AI Influencers: Marketing Boost or Manipulation?

A Communication and Marketing Psychology Analysis

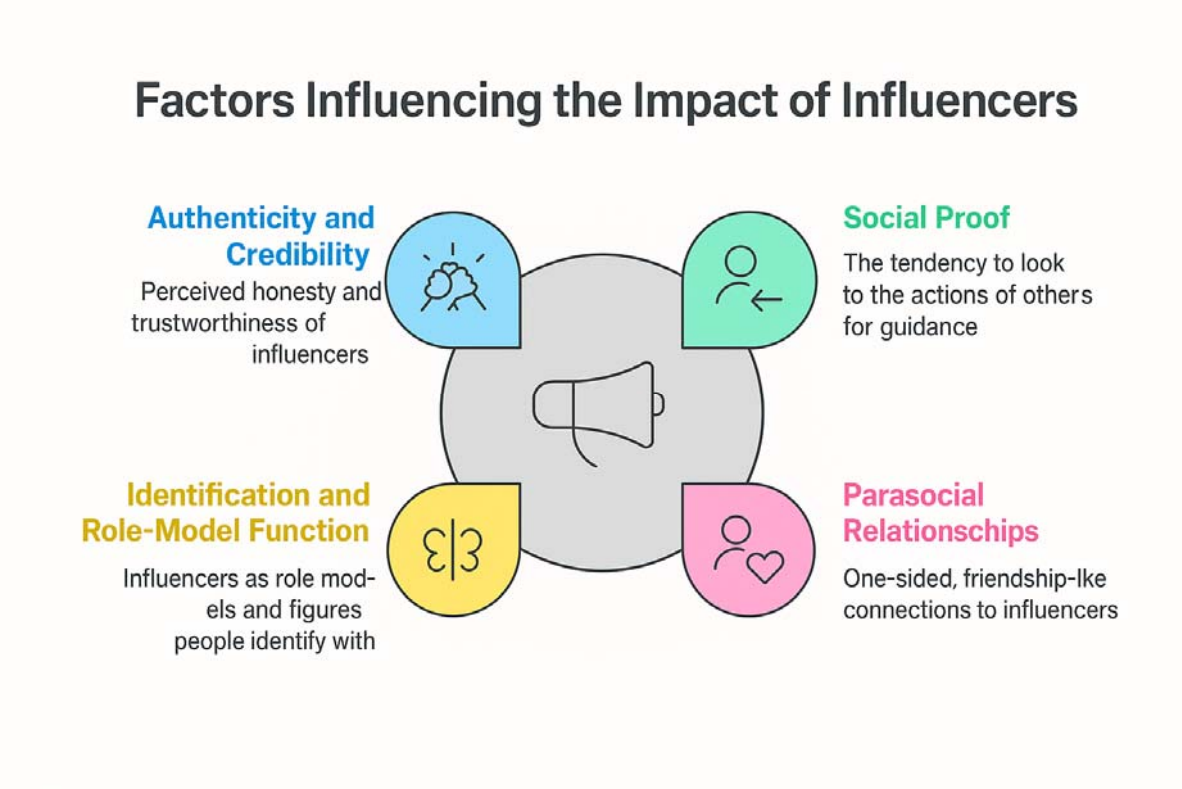
Dr. Josef Sawetz, August 2025

The Rise of AI Influencers

In recent years, artificial intelligence (AI) has permeated virtually every area of life, including marketing and advertising. A particularly promising yet unsettling development is the emergence of AI influencers—computer-generated personalities that share content on social media, promote brands, and build relationships with human followers.

By 2024, the market for AI influencers had reached approximately USD 6.95 billion, with an annual growth rate of 39.9% (Statista, 2024). Statistics show that virtual influencers achieve an average engagement rate of 2.84%, compared to 1.72% for human influencers (Digital Delane, 2024).

For brands, they are controllable, scalable, and permanently conflict-free—which attracts budgets that previously went to creators.



The “Media Equation” Theory: Our Brain Does Not Distinguish Between Real and Digital

The “Media Equation” theory by Byron Reeves and Clifford Nass provides another explanation for the effectiveness of virtual influencers. It posits that people tend to interact with media and technologies as if they were real people. Over the course of evolution, our brains did not learn to distinguish between real social interactions and their media representations.

