

HOW NOVELTY SHAPES AUDIENCE PERCEPTIONS OF VIRTUAL INFLUENCERS: EVIDENCE FROM A LIMITED-EXPOSURE MARKET

Paul-Valentin LUNG

Babeş-Bolyai University, Cluj-Napoca

Abstract: The rapid progress of artificial intelligence enables the creation of virtual influencers, AI-generated anthropomorphic or animated characters, in social media. Tools such as MidJourney create highly realistic images and raise questions about the distinction between real and AI-generated people in the digital space. This study examines the acceptance of virtual influencers among young people in Romania, with a focus on a male Romanian virtual influencer. For this purpose, two focus groups were conducted, each with ten social media-savvy young adults. Before the discussion, the participants followed the Instagram account of a Romanian AI-generated influencer for a week. The discussions showed that novelty in particular, a key concept for evaluating technological developments, influences perception and acceptance. Persuasive knowledge, source credibility, congruence and the Uncanny Valley effect also played a role in the evaluation of the virtual influencer.

Keywords: Generative Artificial Intelligence, Virtual Influencer, Social Media, Novelty, Focus Group

1. Introduction

It is no secret, that one of the main means of communication in today's society is portrayed by social media. Statistics show that there are over 5 billion social media users worldwide, a number that is projected to rise to 6 billion users by the year 2028 (Statista, 2024). On the same note, the Romanian society represents about 17 million of these users and the number is expected to increase to 18 million by 2028 (Statista, 2023).

Owing to their extensive usage, social media platforms have been utilized for advertising purposes more and more (De Keyzer et al., 2021), paving the way for advertising done through Social Media Influencers. Influencer Marketing has become a global phenomenon and a crucial part of brands' marketing strategies as they allow Social Media Influencers to present and promote their products to their follower base, ultimately leading to improved business performance (Leung et al., 2022a).

The importance of influencer marketing in today's communication strategies is also strengthened by the fact that the social media influencer market was valued at \$16.4 billion in 2022, while at the same time over 75% of brands allocate a certain amount of money for this communication strategy segment (Leung et al., 2022b). On the other side, the Romanian social media influencer market was valued at €13.0 million in 2021 (Iusan, 2021).

Even though social media influencer marketing is relatively new, an even newer trend is on the rise and directly interconnected with the development of Artificial Intelligence. From generative image programs to all sorts of tasks that Artificial Intelligence can execute in a matter of seconds, one of the newest areas in social media influencer marketing is the existence of Virtual Influencers. While novelty is still central to this fast-paced phenomenon, this study aims to bring a nuanced needed perspective into the developing scholarship of virtual influencers, as discussed by Byun and Ahn

(2023). Although some studies have addressed the acceptance and perception of virtual influencers each through a singular theory, for example source credibility (Kim & Wang, 2024) or novelty (Kim et al., 2024a), no study has addressed this through a multi-theoretical framework. Moreover, no study of this kind was conducted in Romania, an emerging digital market which can bring valuable new insights, as discussed by Franke et al. (2023).

This study examined the perception and acceptance of virtual influencers in Romania through a multi-theoretical framework. Particularly, this study tested which theories, according to the meta-analysis conducted by Spörl-Wang et al. (2025), that apply to the perception and acceptance of human influencers, also apply in the case of virtual influencers.

2. Literature Review

2.1. Defining Virtual Influencers

Virtual Influencers can imitate Human Influencers content by posting about aspects of their lives that represent their personas, such as travel, everyday activities, or interactions with brands. The material difference here is that Virtual Influencers are computer generated, hence the ultimate purpose of this strategy is to promote brands, just as Human Influencers do. In 2022, there were over 200 Virtual Influencers actively participating in advertising, a number which has drastically increased from just nine active Virtual Influencers in 2015. One of the most popular Virtual Influencers, which was also listed under the 25 most influential people on the Internet by Time Magazine is Lil Miquela (Byun & Ahn, 2023).

Romania has only one Virtual Influencer and her name is Ana Tobor (Revista BIZ, 2020). Her Instagram account reached slightly over 4.000 Followers and has been inactive since 2022, up until which the Influencer had some minimal image building collaborations with some brands (Ana Tobor, n.d.).

