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"Who Influences Who?" Dehumanization in the World of Virtual Influencers

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Abstract

In the age of social media, people have progressed from merely posing for amusement to monetizing their content. Social media influencers are used as brand endorsements and being able to express their opinions to their followers. Virtual influencers, a novel type of influencer, have rapidly gained popularity in recent years, sparking debates about their impact on society. This thesis provides a comprehensive analysis of virtual influencers, examining their objectives, efficacy in influencer marketing, perception of users, motivations for following them and their anthropomorphic characteristics. Lil Miquela, Shudu Gram, and Noonoouri, will be briefly introduced as virtual influencers in this thesis. The research question of this thesis is to what extent the exposure of unrealistic beauty standards by virtual influencers affects the mental health of their viewers. In order to address the main study question, three sub research questions are introduced which discusses the distorted beauty ideals of virtual influencers, their follower's confidence and the relationships with virtual influencer. Lil Miquela and Shudu Gram will be used as case studies in answering these questions. To further understand how social media influencers and virtual influencers are seen to be comparable, both groups are compared for each of the three questions. The findings of this study suggest that virtual influencers can negatively affect their followers' mental health, especially when beauty ideals are emphasized. This study highlights the need for further research to better understand virtual influencers and the potential consequences of their use.

Contents

1 Introduction **2**

2 Social Media Influencers **4**
2.1 Background 4
2.2 Unrealistic beauty standards and their repercussions 6

3 Virtual Influencers **13**
3.1 Background 13
3.2 Current Virtual Influencers 15
3.2.1 Lil Miquela 16
3.2.2 Shudu Gram 19
3.2.3 Noonoouri 20
3.3 Purpose of Virtual Influencers 22
3.3.1 Marketing Effectiveness of Influencer Marketing 23
3.4 Virtual Influencers and Humans 27
3.4.1 Anthropomorphism 31
3.4.2 What are the distorted beauty ideals that virtual influencers create, and are they feeding their follower the idea of being 'perfect'? . . . 33
3.4.3 Are professionals losing their confidence and jobs due to these virtual influencers? 37
3.4.4 Are virtual influencers creating a relationship with their followers? 39

4 Discussion **43**
4.1 Conclusion 45

5 Acknowledgments **47**

References **48**

Chapter 1

Introduction

Social media has become an integral part of modern life, surpassing initial expectations of its impact on society. With over 50% of the world's population reportedly active on social media platforms it has revolutionized the way we communicate, share information, and connect with one another (Chaffey, 2023). The rise of social media can be traced back to MySpace, a social networking site that allowed users to create profiles and share their music preferences and images (*Myspace Features*, 2023). Despite not being the first social networking site, this one was the first to become widely used by people (*Myspace Features*, 2023). Since then, social media has continued to grow and dominate the digital landscape, with platforms such as Facebook, YouTube, LinkedIn, Snapchat, Instagram, Twitter, Pinterest, and TikTok, among others, providing avenues for users to share their interests, raise awareness, find jobs, and document their daily lives through photos, videos, and stories. As social media continues to evolve, understanding its impact on society becomes increasingly important, making it a significant area of research for scholars and practitioners alike.

The idea of just posting for pleasure was lost with the rise of social media, but it has since created chances for people and businesses to profit from it. Those who do have a large following and who tend to monetise their content on social media apps are called social media influencers. They have the ability to strongly sway the opinions of their followers on the subject at hand by using forms of social media (Freberg, Graham, McGaughey, & Freberg, 2011a). These influencers are a type of celebrity but are more attractive to their followers and companies due to their personal and creative approach (Harrigan et al., 2021). The rapid attainment of celebrity status and high level of interactivity with followers by social media influencers have been noted to have an impact on their audience (e.g., Kay, Mulcahy, & Parkinson, 2020; Marwick, 2015; Glucksman, 2017; Martínez-López, Anaya-Sánchez, Fernández Giordano, & Lopez-Lopez, 2020). Oftentimes, influencers present an idealized version of themselves to their followers, which is far removed from reality. This practice contributes to the normalization of prevailing beauty standards portrayed in the media. It is imperative to recognize the varied beauty ideals that exist and the degree to which social media influencers conform to them. Currently, many studies have been conducted to understand how a follower is impacted with these ideals and these influencers (e.g., Chae, 2017; Bauer, 2022; MacCallum & Widdows, 2016).

Social media influencers, while significant in their own right, represent just a small part of a much larger phenomenon. Brands have long recognized the potential of these influencers, yet their involvement also introduces a certain level of risk. The emergence of virtual influencers helped to bridge the gap between what a brand wants and what

these influencers are unable to accomplish. Virtual influencers are "computer-generated influencers with a significant following, who appear and act like humans by sharing their followers about their daily lives" (Moustakas, Lamba, Mahmoud, & Ranganathan, 2020, p. 1). Brands are drawn to them because they can provide more consistency than social media influencers, and users are drawn to them because they are fascinated by them (Moustakas et al., 2020; Conti, Gathani, & Tricomi, 2022; Choudhry, Han, Xu, & Huang, 2022). Virtual influencers are typically utilized for the same purposes as social media influencers, such as brand endorsements, giving their opinions, and raising awareness for social causes (Choudhry et al., 2022). As they tend to resemble human attributes and appearance, which creators appear to have all control for, virtual influencers could pose serious problems in the future. Creators want to mimic how a human looks but they seem exaggerate a virtual influencer's appearance by a lot. This is comparable to the way social media influencers online present exaggerated representations of themselves and virtual influencers also conform to set of beauty ideals that tend to affect their followers. There are currently a number of publications on the usefulness of using virtual influencers for brands and how they affect followers while doing so (e.g., Moustakas et al., 2020; Conti et al., 2022; Batista da Silva Oliveira & Chimenti, 2021). Yet, very little research has been done on the beauty ideals they represent and how those influence their followers.