This means that we unconsciously respond to a friendly avatar or a helpful chatbot as if it were a friendly and helpful person. Virtual influencers take advantage of this psychological “shortcut.” By simulating human communication—direct address, sharing personal stories, responding to comments—they activate social scripts in users that are usually reserved for interaction with other people. As a result, despite knowing they are artificial, we form emotional bonds with them and grant them trust.

The Authenticity Paradox: Trust in the Non-Human

Credibility is the currency of influencer marketing. Consumers follow recommendations from people they consider trustworthy, competent, and attractive. The “Source Credibility Model” by Hovland and Weiss (1951) is a central theoretical framework here.

Transparent Artificiality

Some researchers argue that openly communicating their non-existence can paradoxically increase the credibility of virtual influencers. Followers know they are dealing with a fictional figure and may evaluate them according to different criteria than human influencers—for example, entertainment value, aesthetics, or the originality of their story. Many successful virtual influencers do not hide their digital origins. This openness is paradoxically interpreted as a sign of honesty, even though everything else about them is constructed.

Flawlessness as an advantage: While human influencers can lose credibility through scandals and inauthentic behavior, virtual influencers are immune to this. Their immaculate and controlled nature can be perceived as reliable in a media landscape marked by mistrust.

Attractiveness as a dominant factor: Studies show that physical attractiveness plays an even greater role in the positive perception of virtual influencers than it does for humans. Because their attractiveness can be digitally perfected, this factor may compensate for deficits in perceived trustworthiness.

Consistency: Virtual influencers do not exhibit contradictions in their behavior. They are always the same person, with the same values and the same aura. This consistency conveys trustworthiness (Miao et al., 2022).

Perfect imperfection: Paradoxically, virtual influencers appear authentic because their creators deliberately build in small “flaws”—a slightly crooked nose, freckles, or occasional “spontaneous” moments. This calculated imperfection makes them more human and thus more credible (Thomas & Fowler, 2021).

It appears that traditional models of credibility may need to be expanded in the context of virtual influencers. Factors such as “uniqueness” or “innovative character” could play a role that is just as important as the classic dimensions of expertise and trustworthiness.

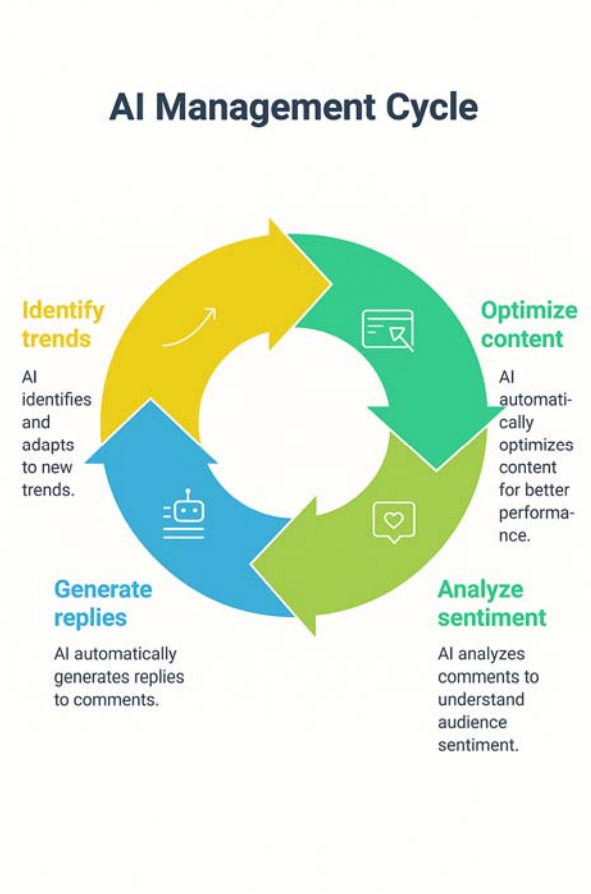
In human–AI interactions, the machine heuristic also comes into play: “machines are precise, objective, consistent”—which can increase attributed credibility.

