



Cultivating conservation connections: A look at virtual influencers in promoting environmental awareness on social media

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ABSTRACT

This research explores how virtual influencers use visual aesthetics and storytelling to promote environmental awareness and encourage pro-environmental behaviour, focusing on Leya as a case study. Findings reveal that Leya uses captivating nature visuals and human-animal connections to promote environmental harmony and sustainability. Through a personal, conversational storytelling style, Leya humanises animals and engages her audience emotionally. She positions herself as a companion rather than an authority, focusing on hope and the beauty of nature rather than the negative aspects of environmental degradation. The study also explores audience perceptions, revealing a mix of admiration and skepticism, particularly regarding Leya's digital persona. Findings highlight the effectiveness of virtual influencers in creating relatable, emotionally charged content, while also addressing challenges in building trust and credibility for environmental advocacy. The study contributes to the growing body of literature on digital activism by demonstrating the unique potential of virtual influencers to promote environmental awareness, while also revealing the challenges they face in establishing genuine connections with their audiences.

Keywords: ***Virtual influencer, environmental awareness, social media, audience perception, visual aesthetics, storytelling***

INTRODUCTION

Our planet faces a myriad of environmental issues, posing a significant threat to the delicate balance of our ecosystems and the well-being of future generations (Hák et al., 2016; Mantlana & Maoela, 2019). As environmental issues become more urgent, effective communication strategies are crucial for mobilising action and fostering awareness. Social media influencers have already proven to be influential in shaping consumer behavior and public opinion (Matterz, 2024; Schmuck, 2021). Leveraging their extensive reach and engaged audiences, these individuals can inspire and educate millions on the importance of environmental stewardship (Enke & Borchers, 2019). By sharing informative content, promoting eco-conscious lifestyles, and supporting environmental organisations, influencers can contribute significantly to raising awareness and driving positive change (Schmuck, 2021; Tomazos, 2022).

Virtual influencers (VIs) combine technology, creativity, and storytelling to engage audiences in innovative ways (Lim & Lee, 2023). These computer-generated characters, managed by teams of creators, lack physical bodies but offer unique advantages over human influencers, such as creative control, consistent branding, and global reach (Franke et al., 2023; Kim & Park, 2023). Despite being non-human, VIs build meaningful relationships with followers and influence online communities by aligning with audience values, particularly sustainability (Camilleri, 2024). Their adaptability, longevity, and consistent content make them powerful advocates for environmental causes in the digital age (Teh, 2021).

Despite the growing popularity and potential of VIs, research on their role in promoting environmental awareness is limited. Previous studies have mainly examined the broader impact of VIs on consumer behavior and brand engagement (Jhawar et al., 2023; Yu et al., 2023) while research on how VIs promote environmental awareness and influence pro-environmental behavior has been scant. Existing literature has largely concentrated on the effectiveness of human influencers in sustainability campaigns, leaving a gap in understanding the distinct advantages and challenges presented by digital personas. Moreover, while the emotional power of visual communication in environmental advocacy has been widely discussed (Schreiner et al., 2021; Zsidó, 2023), the particular ways in which VIs use these tools to convey their messages and the audience's responses to such content remain underexplored. Furthermore, while much of the current literature focuses on prominent VIs like Lil Miquela, Shudu Gram, and Knox Frost, primarily examining their impact on marketing, and brand collaborations, there is a limited amount of research dedicated to exploring the activities and influence of VIs like Leya Love. Specifically, existing research tends to overlook the unique contributions of VIs like Leya Love, who dedicate their platforms to promoting environmental awareness and sustainability. This gap in the literature highlights the need for further investigation into the specific strategies, and audience engagement of such VIs in the context of environmental advocacy.

In this regard, this research aims to explore how VIs can serve as powerful agents for environmental change, focusing on Leya Love as a case study. It addresses two research questions as follows:

1. How do virtual influencers use visual aesthetics and storytelling in their content to communicate messages about environmental awareness and inspire her audience to take action?
2. What are their audience's perceptions of virtual influencer's content on environmental awareness?

This research makes a significant theoretical contribution by examining the intersection of virtual reality, influencer marketing, and environmental communication. By focusing on the ways in which VIs create meaning through visual and narrative techniques, it expands the existing literature on digital influencers and their role in shaping public perceptions. Moreover, it expands our understanding of the potential of digital technology in advocacy (Jhavar et al., 2023).

As social media continues to dominate as a primary source of information and influence, understanding the efficacy and limitations of VIs in environmental messaging is vital for brands, non-profit organisations, and governments who seek to leverage these platforms for positive social change (Gmyrek, 2023). They present an opportunity for brands to partner with VIs to authentically promote their environmental initiatives (Kim & Park, 2023). Particularly, this research sheds light on how the aesthetic elements and narratives constructed around VIs influence audience perceptions of environmental causes. By understanding these dynamics, brands can refine their strategies to better resonate with eco-conscious consumers and enhance their social responsibility messaging.