Originally, Virtual Influencers used to be made through practices such as motion tracking or by employing deepfake technology. These technologies involve the need of specialised individuals, covering all sorts of area, such as 3D artist, animators, professional photographers or videographers etc. This is why at first Virtual Influencers were mainly possible only if they were created by specialised agencies, that have the necessary resources and knowledge on how to create and delivery such a novel concept. The breakthrough innovation in this field comes with the generative AI programs that have minimised the dependencies of the aforementioned creation process, so that nowadays everyone can create a Virtual Influencer, as long as they possess the knowledge on how to navigate such generative programs, that are based on Artificial Intelligence. Future prospects on this topic refer to having Virtual Influencers that will be able to manage themselves autonomously, a thing that is not yet possible, as the current state of the technology presents many risks of such a practice, that can harm the brand image of this influencer persona (Breves & Van Berlo, 2024).

Yan et al. (2024) presented their categorization of Virtual Influencers first through their creation purpose and secondly through their visual characteristics. Based on their creation purpose we can have either innate influential avatars, which are created for specific brands and are intended to maintain and enhance the brands identity, or we can have incarnate avatars, who concentrate on creating a narrative and serving as replicable role models for human followers, therefore keeping distance from setting the main focus on brand affiliations.

Based on their visual characteristics, Virtual Influencers can be categorized in mimic-real human Virtual Influencers (mimicing real humans), animated human Virtual Influencers (drawn animated characters with a human-like appearance) and non-human Virtual Influencers (personalities of inanimate objects, animals, or supernatural entities) (Yan et al., 2024).

2.2. Influencer Marketing, Emergence of Virtual Influencers and Advertising Effectiveness

Although there are many factors that lead to the effectiveness of an advertisement, the existing literature often links effectiveness firstly to the consumer's post exposure attitude towards the advertisement or brand and secondly to the purchase intention that an advertisement has achieved (Ansari & Riasi, 2016).

Current literature has been constantly proving the advertising effects of traditional influencer marketing, done through human social media influencers. The study conducted by Chekima et al. (2020) highlights how a credible human influencer can score positive consumer attitudes in regard to the presented brand or product and ultimately a favourable purchase intention, in the case of the cosmetic industry. Great developed parasocial relations aim to foster deeper engagement with and greater consumption of the Influencers content, ultimately leading to a positive shift in the brand image and purchase intention of that respective brand collaborating with the respective Influencer (De Veirman et al., 2017; Evans et al., 2017).

In the case of Virtual Influencers and their proven advertising effects however, research is still limited, underlining the novelty of this concept.

According to cognitive psychology, novelty comes before emotion, memory, behavior, and attention, which is essential for advertising creativity. Ads that are novel are seen as unique and unexpected, arousing and surprising viewers. As novelty can spark these reactions, the fact that this phenomena is short-lived needs to be pointed out, because as familiarity to the concept grows over time, the same things that once were watched with excitement can get to being boring (Breves & Van Berlo, 2024). Thanks to its distinctive and surprising character, a novel advertisement also increases its persuasive power (Rosengren et al., 2020).

Van Berlo et al. (2023) showcased in their meta-analytical review how ad novelty positively affects brand association strength and consumer persuasion, eventually scoring an increase in ad and brand attitude, purchase intention and eWOM.

Current literature in how consumers react to novelty in advertising has employed experiemental research designs revolving around socalled advergames. The findings of the study conducted by Van Berlo and Chen (2024) demonstrate how novel, creative and interactive advertising done through gamification results in a higher consumer brand engagement rate than in the case of a static ad. The authors also underlined that the positive consumer brand engagement rate is dependent on the satisfaction of the consumer with the experience of the advergame.

Industry analysis and research suggest that virtual influencers offer significant commercial value. They help reduce endorsement costs, lower some of the risks associated with human endorsers, and provide around-the-clock advertising support (Sands et al., 2022).

Existing research shows that with technological advancements, virtual influencers (VIs) are becoming harder to distinguish from human influencers (HIs) and play a similar promotional role in advertising (Byun & Ahn, 2023).

This is particularly relevant in the context of novelty, as the study conducted by Kim et al. (2024a) emphasizes how important perceived novelty is for the effectiveness of VI advertising, especially for anime-like virtual influencers: Branded advertising content from anime-like virtual influencers was perceived as more innovative than that from human-like virtual influencers, and the audience's increased engagement with the content was directly related to this perception of novelty.

Moreover, virtual influencers can benefit from the novelty effect especially in countries where they are not yet widely known or used, as Franke et al. (2023) have discussed the perception of virtual influencers, pointing out that countries such as Japan are completely different compared to Western countries, as anime culture is an indispensable part of Japanese culture.