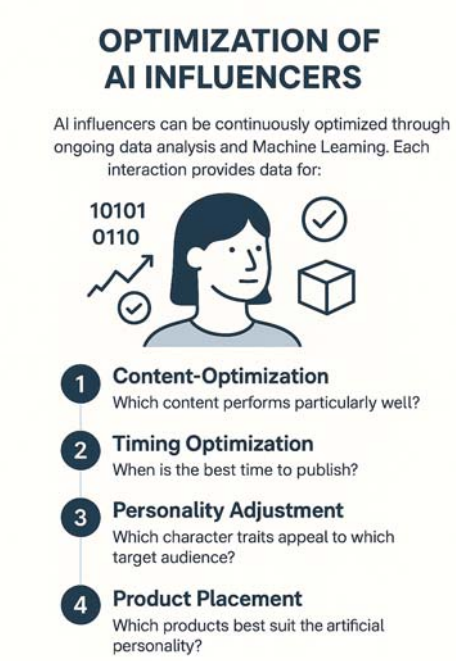
Through category and identity fit, “product-dependent” virtual influencers (avatars with matching expertise/role) generate higher cognitive and emotional trust judgments and purchase intention than generic figures.

The Anatomy of Virtual Influencers

AI Management Layer:

- Automated content optimization
- Sentiment analysis of comments
- Automatic reply generation
- Trend detection and adaptation





Data-Driven Persuasion and Micro-Targeting

Virtual influencers are driven by algorithms that continuously analyze and adapt interactions. This data-driven approach enables a previously unattained level of personalization and adaptation to individual preferences (Kietzmann et al., 2018). While personalized communication is not problematic per se, it becomes so when it is used to tailor persuasive messages in ways that are particularly effective on vulnerable target groups.

The combination of AI-based analysis and full controllability of the influencer enables micro-targeting that can systematically exploit the weaknesses and cognitive biases of individual consumers. This raises significant ethical questions, particularly with regard to protecting vulnerable groups such as children or people with low media literacy.

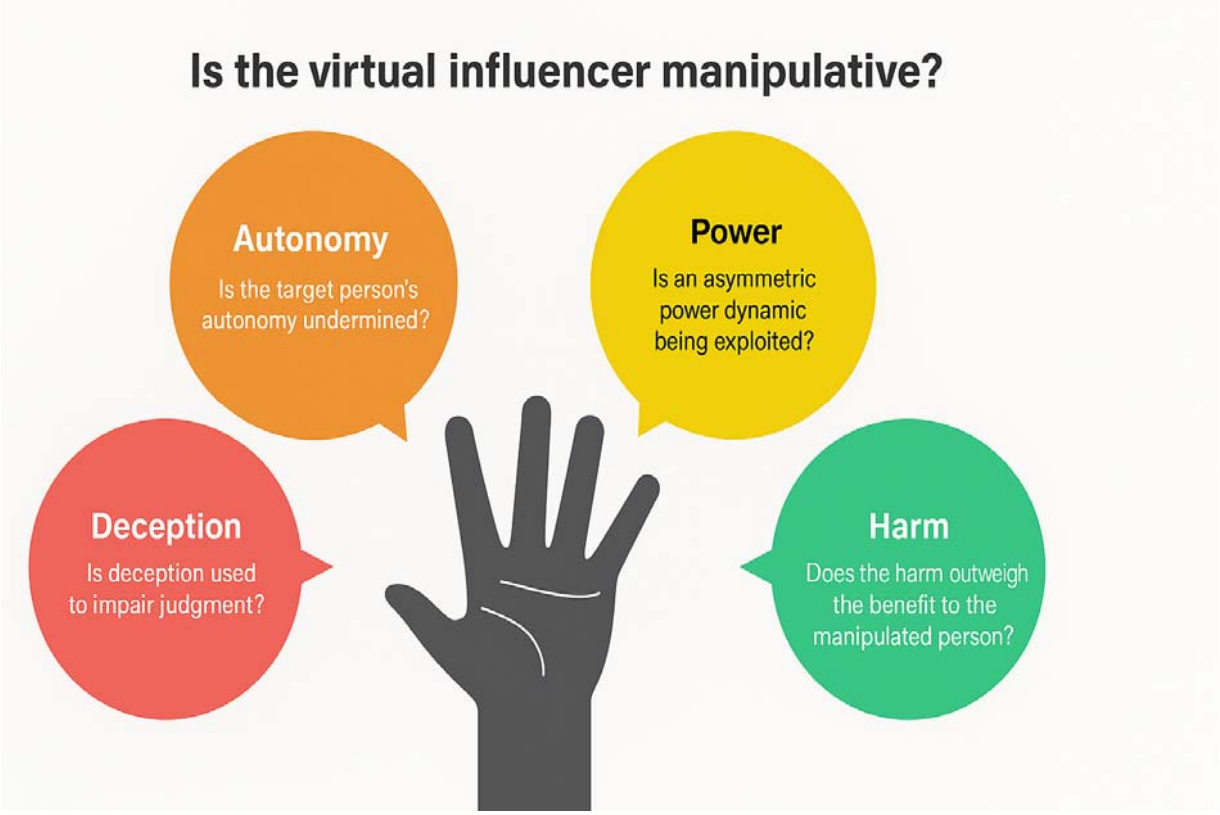
This data-driven approach enables persuasion that human influencers cannot achieve with such precision.