LITERATURE REVIEW

Environmental awareness

Our planet faces an ever-growing environmental crisis, with pollution, deforestation, and climate change threatening biodiversity and human health (Williamson, 2024). Environmental awareness (EA)—understanding environmental problems and committing to solutions—is critical for addressing these challenges (Si et al., 2022). The United Nations' (UN) Sustainable Development Goals (SDGs), especially Goal 13 (Climate Action) and Goal 15 (Life on Land), emphasise the importance of EA in achieving global sustainability (Barbier & Burgess, 2017; IEA, IRENA, UNSD, WB, WHO, 2019). Research shows EA strongly correlates with pro-environmental behaviours like recycling and conservation (Kollmuss & Agyeman, 2002). However, fostering EA and driving action remain challenging. Traditional methods relying on facts and fear appeals often fail to engage diverse audiences or inspire sustained action (O'Neill & Nicholson-Cole, 2009). Thus, innovative, digital-native communication strategies are essential to effectively connect with and motivate today's audiences.

Social media influencers

Social media platforms have become vital channels for spreading environmental messages, with a growing interest in social media influencers (SMIs) as key players in this space (Huber et al., 2022; Fitch Solutions, 2019). SMIs build trust and influence consumer behaviour by fostering parasocial relationships with followers (Chung & Cho, 2017). Their ability to drive engagement and promote sustainability makes them effective advocates for cause-related messaging and environmental awareness (Breves & Liebers, 2022; Kilipiri et al., 2023).

Studies show SMIs outperform brands in engaging audiences and addressing corporate social responsibility, often driving behavioural change through trusted recommendations (Claeys et al., 2023; Enke & Borchers, 2019; Tanha, 2020). Organisations increasingly collaborate with SMIs to reach wider audiences and inspire action on environmental issues (Buvár et al., 2023; Tanha, 2020). While SMIs' impact on sustainability advocacy is well-documented, there remains a research gap in understanding the role of VIs in this context.

Virtual influencers

VIs are CGI-created digital characters with distinct personalities and backstories, interacting with audiences on platforms like Instagram, TikTok, and YouTube (Camilleri, 2024; Conti et al., 2022). Despite their non-human nature, VIs are designed to be relatable, fostering parasocial relationships with followers (Kim et al., 2024). Their growing popularity spans diverse applications, from fashion collaborations, like Lil Miquela's work with Calvin Klein and Prada, to social advocacy campaigns on issues like COVID-19 and climate change (Drenten & Brooks, 2020; Mo & Zhou, 2024).

VIs provide a consistent platform for promoting sustainability, free from human controversies, and use creative storytelling and digital environments to make complex environmental issues engaging (Jiang et al., 2024). Their potential in eco-conscious advocacy is increasingly recognised. Research on VIs and environmental awareness is still in its nascent stages, but existing studies offer promising insights. A study by Jiang et al. (2024) found that VIs can effectively promote green products depending on the VI image and product type.

Another study by Gerrath et al. (2024) explored how individuals react to VIs promoting pro-environmental campaigns. They found that message warmth positively affects engagement with environmental causes, especially for individuals with low trust in experts (Gerrath et al., 2024). Additionally, Moon et al. (2024) investigated the efficacy of virtual humans in pro-environmental social marketing campaigns. They found that while actual human protagonists elicit stronger identification, virtual humans could still evoke empathy and be perceived as having emotions (Moon et al., 2024). These studies collectively suggest that VIs can be effective tools for promoting environmental awareness, but their effectiveness can vary depending on different factors.

Visual aesthetics and storytelling in content

Visual aesthetics and storytelling are essential tools in digital communication, used by both humans and VIs to engage audiences and convey messages effectively (Hansen & Machin, 2013). VIs, however, hold unique advantages due to their digital nature and creative flexibility.

Visual aesthetics refer to the visual appeal of online content, including colour, imagery, and composition (Merkulova & Pryshchenko, 2022; Schreiber, 2017). While human influencers rely on personal style, photography, and design, VIs have full control over their appearance and presentation (Miyake, 2022). Storytelling involves crafting narratives that connect with audiences (Lund et al., 2018; Mueller & Rajaram, 2022). In this respect, humans often share personal anecdotes, while VIs use fictional backstories tailored to themes or brand messages (SocialMediaOne, 2023).

VIs excel in both achieving visual perfection and creative freedom beyond human capability. They ensure consistent storytelling aligned with brand goals, evoke targeted emotions, and inspire action. VIs can also create immersive experiences, merging reality and fiction to enhance engagement and explore innovative storytelling formats (Miyake, 2022). This research highlights the potential of VIs to advance environmental advocacy by leveraging digital platforms for impactful and sustainable messaging.