This thesis strives to clarify the notion of virtual influencers and offers an in-depth analysis of the present literature while focusing on filling the gap on the absence of research about the impact virtual influencers have on mental health in relation with beauty ideals. Hence, the research question of this thesis is **"To what extent does the exposure of unrealistic beauty standards by virtual influencers affect mental health of its viewers?"**. In order to answer this, it is important to narrow down this question into three sub-questions. The three sub-question are: *"What are the distorted beauty ideals that virtual influencers create, and are they feeding their follower the idea of being 'perfect'?"*, *"Are professionals losing their confidence and jobs due to these virtual influencers?"* and *"Are virtual influencers creating a relationship with their followers?"*. Lil Miquela and Shudu Gram are chosen as the two virtual influencers to answer these sub-questions.

This thesis begins by introducing the notion of social media influencers which is presented in chapter 2 which will contain their purpose, their effectiveness and most importantly the distorted beauty ideals which they represent. This chapter is essential because the results provided in this section can be used to establish comparisons between virtual influencers. Chapter 3 is the main chapter for this thesis as it will introduce virtual influencers. This chapter starts by introducing the background and history of these virtual influencers in section 3.1. As two virtual influencers are used as prime example for this thesis, section 3.2 introduces three virtual influencers: Lil Miquela, Shudu Gram and Noonoouri. Their history, purpose and facts are provided in this section. Section 3.3 is used for identifying their purpose which is mainly being used for influencer marketing and their marketing effectiveness will be analysed with the use of different research papers. Section 3.4 will discuss how users desire to follow these influencers and how they tend to perceive them. Through the findings, it was revealed how virtual influencers have anthropomorphic traits so in the same section the current literature of anthropomorphism will be analysed. The three sub-questions will be addressed using the previously stated background and analysis. These sub-questions will be discussed in chapter 4, and my perspectives on them will be offered. This chapter will also present potential future research ideas, and the main research question will be answered in the conclusion section.

Chapter 2

Social Media Influencers

Given that social media influencers form the foundation of all influencers, this chapter is devoted to identifying and comprehending them in order to develop a more nuanced understanding of their function within social media and their impacts. Section 2.1 introduces the current background on social media influencers where their development and the arc of their journey will be identified. Section 2.2 sheds light about the beauty standards created by them and how they affect their followers. This section assumes a significant role as it serves to address critical inquiries pertaining to the comparison between social media influencers and virtual influencers. Its utilization is paramount in answering the research questions posited in this study.

2.1 Background

Combining the statistics of Youtube, Instagram and Tiktok there are currently 3.2 million to 37.8 million influencers which exist (Wise, 2022). The term social media influencer (SMI) "refers to a new class of unaffiliated third-party endorsers who utilize blogs, tweets, and other forms of social media to influence audience attitudes" (Freberg, Graham, McGaughey, & Freberg, 2011b, p. 90). Influencers often express their opinions regarding various products, services, and enterprises via social media (Harrigan et al., 2021). Social media influencers are very attractive to brands because compared to other types of marketing they come across to their consumers as authentic while simultaneously being creative and having a personal approach (Harrigan et al., 2021). The way influencers gain fame differs a lot with mainstream celebrities. Mainstream celebrities are able to gain fame and popularity by pursuing acting, music, sports, politics (Kay et al., 2020, as cited in McCracken, 1989). On the other hand influencers gain popularity with an active social media presence (Kay et al., 2020).

Self-branding is an important idea that pertains to social media influencers. As mentioned in the paper of Khamis, Ang, and Welling (2016) self branding is "sometimes called personal branding, involves individuals developing a distinctive public image for commercial gain and/or cultural capital" (Khamis et al., 2016, p. 191). The paper delves into several themes including the rise of self-branding from its inception to the present day, the concept of micro-celebrity and instafame (i.e., having many Instagram followers; discussed further below), the political and economic dynamics of self-branding, and recent instances of self-branding and influencers on social media (Khamis et al., 2016). Self-branding increases the accessibility of fame by enabling users to assert strong identities that may support and animate big social profiles (Khamis et al., 2016). This paper demonstrates how self-branding techniques are encouraged by social media. The downside is how these

techniques make the most of the "seeming democratization of media production and distribution which have low entry levels and large influence potential" (Khamis et al., 2016, p. 205). Hence, micro celebrities are linked to this "self-presentation strategy where these individuals view themselves as products and sell this image to others" (Marwick, 2015, p. 140, as cited in Hearn, 2008; Lair, Sullivan, & Cheney, 2005).