2.3. The perception of virtual influencers

As current literature on virtual influencers is scarce, the following section aims to present the theories that are usually employed to assess the perception and effectiveness of traditional human influencers and virtual influencers.

The degree of similarity between a virtual avatar and a human is referred to as virtual realism and includes design features such as anthropomorphism, spatial dimensions (2D and 3D avatars) and movement (e.g. whether the avatar appears dynamic or remains visibly static). Behavioral realism, on the other hand, is concerned with the degree of similarity between the behavior of a virtual influencer and a human being (Kim et al., 2024b).

The similarity degree in the cases of virtual and behavioral realism can have an impact on the trust or relatability of a virtual influencer, factors which current literature addressed broadly on human influencers. The theories that can be tested on virtual influencers as well to assess their trustworthiness and relatability are the uncanny valley theory, the authenticity theory, the source credibility theory and the congruence theory.

The uncanny valley theory, developed by the Japanese robotics professor Masahiro Mori in the 70s discusses how people respond to robots that resembled humans in both appearance and behavior. In particular, he postulated that as a humanoid robot got closer to looking lifelike but fell short of that goal, a person's reaction would suddenly change from empathy to disgust. The uncanny valley is the term used to describe this drop into eerie (Mori, 2012).

Authenticity lies above all in what is true and genuine, in this case in the message that is conveyed. Current literature examines how this attribute can lead to higher message receptivity, perceived quality and purchase intent (Audrezet et al., 2018). Linked to this is the source credibility theory developed by Hovland and Weiss (1951). It analyzes how customers view the source of information, in this case the communicator, whose credibility is influenced by their trustworthiness, attractiveness and expertise. According to Balaban & Mustățea (2019), these three factors of the communicator, which in their case are applied in the context of social media influencers, have a demonstrably positive impact on perceived trust, brand awareness and purchase intent.

According to the congruence theory, consumers' opinions and attitudes towards the recommended product are influenced by how well the influencer's characteristics match those of the brand or product (Misra & Beatty, 1990).

Kim and Wang (2024) examined how for-profit and not-for-profit messages have an impact on the source credibility and authenticity of human, human-like virtual and anime-like virtual influencers. Firstly, as many studies show, the authors found out that the more

antropomorphic a virtual influencers presents itself, the more it will have a positive degree of authenticity and trustworthiness. The results show that human-like virtual influencers can be just as successful as human influencers, particularly in non-profit messaging where their trustworthiness as a source and authenticity are stronger. The benefit of human-like virtual influencers, however, is diminished when the focus changes to profit-driven objectives, more closely resembling anime-like virtual influencers, which are consistently less effective. On another note, all influencer types experienced a low effectiveness of their messages on their audience, if these were profit-intended.

Aiming to contribute to a more detailed understanding of how VIs are being perceived through nuanced theoretical frameworks, the following research questions were formulated:

RQ1: How does the novelty of virtual influencers impact young adults' perceptions of advertising effectiveness in a market with minimal prior exposure to virtual influencers?

RQ2: What role do constructs such as virtual & behavioral realism, authenticity, credibility and congruity play in shaping the advertising effectiveness of virtual influencers compared to human influencers?

3. Methodology

The purpose of the present exploratory study was to gain insights into the fact if theories that measure the effectiveness of human influencers, are also applicable and effective in the case of virtual influencers.

In order to reach this objective and to be able to answer to the research questions, I employed a qualitative approach, by conducting two focus groups, each with n=10 young social media users (N=20). To develop the interview questions for this qualitative study, I grounded my approach in the findings of Spörl-Wang et al. (2025), who conducted a meta-analytic review to identify key predictors of SMI marketing effectiveness. Their analysis revealed that existing research predominantly applies theories related to senders, receivers, the relationship between senders and other actors, and the processing of SMI advertising messages. Building on this theoretical foundation, I selected some of the most widely discussed theories from the 22 identified in their review, focusing on constructs such as credibility (Lou & Yuan, 2019), authenticity (Audrezet et al., 2018), parasocial relations (Schramm & Libers, 2019), and congruity theory (Choi & Rifon, 2012). Additionally, I included constructs related specifically to virtual influencers, such as virtual and behavioral realism (Kim et al., 2024b), uncanny valley (Liu & Wang, 2025), and novelty (Sands et al., 2022). I systematically derived the interview questions by first identifying the scales used to measure these constructs in quantitative studies. These scales were then adapted into open-ended questions suitable for qualitative interviews, allowing for an in-depth exploration of participants' perceptions and experiences with a specific virtual influencer and their views on virtual influencers in general.

