Virtual influencers: generation of trust, loyalty and purchase intentions.

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Type of manuscript: Extended abstract

Keywords: virtual influencer, trust, purchase intention.

Abstract

In recent years, companies have increased their use of influencer marketing because they generate content valued by consumers (Casaló et al., 2020; Ge & Gretzel, 2018). In 2022, it is expected that the industry will grow by 17 billion dollars, representing an increase of investment of 70% on the part of e-commerce professionals (Werner, 2022). Influencer marketing is defined as the use of opinion leaders, famous or not, who have many followers on social platforms, to evoke positive attitudes and behaviours in these followers in the interests of brands (Martínez-López et al., 2020a). They are considered to be prescribers, sources of advice and opinion leaders (Casaló et al., 2020), and to generate trust (Balaji et al., 2021).

In this context, a new type of influencer has emerged: the virtual influencer (Arsenyan & Mirowska, 2021). They are artificial images, or interactive avatars, that resemble human influencers in several their functionalities (e.g., they post content online, and can be followed), but they are not human (Arsenyan & Mirowska, 2021). Virtual influencers create and disseminate online content and have the capacity to persuade (Arsenyan & Mirowska, 2021). Unlike human influencers, their non-human characters lead them to “stick to the script” and project an image of perfection (Appel et al., 2020). Appel et al. (2020) argued that advances in computing power and artificial intelligence algorithms will make virtual influencers even more prominent in the near future. While the marketing literature on influencers is extensive (see Belanche et al., 2020; Casaló et al., 2020; Kim & Kim, 2020; Martínez-López et al., 2020a, b; Sokolova & Kefi, 2020), few studies have examined the effects of using virtual influencers (Arsenyan & Mirowska, 2021; Kim & Kim, 2021).

The objective of this research is to explore the processes of the generation of trust and purchase intentions among followers of virtual influencers. Although this work is still ongoing, this
extended abstract proposes and evaluates a model based on the theory of social exchange and its principle of reciprocity (Kim & Kim, 2021). The model presents five antecedents of trust widely accepted in public influencer marketing research (see Filieri et al., 2015; Kim & Kim, 2021; Masuda et al., 2022) four being content quality, physical attractiveness, social attractiveness and homophily; in addition, anthropomorphism is included as an antecedent variable of trust given that it has been identified as important in interactions between people and artificial intelligence-enabled service devices (Melián-González et al., 2019). As outcomes the model evaluates the influence of trust on loyalty to the influencer and on intentions to buy the products recommended by “him/her”.

During October and November 2021, an online survey was distributed among active Instagram users who follow LilMiquela, a virtual influencer with a very human appearance, indeed, difficult to distinguish from a real person. “She” has 3 million followers and has collaborated with brands such as Calvin Klein and Prada. The model variables were measured using 7-point Likert-type scales validated in previous studies. Physical attractiveness, trust, loyalty to the influencer and purchase intentions were adapted from Kim and Kim (2021), social attractiveness and homophily from Masuda et al. (2022), content quality from Filieri et al. (2015) and anthropomorphism from Melián-González et al. (2019).

A total of 167 valid responses were obtained. The sample consisted mainly of women (65.3%), aged between 18 and 35 years (85.1%), having university studies (69.5%). The model was evaluated using the PLS-SEM technique, with SmartPLS software, version 3.3.3 (Henseler et al., 2018; Ringle & Sarstedt, 2016). The model meets the reliability and convergent validity criteria. All factor loads are greater than 0.70. Cronbach's alpha (CA) and composite reliability (CR) in all cases exceed the minimum value 0.8 suggested by Nunnally (1978). The average variance extracted (AVE) values exceed the minimum recommended level of 0.5 (Fornell and Larcker, 1981). Discriminant validity was verified using the Fornell-Larcker criterion (Fornell & Larcker, 1981) and the heterotrait-monotrait ratio (HTMT) (<0.9) (Henseler et al., 2016). The values are all within the recommended limits.

The Bootstrapping method, with 5,000 subsamples, was used to evaluate the structural models (Dijkstra & Henseler, 2015). The results showed that the data support five of the seven model hypotheses. In particular, the effects of content quality, social attractiveness and homophily on trust, and of trust on loyalty and purchase intentions are statistically significant. On the other hand, the effects of anthropomorphism and physical attractiveness on trust cannot be accepted.

Content quality is the variable with the greatest effect on trust, followed by homophily and social attractiveness. Unlike studies into human influencers that have highlighted the key roles of their physical and social attractiveness, this research into virtual influencers highlights the key role of their ability to generate quality content. This may be because Instagram users accept their messages but are aware they are not real people. Thus, they do not attach importance to the virtual influencer being physically attractive, while the impact of social attractiveness is reduced (β = 0.218). That is, influencers need to exercise social interrelation skills with their audiences (Rapp et al., 2013). However, Instagram users do not place their trust in these figures because of their beauty, attractiveness, or sensuality (Kim & Kim, 2021). Homophily is understood as being the similarity that followers perceive between their beliefs, values, experiences, and lifestyles, and those of their influencers; it strengthens trust by creating good feelings and reduced uncertainty among followers, as occurs in communication between humans. Finally, the negative effect of high anthropomorphism is not statistically significant. In the literature this is a controversial topic with very different results, so further study is needed to arrive at more reliable conclusions.
This work in progress has several limitations. First, a specific influencer, specialising in fashion and lifestyle products, was used as the stimulus. It would be advisable to evaluate the model’s relationships based on influencers with different characteristics and in other sectors. The convenience sample was obtained from Spanish Instagram users. Future work should use samples from other cultures and, if possible, random sampling. Finally, although the explanatory capacity of the model is acceptable, its power could be increased by adding other variables, such as perceived experience and satisfaction.

Acknowledgments: This research was supported by the Andalusian Plan for Research, Development and Innovation of the Junta de Andalucía, Group SEJ-567 (Spain).

References
Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research, 18*(3), 382-388.