Marwick (2015) defines instafame, mentioned above, as "the condition of having a relatively great number of followers on the Instagram app" (Marwick, 2015, p. 137). Marwick (2015) provides an excellent analysis of how the younger generation achieves this need to be "Instagram famous" and makes several insightful remarks about it. Influencers act in an attention economy and gain social reinforcement with their posts (Marwick, 2015). Marwick (2015) also highlights how social media aids individuals to becoming more successful as well-known influencers however they ultimately end up in the same old status aristocracies of luxury that the more "traditional" celebrities do, proving that instafame is not egalitarian and how these conventional hierarchies are not overthrown. Instagram's founding community manager, Jessica (2013), is quoted by Marwick (2015) as saying that young users employ three techniques to stand out: "leveraging existing social networks, utilising hashtags, and integrating with the greater Instagram and digital photography community" (Marwick, 2015, p. 147, as cited in Jessica, 2013). After analysing the three chosen influencers who embody three different personal brands the paper concludes that influencers utilize Instagram to show viewers glimpses into their lives that correspond to their personas (Marwick, 2015). Individuals being successful at attaining fame is just a hashtag away (Marwick, 2015).

Influencers on social media can be broadly categorized as either micro or macro. Micro-influencers are those who have a smaller following and who are on their way to become an influencer and macro-influencers indicate a larger follower count and are usually known by many brands (Hatton, 2018). The study by Kay et al. (2020) examined "how consumer product evaluations were affected by macro and micro influencers as well as by their disclosure of native advertising funding" (Kay et al., 2020, p. 3). Their results suggested that consumers who were in the micro condition were able to have higher product knowledge (Kay et al., 2020). The disclosure of sponsorship condition also leads to higher purchase intentions and slightly more for the micro influencers than the macro influencers (Kay et al., 2020). This suggests that micro-influencers are able to engage more with their followers are able to be more persuasive compared to macro influencers who are constantly showing that their endorsing brands. The idea that micro-influencers are more successful at boosting product knowledge than macro-influencers is supported by the Persuasion Knowledge Model (Kay et al., 2020). The concept explains that "when consumers understand a marketer's objective, their knowledge of and reactions to persuasive marketing information change" (Kay et al., 2020, p. 10, as cited in Friestad & Wright, 1994; Stubb & Colliander, 2019).

Influencer marketing is a form of advertising where SMIs are used to promote a product or service. Influencer marketing is defined as

> "the use of influential opinion leaders (influencers), celebrity or non-celebrity, with many followers on social platforms, to foster positive attitudinal and behavioural responses in their followers (consumers) regarding the brand's interests by using posts shared on such platforms, and which also allows influencers and followers to participate in the co-creation of the brand image on social media" (Martínez-López et al., 2020, p. 579).

"One of the largest marketing and PR trends of 2017 is the rise of social media brand

influencers, particularly those who support lifestyle businesses" (Glucksman, 2017, p. 77). In their study, Glucksman (2017) investigates how "social media influencers have achieved success and why influencer marketing is becoming one of the most widely used public relations strategies" (Glucksman, 2017, p. 79). With the help of two analysis techniques and a case study on the successful influencer Lucie Fink, the research objectives were addressed (Glucksman, 2017). With their analysis, they discovered that Fink was adept at subtly incorporating brand endorsements into her posts, connecting the business with prospective customers, and responding to comments which help to maintain a personal connection with her followers (Glucksman, 2017). Results from the Youtube content analysis show that influencers that exhibit qualities like engagement, sincerity, and confidence are more successful in achieving brand partnership objectives (Glucksman, 2017). As a result, their research revealed that an influencer's ability to attract followers is through being authentic, self-assured, and interactive in order to establish a bond between the follower and the business (Glucksman, 2017).

An interesting study on the marketing choices made by influencers and their impact on followers was done by Martínez-López et al. (2020). They carried out two experimental tests while keeping in mind four influencers' marketing decision-making variables. The two experimental studies focuses on "brand control over the shared message and its commercial orientation; and, the celebrity level of the influencer and his/her congruence with the product/service they comment on in the post" (Martínez-López et al., 2020, p. 580). For their first experimental study regarding the brand control condition they concluded that brand control has no effect on the follower's trust in the influencer but high levels of brand control over an influencer's message lessen the post's trustworthiness, followers' interest in the product, and their propensity to look for additional information on the subject (Martínez-López et al., 2020). In regards to the commercial orientation on an influencer's post if there is a high condition of commercial orientation then there is less trust, less credibility and lower need to search information (Martínez-López et al., 2020). In their study 2, they concluded that an influencer with high congruence with the product on their post the followers will have more trust, higher credibility, more interest and have higher inclination to want to look more about the product (Martínez-López et al., 2020). However, all hypothesis for the influencer's celebrity degree were rejected. Their results conclude that the celebrity degree of an influencer is rather secondary compared to the congruence with the product in their post (Martínez-López et al., 2020). Their paper also discovered that "it is the non-celebrity, not the celebrity, who has a higher impact on followers' attitudes and behaviors toward the influencer's post content, and product under a situation of high congruence between influencer and product" (Martínez-López et al., 2020, p. 599).