Manipulation or Legitimate Marketing?

Definition of Manipulation

To assess whether virtual influencers act manipulatively, manipulation must first be defined. From a psychological perspective, manipulation occurs when:

- Deception is used to impair judgment
- The autonomy of the target person is undermined
- Asymmetrical power distribution is exploited
- The harm to the manipulated person exceeds the benefit



In virtual influencers, several of these criteria are met:

- **Deception through pseudo-authenticity:** Although they disclose their artificial nature, they simulate human emotions and experiences they cannot have. A virtual influencer cannot truly “love” a product or issue a genuine recommendation.
- **Exploitation of cognitive weaknesses:** They systematically exploit cognitive biases and psychological vulnerabilities, without most users realizing how precisely they are being influenced (Kahneman, 2011).

Manipulation Techniques of Virtual Influencers

🎭 **EMOTIONAL MANIPULATION**

- Artificial vulnerability (used by 89% of virtual influencers)
- Pseudo-intimacy via “private” moments
- Strategic controversies to attract attention

🧠 **COGNITIVE MANIPULATION**

- Mere-exposure effect (an average of 8.7 posts/week)
- Social proof amplified by bots
- Anchoring effect in product pricing

💰 **COMMERCIAL OBFUSCATION**

- Native advertising (76% not recognizable as advertising)
- Lifestyle integration of products
- Parasocial purchase recommendations

🎯 **TARGET-GROUP TARGETING**

- Psychographic profiles (an average of 247 data points/user)
- Algorithmic content optimization
- Micro-targeting of vulnerable groups

Scaled “hyper-personalization” and “agentic virtual influencers” can perform micro-targeting and real-time adaptation—this is psychologically effective but associated with a risk of manipulation (heuristic triggers, social-engineering patterns).

Vulnerable Target Groups

The impact of virtual influencers on vulnerable target groups is particularly problematic:

- **Adolescents and young adults:** This age group is especially susceptible to parasocial relationships and peer pressure. Virtual influencers can convey unrealistic beauty and lifestyle standards that lead to dissatisfaction and compulsive buying (Mascheroni et al., 2015).
- **People with low self-esteem:** Individuals seeking social validation are particularly receptive to the perfect worlds of virtual influencers. This can lead to compensatory purchases that worsen their financial situation.
- **Loneliness and social isolation:** For lonely people, virtual influencers can become substitute friends. While this parasocial relationship may provide short-term comfort, in the long run it can replace real social contacts and intensify isolation.