The assigned task involved asking participants to follow the Instagram account of a male romanian virtual influencer. Since no virtual influencer accounts existed in Romania, I created the profile using the Midjourney software, designing a young adult virtual persona with features typical of people from Romania, promoting an active and healthy lifestyle (see Figure 1.). The account was launched several weeks before the

study, posting regularly and gaining approximately 150 followers. Each post was labelled with the tag "AI Info".



Figure 1. Stimuli – Romanian male virtual influencer

Participants were recruited through a social media announcement by the author. In order to ensure diversity in the samples of the two focus groups, my main focus for the sample of the first focus group was for it to consist of young adults at the start of their university studies and for the sample of the second one to consist of young adults at the end of their university studies. The first focus group consisted of 7 female and 3 male participants, whereas the second focus group consisted of 10 female participants. The participants of the first focus group are aged between 19 to 20 years, whereas the participants of the second focus group are aged between 24 and 25 years. All the participants are Romanian and they were able to register themselves for the participation to the focus group, regardless of the fact if they share similar interests with the created virtual influencer, in this case, a healthy and active lifestyle. Detailed information about the sample of the first focus group can be found in Table 1. and for the second focus group in Table 2. After registering, the participants were instructed to follow the account for one week, during which regular posts were made on the feed and stories. There was a mix in the done posts, hence the feed posts were mostly AI-generated content, and the story posts were mostly real pictures done on the spot by the author. Following this period, participants met with the author for a face-to-face session during December 2024 to March 2025. During these meetings, they were asked to scroll through the influencer's feed for 5 minutes as they typically would on Instagram before beginning the discussion.

Data analysis was performed category-based on the theories, which were used to develop the interview questions. The two discussions were recorded, upon receiving the informed consent of the participants about it and the usage of their answers to the present study.

ID number	Gender	Age	Citizenship	Education
ID 1	male	20	Romanian	Ongoing BA Study
ID 2	female	19	Romanian	Ongoing BA Study
ID 3	female	19	Romanian	Ongoing BA Study
ID 4	female	20	Romanian	Ongoing BA Study
ID 5	female	19	Romanian	Ongoing BA Study

ID 6	female	19	Romanian	Ongoing BA Study
ID 7	male	19	Romanian	Ongoing BA Study
ID 8	female	20	Romanian	Ongoing BA Study
ID 9	male	20	Romanian	Ongoing BA Study
ID 10	female	20	Romanian	Ongoing BA Study

Table 1. Description of the sample of the first focus group

ID number	Gender	Age	Citizenship	Education
ID 11	female	24	Romanian	Ongoing MA Study
ID 12	female	24	Romanian	Ongoing MA Study
ID 13	female	25	Romanian	Ongoing MA Study
ID 14	female	25	Romanian	Ongoing MA Study
ID 15	female	25	Romanian	Ongoing MA Study
ID 16	female	25	Romanian	Ongoing MA Study
ID 17	female	24	Romanian	Ongoing MA Study
ID 18	female	24	Romanian	Ongoing MA Study
ID 19	female	25	Romanian	Ongoing MA Study
ID 20	female	24	Romanian	Ongoing MA Study

Table 2. Description of the sample of the second focus group

4. Findings

4.1. Virtual & Behavioral Realism & Uncanny Valley

All participants from the first focus group recognized from the beginning that the influencer is either AI-generated or that he retouches his photos with AI programs. Some female participants found him attractive and wondered if he might eventually follow them back.

On the other hand, his behavior was seen as genuine by the participants, as it was perceived as sympathetic, interactive and informal. One participant (ID 2) gave us a deeper explanation into the contradiction that she experienced between the appearance and behavior of the virtual influencer: "If you look closely, it's very obvious on his face, the skin — that's the only thing that made me question it because there are no pores or wrinkles. The skin was the only thing that seemed AI-generated; everything else looked real."

The participants also felt the Uncanny Valley effect, as the virtual influencer seemed either "too perfect" or "too artificial" for everyone. More to this, one feature that was perceived as strange by the participant ID 1 was that his face was statically in the same position in every post: "His face is always the same. With the virtual influencer, the clothes and context change, but the face is always the same and from the same angle."