The above-mentioned information facilitates a comprehension of the activities of social media influencers, their distinctive attributes, their evolution as marketers, and the variations in consumers' responses to posts based on the employed marketing strategy. The ensuing subsections will furnish additional context relevant to beauty standards and the implications of influencer content for users.

2.2 Unrealistic beauty standards and their repercussions

The feminine beauty ideal is defined as "a specific set of beauty standards regarding traits that are ingrained in women throughout their lives and from a young age to increase their perceived physical attractiveness" (Wikipedia, 2023). "Throughout human history, beauty standards have always been pervasive, and they continue to have a significant

impact on social interaction, the media, and the commercial sector today" (Povey, 2021). "From height and weight to facial features, body type, and facial proportions", they decide what constitutes 'beauty' (Povey, 2021). Women have always felt pressure to uphold these ideals. One of the most common standards for women is to have a young, slender, tall body type, fair skin tone, and a beautiful face with sharp features that has remained stable for a substantial length of time (Deng & Jiang, 2023, as cited in de Valle, Gallego-García, Williamson, & Wade, 2021) (MacCallum & Widdows, 2016).

As social media influencers become more popular, trends shift quickly and are challenging to follow. These trends include different fashion styles, food, makeup, fitness, lifestyle, most importantly body types and face filters. One of the most widely accepted beauty ideals is a having a certain body type which keeps evolving. For instance, women were tall and square-boxed in the 1940s, the Marilyn Monroe era of larger hips and a fuller bust began in the 1950s, ultra-thin figures with flat stomachs and small hips dominated the 1960s and 1970s, athletic figures prevailed in the 1980s, thin waif-like figures returned in the 1990s, and thin body types continued into the 2000s (Greep, 2022). The hourglass trend began in 2010 as a result of Kim Kardashian, and although the notion of varied body types has grown recently, it doesn't always succeed in replacing the idealised slim body type as the most popular (Greep, 2022). "The mass media exerts a potent influence on social and cultural conventions, particularly with regards to the thin body type that is often regarded as the "thin-ideal" for women" (Cohen, Fardouly, Newton-John, & Slater, 2019, p. 1547, as cited in Grabe, Ward, & Hyde, 2008). Regardless of what is trendy right now, users frequently idealize and compare themselves to others online who have the body type they would like to achieve.

In India, for example, a woman's skin tone is associated with her sense of attractiveness (Karan, 2008). The concept of having light skin is an extremely problematic and racist beauty ideal. The paper by Karan (2008) explores the color discourses in Indian advertising and raises some crucial points about how a person's skin tone affects a variety of roles that are played there. Indian brand commercials like "Fair & Lovely" products, which claim to make a person's skin tone fairer in a few weeks, are controversial, but because "this standard affects people's chances of finding a partner, being hired, and succeeding in life, some people are duped into buying these products" (Karan, 2008). Marketers have taken advantage of this phenomenon to promote their fairness soaps, lotions, and creams (Karan, 2008). Through these ads, the cultural concept that one must have a light complexion to succeed is being propagated, which is wholly untrue. Even if there is a greater understanding of how impossible this ideal is, people still have a tendency to hold these beliefs and use them to influence others.

The idea of retouching photos and applying "filters" on social media is another popular trend that distorts a person's looks and makes them conform to the prevailing standards of beauty. As mass media grows, the awareness of knowing that photos being altered also grows as they tend to satisfy the beauty standards (Guest, 2016). Since models have been altered for so long in traditional media, it has become accepted that one should look that way. Many people feel forced to modify themselves by this beauty ideal now that there are applications available to change your appearance. "Although it's obvious when a filter embellishes a photo by adding flowers, some alterations could be more subdued and instead encourage pressure to look a certain way" (Rajanala, Maymone, & Vashi, 2018, p. 443). "It may be claimed that these apps are causing us to lose touch with reality because we expect to always look flawlessly primped and filtered" (Rajanala et al., 2018, p. 443). A very popular filter right now which gives a person a thinner face, smooth skin, small nose, thick lips and cat/fox eyes. The latest addition to the beauty trend,

termed the "fox eye", involves the modification of eyebrow contours by shaving off their outer ends to achieve a more linear shape and utilizing makeup to accentuate a sharply defined cat-eye appearance (Mills, Shannon, & Hogue, 2017). Celebrity figures such as Kendall Jenner and Bella Hadid have embraced this trend, albeit its appropriation of Asian features has engendered considerable criticism (Mills et al., 2017). In Figure 3.1, you can see how Sasha Pallari's face changes after applying a filter on her face. The left image shows her in her natural form; when the filter is applied, the differences are immediately noticeable with more contoured, angular cheekbones, a pointed nose, fuller lips, and heavier makeup. Retouching and photo-shopping is the "new standard for print and online images" (MacCallum & Widdows, 2016, p. 235). People become persuaded into utilizing these filters more to improve themselves as a result of these deceptive filters and frequent retouching (MacCallum & Widdows, 2016). This is also due to the fact that many influencers have an appearance similar to these filters, which establishes its own standard of beauty.