Effects on Consumer Behavior

Purchase Decisions and Impulse Buying

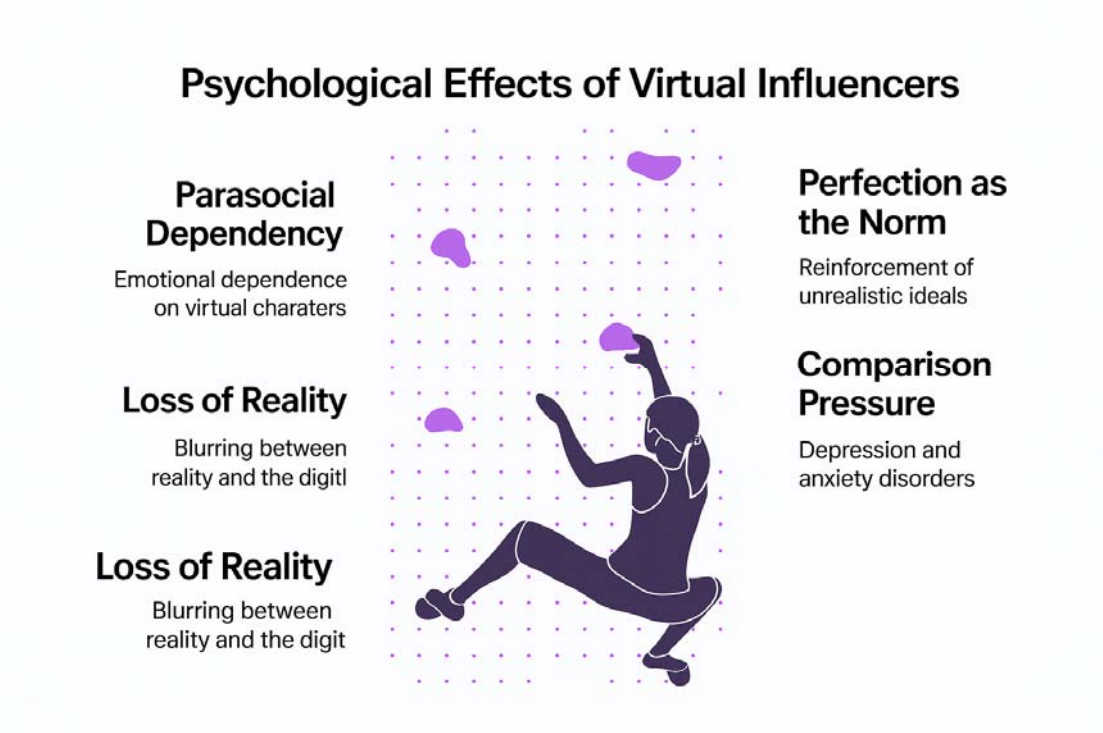
Studies show that virtual influencers are particularly effective at triggering impulse purchases. Their perfect presentation of products in idealized contexts reduces critical reflection and activates emotional buying motives (Kim & Kim, 2021).

Change in Values

Virtual influencers implicitly promote certain values:

- **Materialism:** Through the constant presentation of luxury goods and lifestyle products, material possessions are portrayed as the key to happiness.

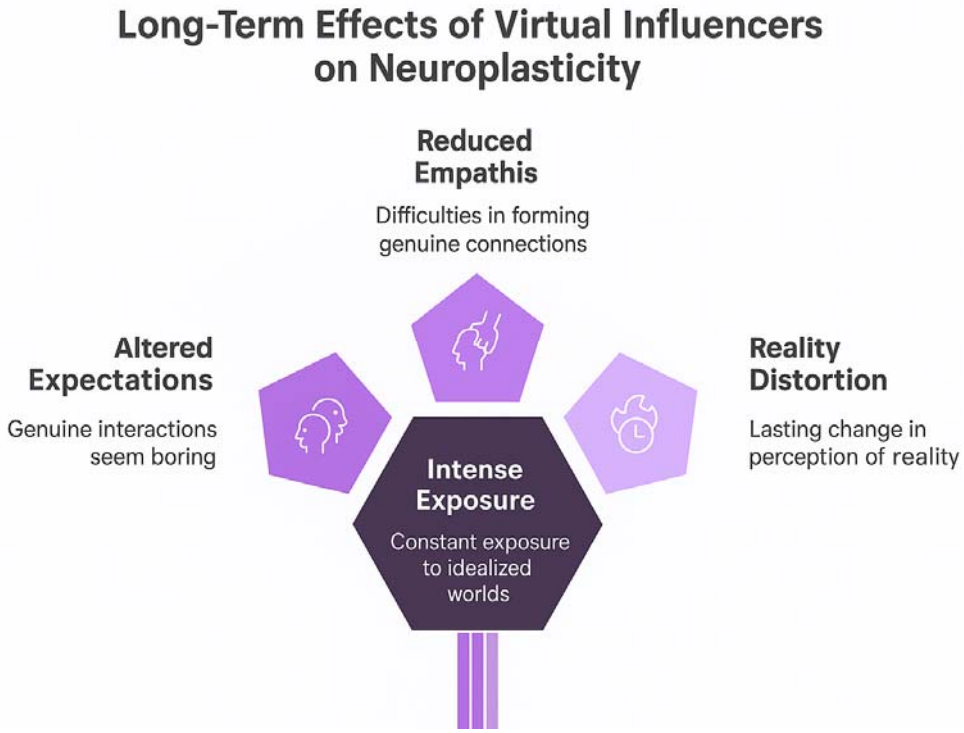
- **Superficiality:** Physical appearance and status symbols are disproportionately emphasized, while inner values recede into the background.
- **Consumerism as identity:** Personality is increasingly defined through consumer goods. “I am what I buy” becomes a life maxim.