A trigger for the uncanny valley effect were also the physical inconsistencies of the virtual influencer: "I'm a person who looks a lot at details, so I looked at the muscles and it seemed to me that there were differences between 3 pictures. Sometimes too big, sometimes too small." (ID 6)

If we are looking at the second focus group, all participants directly recognized that the influencer is AI-generated. Moreover, one participant shared a different opinion about the personality and behavior of the virtual influencer, than observed up until this point:

"I thought he just thinks he's an Influencer. If someone real like that would put those descriptions up, it would sound cringey to me. He doesn't seem stable to me – now I'm

showing you cakes, after that I'm showing you what gym I'm going to – there is no such thing. And the style of music in the posts, they are different, he doesn't have a well-established personality.” (ID 12)

Inside this sample, all participants pretended they didn't experience the uncanny valley effect, claiming that they developed a resistance to this type of content. Although they recognized that the influencer is AI-generated, thanks to prior knowledge of constant exposure to this type of content, they still reported the drop into eerie caused by the artificiality of the character, which triggers the uncanny valley effect: “... his image as a person, perfect features, symmetrical yet unnatural. When you see a person or a post like that, also with an artificial background, you think twice whether to believe it or not.” (ID 11)

4.2. Novelty

While the virtual influencer's appearance seemed artificial, all the places he visited and the products he used were real and came from the same city as the participants. The participants of the first focus group had no information about the concept of virtual influencers and did not follow such influencers until the point of this discussion.

Moreover, they had no clear knowledge of what an AI-Info label entails in a social media post. The researcher therefore informed the participants about the AI-Info label and then asked them about their opinion on whether they thought there was a real person behind this account who retouched his photos a lot with AI programs. After the explanation, the following answer was received: “Partly I realize it was done with artificial intelligence, but at the same time I want to see if there's a real person behind it, because in one post it looks like a real person because the picture was taken from behind.” (ID 3)

In the case of the second focus group, the participants did not know any virtual influencers, hence they do not follow any, but they were already familiar with the concept of AI-generated avatars and their usual appearance style.

Furthermore, the participants were able to say about the AI-Info label that it signals a fully AI content manipulation. In this case, the researcher explained to them that the AI-Info label can also signal partial AI content manipulation of real photos.

4.3. Authenticity and Credibility

Participants of the first focus group did not consider the content to be authentic, however the majority felt that the virtual nature of the influencer could be categorized as authentic. Despite this fact, participants appreciated that content types of human influencers were presented by a non-human one. They were not bothered by the artificial nature of the virtual influencer, as the majority claimed that “human influencers also heavily edit their images and artificially manipulate their posts”.

The participants of the second focus group did not consider the content to be authentic as well and they remained reluctant regarding the credibility of the virtual influencer, as they “wouldn't get close to this virtual domain”, especially in the case of this virtual influencer, which according to their opinion doesn't have a matured personality.

Asked if they found the content credible and about the characteristics that influenced their credibility, participants' credibility levels of both samples were directly influenced by the reality level of the content. Once a piece of content was visually real, in this case story posts, it was easy for participants to perceive it as credible. On the other hand, the AI-generated feed posts were not perceived as credible.

4.4. Congruity

When asked about the influencer-product fit, most participants felt that technical products were better suited for such influencers to promote: "I wouldn't see him promoting any physical products. If it was an app, powered by AI, then that could be promoted as a joke, to be something other than what he has with the gym." (ID 6) Some felt that the influencer could also promote human products (such as gym products and supplements), but they felt that it would not be credible: "I could see promotion on protein powder, gym products. But he couldn't promote everything, and if he did, people wouldn't trust him." (ID 3)

After further conversations, increased purchase intent and a positive attitude towards the brand in relation to human-centric products, such as a gym and healthy food in a restaurant, was observed. Furthermore, two users reported that they bought products recommended by the influencer, marking actual consumer behavior: "I saw the post about the restaurant, and I'm not kidding - I went on the food delivery app, looked at the restaurant and ordered a burger with a colleague." (ID 1)

Once I aimed to test the congruity theory inside the sample of the second focus group, opinions here were diverse. While some participants shared the fact that they could see him promote human products, such as gym products and supplements, participant with the ID 11 stated that: "I don't think a virtual influencer like this could promote any product, or maybe they could, but to me they would have zero credibility.", whereas the participant with the ID 13 followed up on this by saying that: "I think they could promote any product if it matches the target group on social media and personal narrative."