Figure 2.1: "A photograph of Sasha without filter is seen side-by-side with an adapted version that has had a 'cats eyes' filter added" from
(Hallett, 2021)

MacCallum and Widdows (2016) investigated the "effects of modified photos on people's body satisfaction and aspirations" (MacCallum & Widdows, 2016, p. 235). Their goal was to understand why individuals are drawn to these idealized, unattainable visions. According to this study, the growth and emphasis on these specific attributes have lowered body satisfaction and made individuals feel badly about their appearance (MacCallum & Widdows, 2016). These photos have been digitally enhanced to emphasize youth and thinness (MacCallum & Widdows, 2016). In the fashion and entertainment sectors, "airbrushing to hide flaws, whiten teeth, lengthen and narrow limbs, thin waists, and boost breast size is not only acceptable but also expected" (MacCallum & Widdows, 2016, p. 236, as cited in Farid, 2009). In their study, they discussed another research which revealed that people do not recognize if a picture has been retouched or not. Another experiment revealed that when women know that some images are altered (when a disclaimer is shown) their desire to look like those pictures increased and find those models more attractive (MacCallum & Widdows, 2016). The effect of beauty standards in those edited photos is therefore not mitigated by the public's awareness of these adjustments, but rather amplified (MacCallum & Widdows, 2016). Their study also examined these findings from a "perceptual angle, which demonstrated that the disclaimer labels caught

users' attention more and helped them infer deeper meanings" (MacCallum & Widdows, 2016, p. 239, as cited in Selimbegović & Chatard, 2015). The self-discrepancy hypothesis is presented, which fundamentally consists of three components in which people maintain their self-perception: "the 'actual' self (the attributes we believe we have); the 'ideal' self (the attributes we aspire to have); and the 'ought' self (the attributes we believe we should have)" (MacCallum & Widdows, 2016, p. 240). "The gap between one's actual self and one's ideal self might grow as a result of viewing idealized representations in the media, which can have detrimental effects including restricting one's ability to eat in public" (MacCallum & Widdows, 2016, p. 240).

Following beauty standards is a moral need for some women (MacCallum & Widdows, 2016). They evaluate their own performance in meeting the criteria of beauty, and if they fail, they tend to punish themselves by cutting back on their meals, going to the gym, or undergo cosmetic procedure (MacCallum & Widdows, 2016). The concept of "perfection", which does not exist in the real world, is now being promised by beauty, which is now operating as a working ideal. Similar to other ideas, it promises a better life for a person, complete with lifestyle and monetary objectives (Karan, 2008; MacCallum & Widdows, 2016). The flawless picture fuels ones' ideas of the ideal individuals we want to be and beauty ideals are cultural constructs that carry meaning and worth (MacCallum & Widdows, 2016). Given that beauty seems to carry a lot of weight, it is crucial that media uses a variety of models who adhere to various standards of beauty.

These were only a few instances of the various types of beauty standards that are now in use. As was already noted, beauty has an aspect, which affects users who are constantly on social media and acts as a working ideal. It is essential to understand how individuals rely on influencers to measure their worth and how they seem to be influenced by them in this way.

To understand how women tend to envy social media influencers, Chae (2017) tests how the relationship between social media use, influencers, and personal attributes predicts envy over time through social comparison behavior. "Due to the lack of gender ratio data and earlier findings that were only about women, choosing women as participants in this study was preferable to selecting men" (Chae, 2017, p. 248). As defined in their paper envy is "the unpleasant emotion that can arise when we compare unfavorably with others" (Chae, 2017, p. 46, as cited in Smith & Kim, 2007). Their hypotheses were based on the following factors that contribute to envy: upward social comparison, predictors of social comparison, including exposure to comparison-related information, individual traits, and indirect effects (Chae, 2017).

Influencers have a greater tendency to induce envy since they are more reachable to their audience than traditional celebrities and individuals must go through a social comparison process in order to experience envy (Chae, 2017). When individuals lack self-image, upward comparison to an individual leads to being envious of that person (Chae, 2017, as cited in Smith & Kim, 2007). This study examines exposure on a quantitative and qualitative level. Quantitatively, previous studies showed that social media influencers plays a role in the social comparison process, the more exposed they are the more desire is to compare themselves with the influencers (Chae, 2017). Qualitatively, influencers can either post about a specific topic or in general about their daily life (Chae, 2017). Individuals who follow a persons daily life are prone to more social comparison as suggested by their paper (Chae, 2017). An example which was mentioned was how females tend to have social comparison with the idea of a thin body (Chae, 2017, as cited in Jones, 2001). The two individual traits which this research chose was: public self-consciousness and self-esteem (Chae, 2017). These two play an important role in understanding if one

individuals tends to compare themselves with others or not. Results showed that individuals who liked to follow influencers who post about their daily life are more likely to compare themselves with them (Chae, 2017). Hence, positively predicting envy. Frequent exposure related to the comparison related content also plays an important role (Chae, 2017). "Individuals with high public self-consciousness and low self-esteem engage with influencers more and that leads to comparison which therefore leads to envy" (Chae, 2017, p. 257). Self-esteem and life satisfaction also predicts envy without social comparison. An individual who is not happy with one's life and has negative emotions will lead to envy (Chae, 2017). Therefore, all of these factors lead to user being envious to a person on the internet.