Complexity of audience sentiments towards VIs

Audience sentiments of VIs are complex, prompting diverse theoretical approaches to understanding their dynamics (Byun & Ahn, 2023). The social response theory suggests that audiences apply social norms when interacting with human-like VIs, influencing self-esteem and trust (Franke et al., 2023; Reeves & Nass, 1996). The source credibility theory highlights trustworthiness and expertise as key to credibility, with VIs increasingly perceived

as trustworthy due to their authentic online portrayal (Jhawar et al., 2023; Robinson, 2020). Further, the parasocial interaction theory posits that sharing personal stories fosters intimacy and credibility, a strategy VIs use effectively to build follower bonds (Jhawar et al., 2023; Lou, 2022; Stein et al., 2022; Usher, 2020). However, skepticism arises from their lack of real-world presence and the artificial nature of their content (Ciechanowski et al., 2019).

While some are intrigued by VIs' uncanniness, others are discomforted by inconsistent realism or overly human-like traits (Arsenyan & Mirowska, 2021; Burleigh et al., 2013). Research shows followers often react negatively to human-like VIs, preferring more stylised designs, and AI influencers in beauty campaigns may face distrust due to limited social presence and perceived inauthenticity. These mixed findings highlight the need for further research to clarify the factors driving audience responses to VIs and their effectiveness (Byun & Ahn, 2023).

METHODOLOGY

This research employed a qualitative case study approach to investigate how virtual influencer Leya Love utilises visual aesthetics and storytelling to communicate environmental awareness and inspire action. A case study methodology is particularly suitable for this research because it allows for an in-depth exploration of a specific phenomenon within its real-life context. This approach enabled a rich understanding of the complex interplay between visual aesthetics, storytelling, and environmental messaging in Leya Love's online content.

Rationale for choosing Leya Love

Leya Love (@leyalovenature on Instagram) is a VI with a mission: to promote environmental awareness and inspire action for a sustainable future. Created by Cosmic Universe, she debuted on January 29, 2020, as an ambassador for the #WorldAwarenessMovement. Since then, she has amassed 540,000 followers and garnered over 800 million views across her social media platforms in just 14 months. Leya Love distinguishes herself from many other virtual influencers who primarily focus on fashion, beauty, or lifestyle brands. Her content consistently centers on environmental issues, showcasing stunning visuals of natural landscapes, wildlife, and eco-conscious practices. She educates her audience on topics like climate change, pollution, deforestation, and sustainable living through informative captions and visually engaging posts. Leya Love's creators have positioned her as a "love ambassador for Planet Earth," emphasising her global perspective and commitment to unity and consciousness. Her interests extend beyond environmentalism to include art, mental health, and creativity, further broadening her appeal and reach.

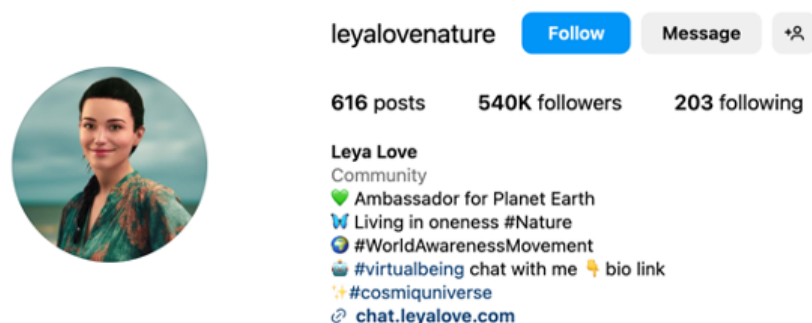


Figure 1. Leya Love's Instagram account

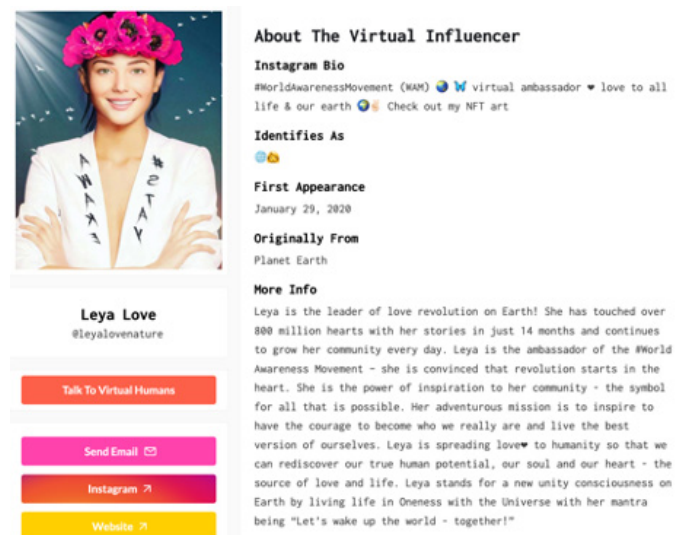


Figure 2. Leya Love's profile (VirtualHumans, 2020)

Her dedicated focus on environmental advocacy, combined with her visually compelling content and engaging storytelling, makes her an ideal case study for exploring the potential of VIs in promoting environmental awareness and inspiring action.