5. Discussion

Addressing RQ1, our findings reveal that the novelty of virtual influencers plays a critical, yet complex role in shaping young adults' perceptions of advertising effectiveness in a market with minimal prior exposure. All participants in our study were able to recognize the influencer as AI-generated, regardless of whether they found the character attractive or not. Notably, the responses varied after a week-long exposure: while participants from the first focus group experienced a tension between the influencer's artificial appearance and his relatable behavior, those in the second focus group—who claimed to be more familiar with virtual avatars—still reported feelings of unease, albeit framing the virtual influencer as "unnatural" and "untrustworthy" rather than "creepy." These findings suggest that even when prior exposure to virtual representations exists, the novelty of AI-driven influencers can still trigger cognitive dissonance.

In particular, both groups demonstrated experiences related to the Uncanny Valley effect (Liu & Wang, 2025), where imperfect human-likeness evoked discomfort. Yet, interestingly, participants' perceptions of credibility improved when posts appeared visually realistic enough, pointing to the significant influence of virtual realism (Kim et al., 2024b) on persuasion outcomes. This reinforces the notion that novelty can initially enhance the persuasive power of advertising (Rosengren et al., 2020) and, consistent with Franke et al. (2023), lead to positive advertising effects even in markets with limited previous exposure to virtual influencers.

Moreover, the discussion revealed a general lack of familiarity with AI-labeled content on social media, and very limited prior experience with virtual influencers. This

gap underlines the need for greater public awareness and literacy regarding AI-generated personas at a societal level.

Turning to RQ2, constructs such as authenticity, credibility, behavioral realism, and congruity emerged as essential drivers of advertising effectiveness—paralleling their established importance in traditional influencer marketing, as highlighted by Spörl-Wang et al. (2025). Although participants initially rated the virtual influencer as less authentic and credible compared to human influencers, these perceptions shifted when the influencer's content achieved high visual realism or when the narrative fit the promoted product. Notably, participants expressed skepticism toward virtual influencers endorsing "human" products, unless the storytelling around the endorsement was perceived as believable and congruent with the influencer's character, aligning with principles from congruity theory.

Overall, our findings indicate that despite the technological differences between virtual and human influencers, the psychological mechanisms influencing advertising effectiveness remain similar. Understanding these nuances is crucial for expanding theoretical frameworks related to virtual influencer marketing and for better designing communication strategies in emerging digital markets.

5. Conclusions

In conclusion, this study highlights the important role of novelty in shaping initial perceptions of virtual influencers in advertising, particularly in markets with limited prior exposure. It shows that constructs such as authenticity, credibility, behavioral realism, and congruity continue to influence advertising effectiveness, even when the influencer is AI-generated. By expanding existing frameworks of social media influencer marketing, our findings contribute to a better understanding of how audiences respond to emerging digital trends and what factors marketers should prioritize, especially in less digitally saturated markets.

Specifically, this study offers insights into the impact of virtual influencers on young adults in Romania, with potential for application to other localized contexts. It points to important practical implications: despite initial cognitive contradictions triggered by unfamiliarity, novel digital ads featuring virtual influencers can achieve positive outcomes if elements like realism and narrative fit are addressed. These findings stress that even in markets with minimal prior exposure, virtual influencers can be effective advertising tools.

Additionally, this research encourages a more nuanced view of digital marketing strategies in emerging markets, where technological literacy may lag behind global hubs, challenging generalized assumptions in the field. It also enriches research on social media influencers by exploring how novelty influences not only engagement and purchase intentions but also the development of attitudes toward new digital personas.

Given its exploratory nature, this study has limitations, notably its small and predominantly young sample. Moreover, since self-reported responses often revealed contradictions and ambivalence, future research should include experimental designs to capture actual behavioral and attitudinal effects toward virtual influencers more accurately.