What followers don't realize is that influencers spend a lot of time and effort making sure they look their best, editing any flaws, obtaining the right lighting and angles for their posts, having great preparation, and having the appropriate management to share that one photo that makes the followers desire what they have (Chae, 2017).

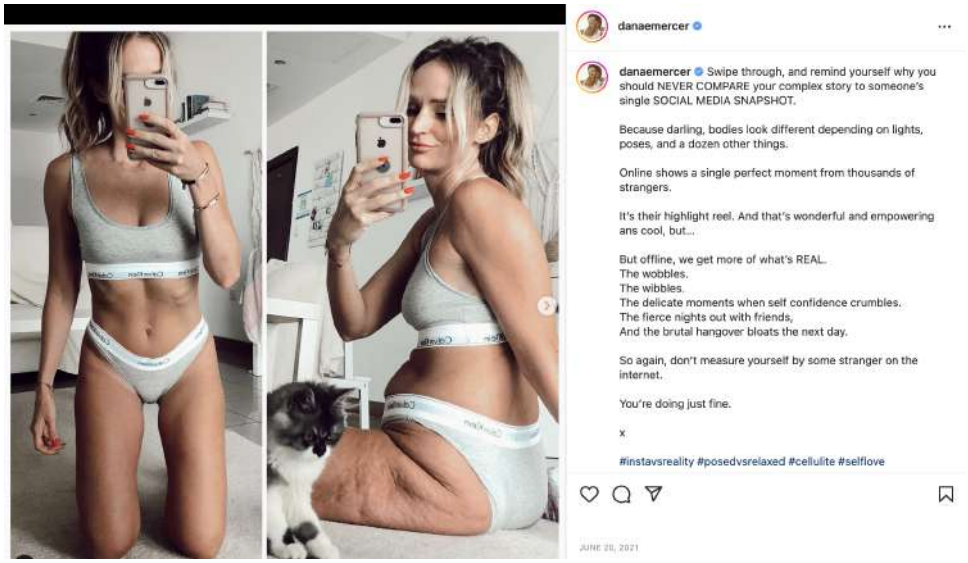


Figure 2.2: "Swipe through, and remind yourself why you should NEVER COMPARE your complex story to someone's single SOCIAL MEDIA SNAPSHOT..." from (Mercer, 2021)

In Figure 3.2, Danae Mercer underscores the significance of angles and lighting in capturing the "ideal" photo. This provides a clear example of how social media users can manipulate their appearance, potentially misleading their followers. Notably, in the left photograph, Mercer seems to conform to the "thin-ideal," which is often idolized. However, in the image on the right, where she is posing in a more relaxed manner, her authentic appearance is more evident. This is a crucial point to emphasize, as users often compare themselves to others and may experience feelings of envy, which can undermine their self-esteem and confidence.

Bauer (2022) analyzed extensively how women internalize beauty standards and perceive themselves as a result of viewing thin bodies on social media. Their research aims to bridge the gap between comparisons made with influencers and comparisons made with peers and more conventional models (Bauer, 2022). As used in Chae (2017) research, the social comparison plays role here as well where an upwards comparison pattern is done when followers compare their body to the body types of infleuncers which seems to form a

negative self image (Bauer, 2022, as cited in Tiggemann & Zaccardo, 2015). They tested the following hypotheses:

> "followers tend to look at thin body photos and are more likely to compare themselves to peers or influencers than to models; followers who view influencer images rather than model photos believe their body type is more attainable; and the more followers believe the other person's body type is attainable, the more they internalize beauty ideals and have lower self-esteem" (Bauer, 2022, p. 5-6).

The findings of the study indicated that users tend to compare themselves more with Instagram models rather than traditional models, which supports the results of Chae (2017), that people compare themselves with others online and feel envious. The study found no significant difference between upward and downward comparisons in terms of belief attainability (Bauer, 2022). However, regarding the internalisation of body ideals, the peer group had the lowest score, even though their body types were considered more attainable, and participants who spent more time on social media had higher body internalisation scores (Bauer, 2022). This implies that the pressure on the internet is higher than among peers (Bauer, 2022). The participants' BMI also played a role in their body appreciation; "those who were dissatisfied with their weight tended to appreciate their body less than those who were content" (Bauer, 2022, p. 18). In conclusion, the study's findings suggest that people with lower self-esteem and more exposure to the attractive thin ideal on social media have a stronger desire to look like them.

Another study sought to examine along similar line but took a different tack in light of the other studies' findings that users frequently compare themselves to influencers. Cohen et al. (2019) examines how exposure to body-positive posts affects women's happiness, body satisfaction, body appreciation, and self-objectification in comparison to thin ideal and appearance neutral posts (Cohen et al., 2019). Body-positive photos are defined in this study as

> "which aims to challenge the aforementioned narrow appearance ideals and instead represent a diverse array of bodies of different shapes, sizes, colours, features, and abilities, with the presumed aim of fostering body acceptance and appreciation" (Cohen et al., 2019, p. 1548, as cited in Cwynar-Horta, 2016)