Data collection

The primary data source for this research was Leya Love's Instagram content. Instagram was chosen because it is one of the main platforms that VIs use to interact with their audience on social media (InfluencerMarketingFactory, 2024). Due to its visual-centric nature and popularity among VIs, it has been consistently highlighted as a key platform for VI activity and engagement (Christopher, 2024; DMEXCO, 2024).

A purposive sampling technique was used to select posts that explicitly address environmental issues or promote sustainable practices. The sample included various content formats, such as images, videos, and stories, to capture the diversity of Leya Love's communication strategies. Relevant hashtags like #EnvironmentalAwareness, #Sustainability, #ClimateAction, and #EcoFriendly were also considered during the sampling process. Additionally, keywords related to environmental challenges (climate change, pollution, deforestation), sustainable solutions (renewable energy, conservation, recycling), and calls to action (reduce, reuse, recycle, conserve water) were taken into account.

Data analysis

The data analysis method used in this research was qualitative content analysis. This approach involves systematically reviewing and categorising textual, visual, or audio content to identify patterns, themes, and trends. In this case, the researchers analysed posts, photos, videos, and comments from VIs on Instagram to gain insights into their environment promotion efforts.

An initial review was conducted on 228 posts by Leya Love, spanning from January 2022 to March 2024. Among these, 92 posts were identified as promoting environmental awareness, each showcasing distinct thematic elements. A qualitative content analysis was then carried out, applying a systematic coding process (Kyngäs, 2020). This involved assessing and categorising each post to identify recurring themes, messaging strategies, and communication patterns used by the influencer.

To analyse audience engagement, 631 comments from followers of the virtual influencer were examined and categorised based on sentiment. This analysis revealed recurring themes, including expressions of support, questions about sustainability practices, and critiques (Beins, 2017). Together, these analyses offer a deeper understanding of the influence of sustainability-focused messaging on social media platforms like Instagram. To ensure consistency and reliability in the analysis, inter-coder reliability checks were implemented. Multiple coders independently reviewed and coded a subset of the content, and any disagreements were discussed and resolved, enhancing the validity and robustness of the findings.

FINDINGS

Research question 1: How do virtual influencers use visual aesthetics and storytelling in their content to communicate messages about environmental awareness and inspire their audience to take action?

Harnessing visual aesthetics to engage and inspire

Leya Love effectively uses visual aesthetics to communicate environmental awareness by centring her content around the natural world. A recurring theme in her posts is the portrayal of nature in its most captivating forms—scenic landscapes, thriving wildlife, and vibrant ecosystems. As can be seen in Figure 3, nature serves as a central theme. Leya is placed in scenic environments—such as lush forests, fields of swaying grass, and near waterfalls. Furthermore, VIs frequently use clean and simple layouts in their posts, reflecting the minimalist principles of sustainable living and reducing visual clutter to emphasise the importance of “less is more.”

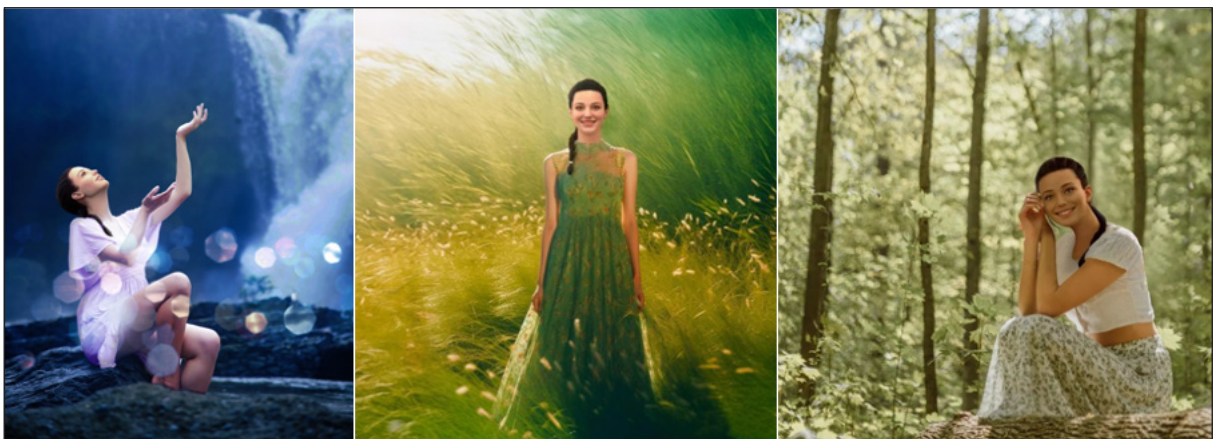


Figure 3. Leya’s photos on Instagram

Additionally, many of Leya’s photos focus on human-animal connections to emphasise themes of environmental harmony, compassion, and sustainability. In each photo, Leya interacts closely with animals, including a tiger cub, a fox, a squirrel, and a leopard (Figure 4). Each image visually conveys a deep sense of empathy and care for wildlife, furthering her message of coexistence and protection of the natural world.