References

1. Tobor, A., n.d. "Ana Tobor's Instagram Profile" in *Instagram*, available at <https://www.instagram.com/ana.tobor/> [accessed February 2025].
2. Ansari, A. and Riasi, A., 2016. "An investigation of factors affecting brand advertising success and effectiveness" in *International Business Research*, available at <https://doi.org/10.5539/ibr.v9n4p20> [accessed April 2025].
3. Audrezet, A., De Kerviler, G. and Moulard, J. G., 2018. "Authenticity under threat: When social media influencers need to go beyond self-presentation" in *Journal of Business Research*, available at <https://doi.org/10.1016/j.jbusres.2018.07.008> [accessed April 2025].
4. Balaban, D. and Mustătea, M., 2019. "Users' perspective on the credibility of social media influencers in Romania and Germany" in *Romanian Journal of Communication and Public Relations*, available at <https://doi.org/10.21018/rjcp.2019.1.269> [accessed April 2025].
5. Breves, P. and Van Berlo, Z., 2024. *Virtual influencers*, Amsterdam: Stichting Wetenschappelijk Onderzoek Commerciële Communicatie.
6. Byun, K. J. and Ahn, S. J., 2023. "A Systematic Review of Virtual Influencers: Similarities and Differences between Human and Virtual Influencers in Interactive Advertising" in *Journal of Interactive Advertising*, available at <https://doi.org/10.1080/15252019.2023.2236102> [accessed April 2025].
7. Chekima, B., Chekima, F. Z. and Adis, A. A., 2020. "Social media Influencer in advertising: The role of attractiveness, expertise and trustworthiness" in *Journal of Economics and Business*, available at <https://doi.org/10.31014/aor.1992.03.04.298> [accessed April 2025].
8. Choi, S. M. and Rifon, N. J., 2012. "It Is a Match: The Impact of Congruence between Celebrity Image and Consumer Ideal Self on Endorsement Effectiveness" in *Psychology and Marketing*, available at <https://doi.org/10.1002/mar.20550> [accessed April 2025].
9. De Keyser, F., Dens, N. and De Pelsmacker, P., 2021. "How and When Personalized Advertising Leads to Brand Attitude, Click, and WOM Intention" in *Journal of Advertising*, available at <https://doi.org/10.1080/00913367.2021.1888339> [accessed April 2025].
10. De Veirman, M., Cauberghe, V. and Hudders, L., 2017. "Marketing through Instagram influencers: the impact of number of followers and product divergence on brand attitude" in *International Journal of Advertising*, available at <https://doi.org/10.1080/02650487.2017.1348035> [accessed April 2025].
11. Evans, N. J., Phua, J., Lim, J. and Jun, H., 2017. "Disclosing Instagram Influencer advertising: The effects of disclosure language on advertising recognition, attitudes, and behavioral intent" in *Journal of Interactive Advertising*, available at <https://doi.org/10.1080/15252019.2017.1366885> [accessed April 2025].
12. Franke, C., Groeppel-Klein, A. and Müller, K., 2023. "Consumers' responses to virtual influencers as advertising endorsers: novel and effective or uncanny and deceiving?" in *Journal of Advertising*, available at <https://doi.org/10.1080/00913367.2022.2154721> [accessed April 2025].
13. Hovland, C. I. and Weiss, W., 1951. "The influence of source credibility on communication effectiveness" in *Public Opinion Quarterly*, available at <https://doi.org/10.1086/266350> [accessed April 2025].
14. Iusan, L., 2021. "Cum a arătat piața de Influencer Marketing în 2021" in *Mocapp*, available at <https://mocapp.net/blog/piata-de-influencer-marketing-2021/?lang=ro> [accessed February 2025].
15. Kim, D. and Wang, Z., 2024. "Comparing Marketing Effectiveness between Human and Virtual Influencers: Role of Not-For-Profit Message in Perceived Authenticity and Credibility" in *Computers in Human Behavior Artificial Humans*, available at <https://doi.org/10.1016/j.chbah.2024.100100> [accessed April 2025].
16. Kim, E. (Anna), Shoenberger, H., Kim, D., Thorson, E. and Zihang, E., 2024a. "Novelty vs. trust in virtual influencers: exploring the effectiveness of human-like virtual influencers