Previous research has demonstrated a relationship between body-positive posts and women's enhanced happiness and body satisfaction (Cohen et al., 2019). The media has a significant impact on the way users view themselves, leading to the development of false expectations regarding beauty (Cohen et al., 2019). The theory of objectification, which is the "media's method of sexually objectifying women, socializes women to regard themselves as things to be looked at and judged by appearances" (Cohen et al., 2019, p. 1547). This study attempts to shed light on the various ways bodies are looked at and to examine how it plays an influence on a users mind since appearance due to media is becoming a significant factor (Cohen et al., 2019). According to their findings, participant mood and body satisfaction improves when they are exposed to more body-positive posts, and their mood and body satisfaction suffers when they are exposed to more thin-ideal posts (Cohen et al., 2019). "Body-positive posts led to high body appreciation scores, which were subsequently followed by appearance-neutral posts and the lowest scores with thin ideal posts" (Cohen et al., 2019, p. 1556). Regarding self objectification, "the scores where highest when participants were exposed to thin-ideal followed and body positive

posts and lowest in appearance-neutral condition" (Cohen et al., 2019, p. 1557). As a result of frequent exposure to body-positive posts, favorable attitudes toward one's own body were fostered (Cohen et al., 2019). Exposure to appearance-neutral posts did not affect body image outcomes as anticipated, but it was linked to increases in mood (Cohen et al., 2019). Therefore, it is always wise to encourage more body-positive content on all social media platforms.

Another study examined the associations between overvaluation of shape and weight and body dissatisfaction and social media use in general and "selfie-related social media activities in particular" (McLean, Paxton, Wertheim, & Masters, 2015, p. 1132). According to their findings, "when young people spent more time engaging in social media activities like uploading photos and editing images, they experienced higher levels of eating and body concerns" (McLean et al., 2015, p. 1133). Therefore, people who posted their images more frequently tended to have a negative self-perception of their bodies (McLean et al., 2015). If they altered their selfies before sharing them online, "this would also fit with their tendency to put their appearance first, which results in concerns about their bodies and eating habits" (McLean et al., 2015, p. 1138). Their obsession with looks may be caused by the weight the comments and likes on social media carry, which makes them feel acknowledged and increases their eating disorders (McLean et al., 2015).

Chapter 3

Virtual Influencers

This chapter begins by providing an overview of the history of virtual influencers and their emergence, as outlined in Section 3.1. Section 3.2 examines three specific virtual influencers, namely Lil Miquela, Shudu Gram, and Noonoouri, providing a brief description of each. The purpose of virtual influencers is explored in Section 3.3, which outlines their functions and also includes a discussion of the marketing effectiveness of virtual influencers, drawing on various research studies. Section 3.4 is the most extensive section of the chapter, focusing on the relationship between virtual influencers and humans. It examines various studies to understand how users perceive and interact with virtual influencers, introduces the concept of anthropomorphism in relation to virtual influencers, and answers the three sub-research questions posed in this thesis.

3.1 Background

Who could have predicted a future in which we would follow and be influenced by online avatars? It is a well-established fact in the realm of movies and literature that artificially intelligent virtual beings have coerced humans into following them to their demise, e.g., The Matrix film franchise. However, who could have foreseen that fiction would someday become reality? Many individuals are not aware of the term "virtual influencers", likely because they associate it with "social media influencers", who are influencers in the virtual world. Virtual Influencers (VI) are defined as "computer-generated characters, many of which are often visually indistinguishable from humans and interact with the world in the first-person perspective as social media influencers" (Choudhry et al., 2022, p. 1). They are accumulating popularity by "sharing content related to fashion, music, sports and social causes" (Choudhry et al., 2022, p. 1).

Although the idea of virtual influencers is relatively new in the context of social media, the idea of creating a whole new persona has existed before. "The idea of fictional celebrities dates back to the 1930's when Lester Gaba, a sculptor and retail display designer, created a life sized 100 pound mannequin Cynthia" as seen in Figure 3.1 below (Rasmussen, 2022). As her popularity sky rocketed , people questioned her silence even though she was a mannequin but Gaba justified Cynthia's silence by claiming she was unable to converse due to laryngitis (Rasmussen, 2022). As a result, a narrative is created to the public suggesting that she is a real person and not just a famous mannequin. Moving on to the 1980s, where the "first computer generated TV personality was created" (Rasmussen, 2022). Max Headroom, a fictional AI, on TV mocked news anchors and talk show hosts (Rasmussen, 2022). In reality, it was just special effects makeup on the actor Matt Frewer which ended up giving him the "computer generated" look (Rasmussen,

2022). Just as Cynthia, Max Headroom was created as an fictional character so the audience can perceive it to be as an actual person with a story.



Figure 3.1: "Alfred Eisenstaedt/LIFE" from
(Cynthia & Gaba, n.d.)

Kyoko Date was born in Japan as a result of the development of virtual idols. She was the first 3-D computer-generated model in the world to release a single and became prominent in Japanese popular culture in the 2000s (Conti et al., 2022). Kyoko Date served as an inspiration for the popular Hatsuni Miku. To promote Yamaha's new singing voice synthesizer program, Crypton Future Media created Hatsune Miku, a software character with a "cartoonish female persona" (Conti et al., 2022; Tsutsui, 2018). Since then, she's released more than 100000 songs, has 2.4 million Facebook followers, and admirers travel from all over the world to see her holographic concerts as seen in Figure 3.2 (Tsutsui, 2018). She is considered to be the "most successful virtual idol since she is still making and selling music, touring the globe, making TV appearances, advertising, and even appearing in video games" (Tsutsui, 2018).