Figure 4. Leya’s photos on Instagram

Through carefully curated imagery, Leya shows the interconnectedness between humanity and nature, presenting an aspirational vision of harmony and coexistence. The predominant colors in her visuals, green and blue, play a significant role in conveying her themes (as shown in Figure 5). The dominance of these colors in her posts serves as a visual cue that connects her personal brand with environmental advocacy.

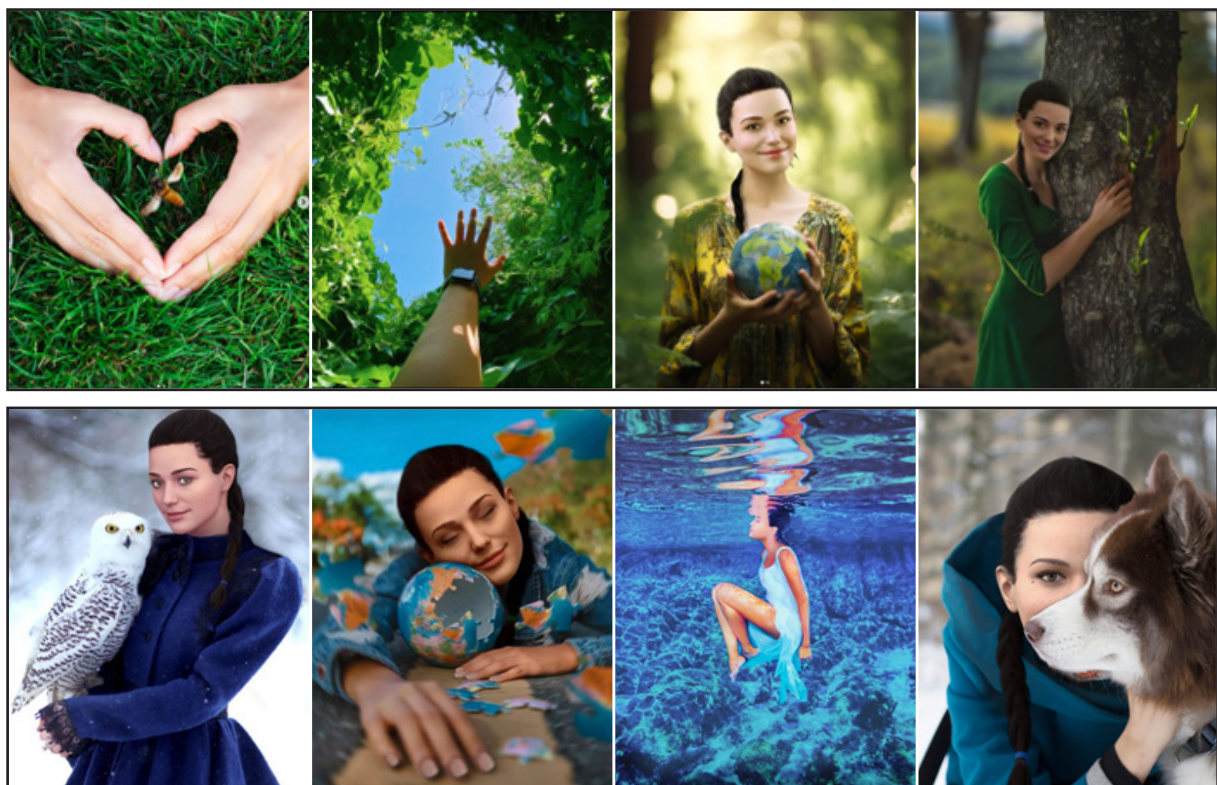


Figure 5. Leya’s photos on Instagram

The power of storytelling — Personalised narratives to build relatability

Leya Love presents environmental issues through personalised stories with conversational style, as if she is sharing stories with friends. This is evident in posts where she recounts her interactions with animals. For instance, she shares the story of finding Rita weak and thirsty, helping her, and later meeting one of Rita’s cousins (Figure 6).

On my early morning walk through the fields... I suddenly heard a soft humming sound... It appeared very weak, so I reached out my hand, and it gathered all its strength to slowly crawl on top! I gave it a drop of water, and it is thirsty now! Searching all around me, I finally found where the noise was coming from — a beautiful little bee was tumbling through the grass...

*Do you remember Rita the bee? 🐝 Today, I got to know one of her cousins! Buzzing around me, she told me that Rita is alive and well, but very busy, as always. It's high-season for all the bees out there, but it is also getting harder and harder for them to find healthy flowers to feed from. 🌻🌻🌻🌻🌻🌻
What do you do to help the bees?*

When she talks about Rita, the bee struggling and needing help, it is not just an abstract concept of “saving the bees” – it is about helping a friend in need.

