inclined to engage due to the curiosity and visual impact of virtual influencers. This means that virtual influencers as spokespeople can stimulate the cognitive demand of audiences who are curious and eager to learn about such novel advertisements and technologies, and to enjoy the visual impact of the unusual blend of virtual and real advertising images and plot design. Thus they are willing to interact. For example, innovative advertising content design places virtual influencers in the real environment and combines virtual and reality to enhance the visual impact and drive the audience with curiosity to interact with virtual influencers.

Finally, the more the advertisement reflects the brand culture, the more it can meet the audience's selfactualization needs, the stronger the customer brand engagement will be. Interviewee E suggested that if the brand culture and spirit conveyed by the advertisement could resonate with audiences, causing them to develop an identity consistent with the cultural attributes of the product, thus conferring the product attributes on themselves in the engagement interaction. That is, the higher the brand fit of the virtual influencer, the more successful the brand culture story of the advertising content is, and the more willing the audience is to participate in it.

5. DISCUSSION

There were certain limitations in this research. Firstly, due to the non-probabilistic generic purposive sampling, the small sample of this research and the case study, it was hard to generalize the results [24]. Secondly, regarding data collection, resources as time and staff may fall short of anticipation [25]. Future research could first measure the impact of advertising content from different industries and types of virtual influencers' endorsement in social media on brand engagement among consumers with different ages, genders, etc. Secondly, future research could compare the mediating role of social media type between the advertising content of virtual influencers and consumer brand engagement.

6. CONCLUSION

In conclusion, among virtual influencer endorsement advertisements on social media, those with more interactions can motivate extrinsic motivations, while the content of the advertisement can motivate intrinsic motivations by satisfying the audience's needs for love and belongingness, cognitive and self-actualization. Moreover, low engagement behaviors such as viewing are mainly related to the choice of spokesperson, while higher engagement behaviors such as liking, commenting and forwarding are related to the choice of spokesperson and advertising content design. Therefore, brands should choose spokespersons with high visibility, more realistic appearances, and high brand fit, and design advertisement content with interactivity, creativity, and compelling brand culture stories.

This research enriched the studies in existing rough researches on virtual endorsers' advertising and the motivations of consumer brand engagement in social media. Additionally, the study provided guidance for brands in selecting virtual spokespeople and producing advertisements in social media marketing, and offered direction for future relevant research to follow.

REFERENCES

- Hutchinson, A. "New Report Looks at the Rise of Virtual Influencers on Instagram." (2019). https://www.socialmediatoday.com/news/newreport-looks-at-the-rise-of-virtual-influencers-oninstagram/567550/
- [2] Wang, Wen-yu. "Advertising Effectiveness of Virtual Spokesperson: A Case Study of Kaohsiung Rapid Transit Corporation." (2017)
- [3] Kumar, Jitender, and Jogendra Kumar Nayak. "Consumer psychological motivations to customer brand engagement: a case of brand community." Journal of Consumer Marketing (2019)
- [4] Yongli Han, Research on the current situation and development trend of domestic social media marketing. Henan University, 2014.
- [5] Kaur, Simerpreet. "Social media marketing." Asian Journal of Multidimensional Research, 5(4) (2016): 6-12.
- [6] Dahlen, Micael, and Sara Rosengren. "If advertising won't die, what will it be? Toward a working definition of advertising." Journal of Advertising 45.3 (2016): 334-345.



- [7] Saravanakumar, Murugesan, and T. SuganthaLakshmi. "Social media marketing." Life science journal 9.4 (2012): 4444-4451.
- [8] Moustakas, Evangelos, et al. "Blurring lines between fiction and reality: Perspectives of experts on marketing effectiveness of virtual influencers." 2020 International Conference on Cyber Security and Protection of Digital Services (Cyber Security). IEEE, 2020.
- [9] Molin, Victoria, and Sofia Nordgren. "Robot or Human? The Marketing Phenomenon of Virtual Influencers: A Case Study About Virtual Influencers' Parasocial Interaction on Instagram." (2019). https://uu.divaportal.org/smash/record.jsf?pid=diva2%3A133448 6&dswid=1232
- [10] Horton, Donald, and R. Richard Wohl. "Mass communication and para-social interaction: Observations on intimacy at a distance." psychiatry 19.3 (1956): 215-229.
- [11] Drenten, Jenna, and Gillian Brooks. "Celebrity 2.0: Lil Miquela and the rise of a virtual star system." Feminist Media Studies 20.8 (2020): 1319-1323.
- [12] Katz, Elihu. "The two-step flow of communication: An up-to-date report on an hypothesis." Public opinion quarterly 21.1 (1957): 61-78.
- [13] Zhou, F., Ran, M. G, & Chen, C. Q. (2018). An empirical study on the relationship between perceived authenticity of virtual spokespersons and consumer brand attachment. Soft Science, 32(5), pp.112-115.
- [14]Lou, Chen, and Shupei Yuan. "Influencer marketing: how message value and credibility affect consumer trust of branded content on social media." Journal of Interactive Advertising 19.1 (2019): 58-73.
- [15] Dessart, Laurence, Cleopatra Veloutsou, and Anna Morgan-Thomas. "Consumer engagement in online brand communities: a social media perspective." Journal of Product & Brand Management (2015)
- [16] Hollebeek, Linda D. "Demystifying customer brand engagement: Exploring the loyalty nexus." Journal of marketing management 27.7-8 (2011): 785-807.
- [17] Savage, Jennifer. Creating brand evangelists in the 21st century: Using brand engagement through social media to develop brand loyalty in teens. University of Southern California, 2012.
- [18] Blumler, Jay G., and Elihu Katz. "The Uses of Mass Communications: Current Perspectives on

Gratifications Research. Sage Annual Reviews of Communication Research Volume III." (1974)

- [19] McLeod, Saul. "Maslow's hierarchy of needs." Simply psychology 1.1-18 (2007).
- [20] Bandura, Albert, and Richard H. Walters. Social learning theory. Vol. 1. Prentice Hall: Englewood cliffs, 1977.
- [21] Tianyi Ho, Fumin Deng, Xiaoyan Wang. The impact of branded social media ad content on consumer social media engagement. Journal of Guizhou University of Finance and Economics, 2021(04): 92-100.
- [22] Worthy, Paige. "Top Instagram demographics that matter to social media marketers." Retrieved March 13 (2018): 2019.
- [23] Hennessy, B. "Why Women Dominate Influencer Marketing--and Why It May Be the Right Career for You." Retrieved May 27 (2018): 2019.
- [24] Bell, Emma, Alan Bryman, and Bill Harley. Business research methods. Oxford university press, 2018.
- [25] Flick, Uwe. An introduction to qualitative research. Sage Publications Ltd, 2018.