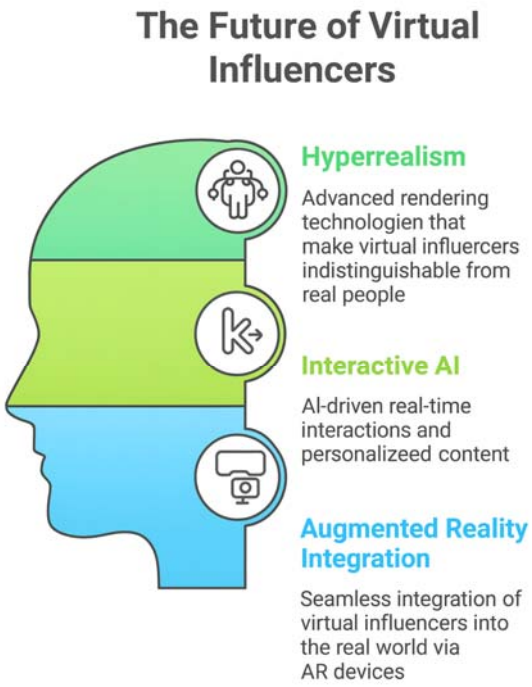
Long-Term Effects of AI Influencers on the Human Brain

Particularly concerning are the long-term effects of intense exposure:

- **Changed expectations:** The brain gets used to the perfect stimuli of virtual influencers. Real human interactions increasingly feel boring and unsatisfying.
- **Reduced capacity for empathy:** Paradoxically, an intense parasocial relationship with perfect AI entities can reduce the ability to form genuine empathic connections.
- **Distorted reality:** Constant exposure to idealized virtual worlds permanently changes the perception of reality.



Future Perspectives and Development Trends



Recommendations for Consumers: Consumer Protection Toolkit

Personal protection against manipulation:

🛡️ **TECHNICAL TOOLS (Effectiveness: 65%)**

- AI-detector browser extensions
- Screen-time limiters
- Algorithm transparency tools
- Privacy-focused social media apps

🧠 **COGNITIVE STRATEGIES (Effectiveness: 78%)**

- 24-hour cooling-off period for purchase decisions
- Ask “Cui bono?” with every post
- Fact-checking across multiple sources
- Conscious interruption of exposure

👥 **SOCIAL MEASURES (Effectiveness: 82%)**

- Open conversations about AI manipulation
- Shared media time with critical reflection
- Promotion of genuine social activities
- Peer education in schools and communities

Ethical Guidelines for Companies and Brands

- Development of internal AI ethics codes
- Refraining from targeting vulnerable groups
- Transparent labeling of all AI content
- Investment in authentic, human-centered communication

Law & Regulation (EU Focus)

EU AI Regulation (Regulation (EU) 2024/1689): Contains transparency/labeling obligations for synthetic content (deepfakes). Art. 50(4) requires, among other things, the clear labeling of manipulated/generated audio, image, or video content to avoid deception. The regulation was published in the Official Journal on July 12, 2024; phased application from 2025/26. For virtual influencers this means: clear labeling when content is AI/CGI-generated; users must be able to recognize the artificial nature.

The EU AI Act classifies high-risk-relevant AI systems, which could lead to virtual influencers being classified as manipulative (EU, 2024).

Ad-labeling obligation: AI influencers must also label advertising as such.

Digital Services Act (Regulation (EU) 2022/2065): Requires advertising transparency (including "Why am I seeing this ad?", who the sponsor is), and strengthens due-diligence obligations for Very Large Online Platforms. Appropriate ad labels are mandatory for influencer/VI campaigns.

EU-UCPD (Unfair Commercial Practices Directive) & 2021 Guidelines: Advertising intent may not be concealed (ban on "hidden advertising"/misleading omissions). For virtual influencers, commercial intent and artificial nature are material information.

Personality rights: Questions regarding copyright to the AI personality and potential violations of the personality rights of real persons.

Implication for brands: Virtual-influencer content must observe two transparency layers:

- **Advertising** (DSA/fair-trading rules, national unfair-competition/media law)
- **Synthetic origin** (AI Act, Art. 50(4))

Two different, cumulative labels are best practice. Clearly visible labels: "Advertisement" + "AI-generated/virtual avatar." (DSA + AI Act)

Conclusion and Outlook: The Future of Marketing Between Human and Machine

The future of influencer marketing will likely be a hybrid form in which human and virtual influencers coexist. The challenge will be to harness the advantages of technology without losing sight of the human components of authenticity, empathy, and genuine connection. Ultimately, the acceptance and long-term success of AI influencers will depend on whether trust can be built among consumers and a responsible approach to this new technology can be established.