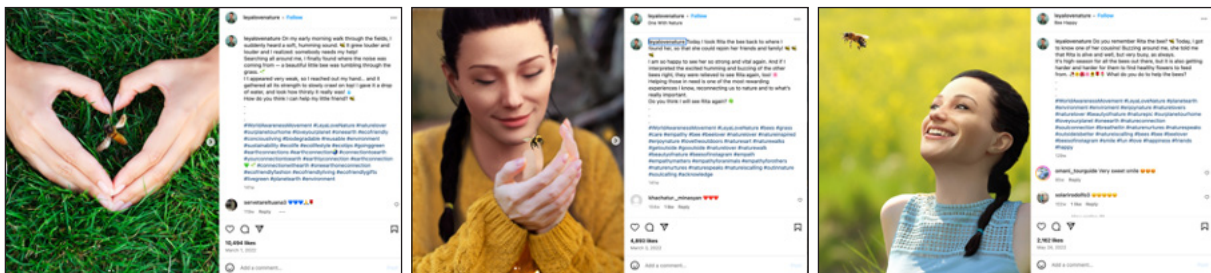


Figure 6. Instagram post about Rita, the bee

The power of storytelling — Humanising nature and animals

One of Leya’s signature storytelling techniques is giving animals human-like traits, names, and personalities, which helps humanise them and fosters an emotional connection with her audience. Whether referring to a Bengal tiger as a “cute friend”, naming a bee “Rita”, or describing a fox’s “feminine magic,” she portrays animals as sentient beings deserving of care and respect. This approach transforms wildlife into relatable “characters” within her stories, making environmental issues less abstract and more emotionally engaging.

I spent the whole afternoon paddling through the bay, in search of the beautiful Arabian humpback dolphin I heard so much about! 🐬 And just when I was about to give up and return to the beach... I felt a school of them playing at my feet, squeaking and softly touching me — only to disappear right after!
🐬🐬🐬

Today I met this beautiful female fox, and immediately felt connected to her feminine magic! 🦊 I spent all morning following her quick, elegant paws through the forest, feeling through her the mystic energy of #Nature... 🌿

Through stories of encountering with animals like the squirrel returning a favour or the playful dolphins, she emphasises that animals have individual personalities and can interact with humans in meaningful ways. In another post (Figure 7), she shared:

Good morning from Sundarban Forest in Bangladesh! Look what a cute friend I have already made here! 🐅 But even though this little Bengal tiger is very soft and loves to play, you can already feel his majestic character.



Figure 7. Leya’s Instagram post about the Bengal tiger

Positioning herself as a companion & using interactive storytelling

In her stories, she does not position herself as an authority figure, and environmental expert or educator, but rather as a companion, inspiring others to embark on their own personal journeys of discovery and appreciation for the planet. She shared a photo of herself planting a tree, not as an expert demonstrating the “right” way, but as someone who finds joy and fulfilment in the simple act of nurturing the environment.

Particularly, Leya actively engages her audience by incorporating interactive elements into her stories. She frequently asks open-ended questions, such as “*Do you think I will see Rita again?*” or “*What do you do to help the bees?*”. These questions invite her followers to reflect on their own relationship with nature and share their experiences. By asking for name suggestions for animals or seeking input on conservation organisations, she makes her followers feel directly involved in her stories and environmental advocacy. Other interactive questions are:

“Do you know similar stories of love and nature? 🌿”

“If you could give this little man a name, what would be it be?”

“What do you do to help animals in need? 🐾”

“Once again, nature proves to be the wisest of all teachers... can you relate?”

“I want to educate and help people get a deeper understanding of the wolf... do you know organizations that are on the same mission? 🐾🐾🐾?”

Emphasising hope and positivity in her stories

Leya Love’s storytelling emphasises hope and positivity, focusing on the beauty and potential of the natural world, rather than dwelling on the negative impacts of environmental degradation. Instead of highlighting how dire environmental issues can be, she showcases how wonderful nature and the environment can become when humans live in harmony with them. (Figure 8). For instance, Leya’s posts frequently center on meaningful and positive connections with animals, like playing with squirrels, paddling with playful dolphins, or following a fox through the forest.