- and anime-like virtual influencers" in *International Journal of Advertising*, available at <https://doi.org/10.1080/02650487.2024.2386916> [accessed April 2025].
17. Kim, I., Ki, C.-W., Lee, H. and Kim, Y.-K., 2024b. "Virtual influencer marketing: Evaluating the influence of virtual influencers' form realism and behavioral realism on consumer ambivalence and marketing performance" in *Journal of Business Research*, available at <https://doi.org/10.1016/j.jbusres.2024.114611> [accessed April 2025].
 18. Leung, F. F., Gu, F. F. and Palmatier, R. W., 2022a. "Online influencer marketing" in *Journal of the Academy of Marketing Science*, available at <https://doi.org/10.1007/s11747-021-00829-4> [accessed April 2025].
 19. Leung, F. F., Zhang, J. Z., Gu, F. F., Li, Y. and Palmatier, R. W., 2022b. "Does Influencer Marketing Really Pay Off?" in *Harvard Business Review*, available at https://www.researchgate.net/profile/Jonathan-Zhang-4/publication/365926125_Does_Influencer_Marketing_Really_Pay_Off/links/638904182c563722f2299c4d/Does-Influencer-Marketing-Really-Pay-Off.pdf?origin=journalDetail&tp=eyJwYWdljoiam91cm5hbERldGFpbCJ9 [accessed February 2025].
 20. Liu, F. and Wang, R., 2025. "Fostering Parasocial Relationships with Virtual Influencers in the Uncanny Valley: Anthropomorphism, Autonomy, and a Multigroup Comparison" in *Journal of Business Research*, available at <https://doi.org/10.1016/j.jbusres.2024.115024> [accessed April 2025].
 21. Lou, C. and Yuan, S., 2019. "Influencer Marketing: How message value and credibility affect consumer trust of branded content on social media" in *Journal of Interactive Advertising*, available at <https://doi.org/10.1080/15252019.2018.1533501> [accessed April 2025].
 22. Misra, S., and Beatty, S. E., 1990. "Celebrity Spokesperson and Brand Congruence: An Assessment of Recall and Affect" in *Journal of Business Research*, available at [https://doi.org/10.1016/0148-2963\(90\)90050-N](https://doi.org/10.1016/0148-2963(90)90050-N) [accessed April 2025].
 23. Mori, M., 2012. "The Uncanny Valley" in *IEEE Robotics & Automation Magazine*, available at <https://doi.org/10.1109/MRA.2012.2192811> [accessed April 2025].
 24. Revista BIZ, 2020. "Cine este primul influencer virtual din România?" in *Revista BIZ*, available at <https://www.revistabiz.ro/cine-este-primul-influencer-virtual-din-romania/> [accessed April 2025].
 25. Rosengren, S., Eisend, M., Koslow, S. and Dahlen, M., 2020. "A Meta-Analysis of when and how advertising creativity works" in *Journal of Marketing*, available at <https://doi.org/10.1177/0022242920929288> [accessed April 2025].
 26. Sands, S., Campbell, C. L., Plangger, K. and Ferraro, C., 2022. "Unreal influence: leveraging AI in influencer marketing." in *European Journal of Marketing*, available at <https://doi.org/10.1108/ejm-12-2019-0949> [accessed April 2025].
 27. Schramm, H. and Liebers, N., 2019. "Parasocial interactions and relationships with media characters: an inventory of 60 years of research" in *Communication Research Trends*, available at <https://dialnet.unirioja.es/servlet/articulo?codigo=7895318> [accessed April 2025].
 28. Spörl-Wang, K., Krause, F. and Henkel, S., 2025. "Predictors of social media influencer marketing effectiveness: A comprehensive literature review and meta-analysis" in *Journal of Business Research*, available at <https://doi.org/10.1016/j.jbusres.2024.114991> [accessed April 2025].
 29. Statista, 2023. "Number of social network users in Romania from 2020 to 2029" in *Statista*, available at <https://www.statista.com/statistics/569036/predicted-number-of-social-network-users-in-romania/> [accessed February 2025].
 30. Statista, 2024. "Number of social media users worldwide from 2017 to 2028" in *Statista*, available at <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/> [accessed February 2025].

31. Van Berlo, Z. M. C. and Chen, X., 2024. "AdverGames and Consumer brand engagement: Experiential satisfaction as a mediator of gamified advertising effects" *Journal of Interactive Advertising*, available at <https://doi.org/10.1080/15252019.2024.2335398> [accessed April 2025].
32. Van Berlo, Z. M. C., Meijers, M. H. C., Eelen, J., Voorveld, H. a. M. and Eisend, M., 2023. "When the medium is the message: A Meta-Analysis of Creative Media Advertising Effects" in *Journal of Advertising*, available at <https://doi.org/10.1080/00913367.2023.2186986> [accessed April 2025].
33. Yan, J., Xia, S., Jiang, A. and Lin, Z., 2024. "The effect of different types of virtual influencers on consumers' emotional attachment" in *Journal of Business Research*, available at <https://doi.org/10.1016/j.jbusres.2024.114646> [accessed April 2025].