By 2030, the market could reach USD 37.8 billion (Forbes, 2024). Future trends include integration into VR/AR, real-time interactions, and hybrid models (Twimbit, 2025).

One thing is certain: the digital spirits we have summoned will keep us occupied for a long time and will force us to repeatedly reconsider the question of authenticity and the value of human interaction in the digital age.

References

Borgi, M., Cogliati-Dezza, I., Brelsford, V., Meints, K., & Cirulli, F. (2014). Baby schema in human and animal faces induces cuteness perception and gaze allocation in children. *Frontiers in Psychology, 5*, 411.

Breves, P. L., Liebers, N., Abt, M., & Kunze, A. (2019). The perceived fit between instagram influencers and endorsed brands. *Journal of Advertising Research, 59*(3), 1–18.

Cialdini, R. B. (2006). *Influence: The psychology of persuasion*. Harper Business.

De Cicco, R., Silva, S. C., & Alparone, F. R. (2021). Millennials' attitude toward chatbot advertising: The interplay of anthropomorphism and engagement. *European Journal of Marketing, 55*(3), 806–834.

De Cock Buning, M. (2024). The Regulatory Landscape for Virtual Influencers. SSRN. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4718820

Digital Delane. (2024). *Exploring AI's Impact in Virtual Influencer Marketing*.

Han, J., Chen, Q., & de Vries, L. (2024). Meta-analysis of social media influencer impact: Key mechanisms and boundary conditions. *Psychology & Marketing, 41*(x), xxx–xxx. https://doi.org/10.1002/mar.21927

Hartmann, T., & Goldhoorn, C. (2011). Horton and Wohl revisited: Exploring viewers' experience of parasocial interaction. *Journal of Communication, 61*(6), 1104–1121.

Horton, D., & Wohl, R. R. (1956). Mass communication and para-social interaction: Observations on intimacy at a distance. *Psychiatry, 19*(3), 215–229.

Horton, D., & Wohl, R. R. (1956). Mass communication and para-social interaction: Observations on intimacy at a distance. *Psychiatry, 19*(3), 215–229. https://doi.org/10.1080/00332747.1956.11023049

Hovland, C. I., & Weiss, W. (1951). The influence of source credibility on communication effectiveness. *Public Opinion Quarterly, 15*(4), 635–650.

Influencer Marketing Hub. (2024). *The State of Virtual Influencers Report 2024*. Influencer Marketing Hub Publications.

Influencer Marketing Hub. (2025). *Influencer Marketing Statistics*. https://influencermarketinghub.com/influencer-marketing-statistics/

Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus and Giroux.

Kim, H., & Kim, J. (2021). Virtual influencers' impact on consumer behavior: The role of authenticity and parasocial relationships. *Journal of Consumer Psychology, 31*(4), 789–804.

Kim, J., & Song, H. (2021). The influence of virtual influencers on consumer purchasing behavior: The role of presence and authenticity. *Journal of Business Research, 134*, 304–312.

Kim, J., et al. (2023). Examining the effects of emotional display on user engagement. *Journal of Retailing and Consumer Services.*

Kim, I., Cho, E., & Choi, S. (2024). Virtual influencer marketing: Evaluating the effects of form- and behavioral-realism on consumer responses. *Journal of Business Research, 178*, 115362.

Li, X., et al. (2024). Threatened and empty selves following AI-based virtual influencers. *AI & Society*.

Lou, C., & Yuan, S. (2019). Influencer marketing: How message value and source credibility affect consumer trust of corporate- and consumer-endorsed brand content on social media. *Journal of Interactive Advertising, 19*(1), 58–73.

Lou, C., et al. (2022). Parasocial interactions with real and virtual influencers. *New Media & Society.*

Martinez, C., Sands, S., & Pallant, J. (2023). The impact of virtual influencers on brand attitudes and purchase intentions: The role of perceived authenticity and product type. *Journal of Interactive Marketing, 58*(2), 1–15.