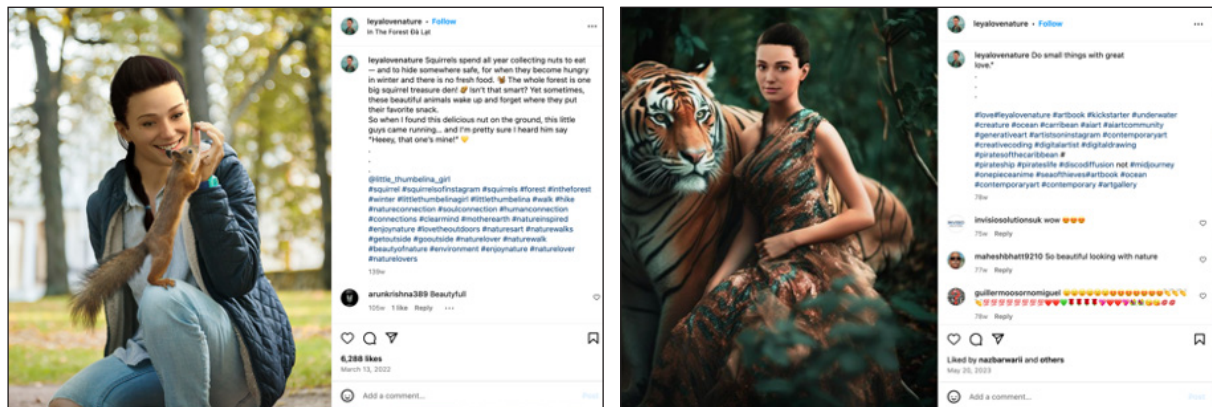


Figure 8. Leya's Instagram posts

Research question 2: What are their audience's perceptions of virtual influencer's content on environmental awareness?

Audience perceptions of VIs' content on environmental awareness vary widely, ranging from admiration and inspiration to skepticism and critique. Many followers express admiration for the positive and uplifting tone of VIs like Leya Love. Comments often reflect a deep emotional connection with her content, particularly her harmonious interactions with nature and animals. Statements such as, "*Your posts always make me feel so connected to nature and inspired to do my part,*" highlight how her storytelling fosters a sense of responsibility and encouragement to protect the environment. Several followers praise Leya for her perceived kindness and passion for nature, with remarks like, "*You are insects and animals lover 🥰🥰*" and "*Respect her hard work.*" Her content is described as calming and inspiring, as reflected in comments like, "*Awesome, wonderful, with complete calmness and nature 🙌👏👏*," and "*Power of green energy 🌱.*"

Followers often note the aesthetic appeal of Leya's posts, describing them as "awe-inspiring," "outstanding," and "wonderful." For example, one commenter wrote, "*If we see nature, we feel the creation of God... Trees give peace to the souls of men... Trees and people have an interdependent relationship.*" These comments suggest that Leya's visually stunning and nature-focused content resonates with audiences, not only as art but also as a means to spark reflection on humanity's relationship with the environment.

Leya's ability to weave environmental education into her stories is also appreciated. Some comments indicate gratitude for the insights shared through her posts, while others point to how her content inspires a deeper appreciation for the environment. Several comments highlight a sense of camaraderie and shared purpose among Leya's followers. Statements like, "*We are deeply grateful to be on this journey with you, Leya!!*" suggest that her audience feels part of a larger movement toward environmental sustainability.

While many comments are positive, a subset of followers express skepticism about Leya's virtual identity. Comments such as, "*Are you a robot?*" and "*This looks very fake,*" reflect doubts about her authenticity. Others question whether her photos are edited or entirely digital, as seen in remarks like, "*I think you're using a filter... it really looks like animated.*" This skepticism raises concerns about the effectiveness of VIs in fostering genuine connections. For some, the lack of a "real" human behind the content diminishes its emotional resonance, potentially impacting the credibility of her environmental advocacy. Comments like, "*Stop normalizing this, it's a bot,*" suggest discomfort with the rise of VIs as a medium for environmental messaging.

While some followers express admiration for Leya's perceived authenticity in her storytelling and advocacy, others challenge the legitimacy of her digital persona. For instance, comments like, "*Are you a real girl?*" and "*More fake models?*" highlight the tension between the digital and human aspects of her identity. This dichotomy reflects broader societal debates about the role of VIs and the trustworthiness of their messages.

DISCUSSION

This study reinforces existing research on the emotional power of visual communication in environmental advocacy. Visual content has consistently been identified as a key tool for eliciting emotions such as empathy, concern, and inspiration—drivers of pro-environmental behavior (Huber et al., 2022; Joffe, 2008). Leya Love's use of visually rich content featuring nature and animals aligns with these practices, demonstrating how emotionally charged visuals can inspire sustainable actions (Schreiner et al., 2021; Zsidó, 2023). Unlike human influencers, VIs like Leya can design their environments and narratives without real-world constraints, making their content consistently impactful and adaptable (Zsidó, 2023).

A novel insight from this study is the unique way VIs foster emotional connections through storytelling. This study highlights a transformative shift in environmental advocacy, focusing on the storytelling approach of Leya Love, a virtual influencer. Her emphasis on hope and positivity, rather than fear, represents a refreshing departure from conventional fear-based messaging in environmental communication. Traditionally, environmental advocacy often relies on fear-based messaging, highlighting dire consequences like climate disasters or species extinction to motivate action (Bilfinger et al., 2024). While effective in generating urgency, fear-driven approaches can also lead to feelings of helplessness or disengagement among audiences, as they may feel overwhelmed by the enormity of the problem (O'Neill & Nicholson-Cole, 2009).