Mascheroni, G., Vincent, J., & Jimenez, E. (2015). "Girls are addicted to likes so they post semi-nude selfies": Peer mediation, normativity and the construction of identity online. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 9*(1), Article 5.

Miao, F., Kozlenkova, I. V., Wang, H., Xie, T., & Palmatier, R. W. (2022). An emerging theory of avatar marketing. *Journal of Marketing, 86*(1), 67–90.

Miao, M., et al. (2025). Beyond the shores of reality: The effect of virtual influencers on luxury perception. *Psychology & Marketing.* https://doi.org/10.1002/mar.22234

Mori, M. (1970). The uncanny valley. *Energy, 7*(4), 33–35.

Mori, M., MacDorman, K. F., & Kageki, N. (2012). The uncanny valley. *IEEE Robotics & Automation Magazine, 19*(2), 98–100. https://doi.org/10.1109/MRA.2012.2192811

Moustakas, E., Lamba, N., Mahmoud, D., & Ranganathan, C. (2020). Blurring lines between fiction and reality: Perspectives of experts on marketing effectiveness of virtual influencers. *International Conference on Cyber Security and Protection of Digital Services*, 176–185.

Nesi, J., & Prinstein, M. J. (2015). Using social media for social comparison and feedback-seeking: Gender and popularity moderate associations with depressive symptoms. *Journal of Abnormal Child Psychology, 43*(8), 1427–1438.

Nightingale, S. J., & Farid, H. (2022). AI-synthesized faces are indistinguishable from real faces and more trustworthy. *Proceedings of the National Academy of Sciences, 119*(8), e2120481119. https://doi.org/10.1073/pnas.2120481119

Nisbett, R. E., & Wilson, T. D. (1977). The halo effect: Evidence for unconscious alteration of judgments. *Journal of Personality and Social Psychology, 35*(4), 250.

Northeastern University. (2025). AI Influencer Marketing May Pose Risks to Brand Trust. https://news.northeastern.edu/2025/02/25/ai-influencer-marketing-brand-trust/

Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising, 19*(3), 39–52. https://doi.org/10.1080/00913367.1990.10673191

Rizzolatti, G., & Craighero, L. (2004). The mirror-neuron system. *Annual Review of Neuroscience, 27*, 169–192.

Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. Springer.

Pornpitakpan, C. (2004). The persuasiveness of source credibility: A critical review of five decades' evidence. *Journal of Applied Social Psychology, 34*(2), 243–281. https://doi.org/10.1111/j.1559-1816.2004.tb02547.x

Reeves, B., & Nass, C. (1996). *The media equation: How people treat computers, television, and new media like real people and places*. Cambridge University Press.

Robinson, B. (2020). Towards an ontology and ethics of virtual influencers. *Australasian Journal of Information Systems, 24*, 1–27.

Sands, S., Campbell, C., Plangger, K., & Ferraro, C. (2022). Unreal influence: Leveraging AI in influencer marketing. *European Journal of Marketing, 56*(6), 1721–1747.

Schallehn, M., Burmann, C., & Riley, N. (2014). Brand authenticity: Model development and empirical testing. *Journal of Product & Brand Management, 23*(3), 192–199.

Schmälzle, R., Häcker, F., Renner, B., Honey, C. J., & Schupp, H. T. (2017). Neural correlates of risk perception during real-life risk communication. *Journal of Neuroscience, 37*(42), 10340–10347.

Skinner, B. F. (1957). *Schedules of reinforcement*. Appleton-Century-Crofts.

Statista. (2024). *AI Influencer Market Statistics*.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Brooks/Cole.

Thomas, V. L., & Fowler, K. (2021). Close encounters of the AI kind: Use of AI influencers as brand endorsers. *Journal of Advertising, 50*(1), 11–25.

Thomas, V., & Fowler, K. (2021). Close encounters of the AI kind: Use of AI influencers in marketing. *Journal of Marketing Analytics, 9*(4), 331–340.

Twimbit. (2025). *State of virtual influencers 2025*.

Virtue Worldwide. (2022). *The Rise of AI Influencers: Consumer Attitudes and Brand Opportunities*. Virtue Worldwide Trend Report.

Wang, Y., et al. (2025). Marketing effect of virtual influencers and its mechanisms. *Acta Psychologica Sinica*.

Xie, C., et al. (2024). The effect of different types of virtual influencers on consumers. *Journal of Business Research.*

Zajonc, R. B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology, 9*(2), 1–27.