Additionally, Leya's personalised interactions with animals and nature humanise environmental issues, making them relatable and immediate for her audience. This approach emphasises the potential of VIs to humanise abstract concepts and strengthen emotional bonds with followers. Leya's strategy of humanising animals by giving them names and roles as "friends" breaks down barriers between humans and wildlife. This tactic, grounded in anthropomorphism, aligns with research showing that such portrayals can increase empathy and concern for animals (Manfredo et al., 2020). This strategy breaks down the perceived barrier between humans and animals, encouraging her audience to view them as individuals with unique personalities and lives. This aligns with the concept of "anthropomorphism," which has been shown to increase empathy and concern for animals (Chan, 2012). By fostering this sense of kinship, Leya effectively motivates her audience to become active participants in environmental protection.

The novelty of Leya's strategy also lies in its rejection of traditional authoritative or expert-led narratives. Instead, she positions herself as a companion, inviting her audience to join her on a journey of discovery and action. This participatory and inclusive approach fosters a sense of community and shared purpose, which is critical for collective environmental action (Ortiz-Riomalo et al., 2023). The study reveals how VIs, by positioning themselves as relatable companions rather than authoritative figures, can foster para-social interactions that engage audiences in a more personal and participatory way (Stein et al., 2022). This approach aligns with the growing trend of interactive digital content, which encourages followers to not only passively consume information but also actively participate in the conversation (Tafesse & Wood, 2021).

Furthermore, the findings reveal a multifaceted landscape of audience perceptions regarding VIs' environmental messaging, characterised by both strong admiration and skepticism. These varying perceptions emphasise the opportunities and challenges inherent in using VIs for environmental advocacy. This finding aligns with current research on AI influencers in other domains, such as beauty brand campaigns on Instagram, where message reception has been negatively impacted by factors like consumer distrust, limited social presence, and a lack of humanistic qualities in the influencers' content (Audrezet & Koles, 2023; Haase, 2022; Hidayat et al., 2024).

This finding adds depth to existing literature by revealing skepticism toward VIs in the context of environmental messaging, which can undermine their effectiveness by diminishing the authenticity and emotional connection necessary to drive meaningful engagement. Future research should explore strategies to bridge this gap, such as enhancing the humanistic elements of VIs, fostering trust through transparent messaging, and leveraging hybrid approaches that combine VIs with human advocates to strengthen their credibility.

IMPLICATIONS

This study contributes to research on visual communication and environmental advocacy by exploring how virtual influencers (VIs) use storytelling and aesthetics to convey sustainability messages. It expands the understanding of digital narratives in environmental communication, highlighting the unique role of VIs compared to traditional influencers. By integrating visual elements, storytelling, and digital engagement, the study underscores the potential of VIs to promote environmental awareness in a visually-driven, interactive digital space.

Organisations and brands can apply these insights to create more engaging sustainability campaigns, ensuring their messaging aligns with aesthetic and narrative strategies. Environmental policymakers and educators can also leverage VIs to disseminate information creatively. The research promotes a positive, hope-driven approach to environmental advocacy, encouraging proactive behavior. It also highlights the ethical concerns of using VIs, emphasising the need for transparency and authenticity to maintain audience trust.

LIMITATIONS

This research focuses on the content and audience perceptions of the virtual influencer Leya Love, providing an in-depth analysis of her strategies. However, the findings may not be generalisable to other virtual influencers (VIs) with different styles, audiences, and causes. Future studies could examine a broader range of VIs to assess the wider applicability of these findings. The research relied on publicly available comments and engagement metrics, which may not capture the full spectrum of audience opinions, as more vocal or active followers could skew the results. Additionally, while the study highlights audience skepticism about VIs' authenticity, it does not explore how demographic factors (e.g., age, cultural background) influence perceptions of digital personas. Future research could address these gaps to better understand the credibility and emotional connection between VIs and their audiences.

CONCLUSION

In conclusion, this study sheds light on the potential of VIs, like Leya Love, to promote environmental awareness through compelling visual aesthetics and emotionally engaging storytelling. By leveraging scenic visuals and personalised narratives, Leya effectively humanises nature and fosters emotional connections with her audience, highlighting the unique role of VIs in digital environmental advocacy. This research builds on existing communication theories, demonstrating how VIs can promote environmental awareness by creating relatable and inspiring content. However, the study also uncovers challenges, such as skepticism regarding the authenticity of virtual personas, which may impact their credibility and effectiveness in advocacy. Future research should further explore these dynamics, particularly the balance between authenticity and innovation, to enhance the impact of digital personalities in advocacy efforts.

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