Figure 3.2: "Hatsune Miku, Crypton Future Media" from
(NBT, 2019)

As the popularity of virtual idols increased, the concept of Virtual Youtubers also known as "Vtubers" emerged. They are a made up fictional personas who go live on Youtube by publishing videos (Conti et al., 2022). They are computer generated and are distinct from virtual idols as they can "converse, move, and engage in social interaction" (Tsutsui, 2018). They are just like other YouTube personalities but are just fictional and virtual

(Tsutsui, 2018). One of the most popular Vtubers, Kizuna AI, has 3 million followers on Youtube (Conti et al., 2022). She is a "spokeswoman for SoftBank and the Japan National Tourism Organization, has large commercial sponsorships, performs at festivals, and hosts offline fan gatherings" (Conti et al., 2022, p. 87). There are already more than 4000 Vtubers, and considering the attention they have received, it is possible that they may surpass human Youtubers in Japan in terms of subscriber growth (Tsutsui, 2018). Following in the footsteps of virtual youtubers and celebrity mannequins, in the age of social media a new phenomenon known as Virtual Influencers has gained attention.

Virtual influencers are "CGI or artificially intelligent influencers (AII) with a social media presence" on social media platforms like Instagram (Moustakas et al., 2020, p. 1). They have highly realistic human traits in their looks, demeanor, and behavior as compared to virtual idols and Vtubers, which may often make it difficult to tell if they are actual or artificial (Moustakas et al., 2020). Virtual influencers have a three times higher rate of engagement than social media influencers, and "over 32% of millenials follow them on social media apps despite knowing they are fake" (Sands, Ferraro, Demsar, & Chandler, 2022, p. 779, as cited in Baklanov, 2023). Just as human influencers, these virtual avatars each play a persona with different roles. Lu da Magalu was one of the first and continues to be regarded as one of the top virtual influencers (*About Virtual influencer Lu do Magalu*, n.d.). "In 2009, Lu made her debut on YouTube to promote IBlogTV for one of the largest Brazilian retail companies, Magalu" (Conti et al., 2022, p. 87). With more than 24 million followers across social media platforms, Lu Do Magalu reviews a range of products, and offers advice on new product launches on behalf of their company (*About Virtual influencer Lu do Magalu*, n.d.). Following the marketing impact, "Magalu as a firm allegedly witnessed sales of 552 million in 2019" (*About Virtual influencer Lu do Magalu*, n.d.). Despite having a large following, her impact is primarily restricted to Brazil, where she was created (*About Virtual influencer Lu do Magalu*, n.d.). Following her, a large number of other virtual influencers were created, including Lil Miquela, Shudu, Noonoouri, Bermuda, and many others which would be more discussed in the following section.

3.2 Current Virtual Influencers

There are currently over two-hundred virtual influencers since their debut where there were just nine who existed (Hiort, 2022). Until Lil Miquela made her Instagram debut, not many people were aware of what virtual influencers were or could be. With her success came the birth of several additional influencers with realistic-looking human features, like Bermuda, Shudu Gram, Imma, and Blawko. Virtual influencers, however, are not all realistic; some of them seem animated, like Noonoouri and Any Malu, while others may be animated but don't even resemble humans, like Guggimon. For an example, Figure 3.3 depicts a few virtual influencers ranging from human-like characteristics to non-human animated characteristics. Lil Miquela, in the upper extreme left, has features that are realistically human-like. Any Malu, in the second row's extreme right, also has human-like characteristics but is animated. Guggimon, in the bottom row's extreme left, has no human-like features.

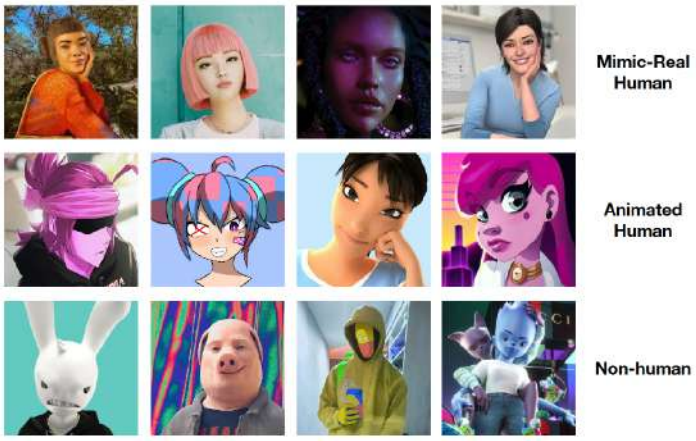


Figure 3.3: "An example of Virtual Influencers in the categories of Mimic-Real Human" from

(Choudhry et al., 2022)

Three virtual influencers: Lil Miquela, Shudu Gram, and Noonoouri, will be briefly introduced in the next section. These three were chosen because they are all distinct from one another in some aspect. Lil Miquela, for example, has realistic human-like features and is a full-time virtual influencer who uploads content on Instagram, Youtube, and Tiktok, whereas Shudu Gram is a full-time virtual 'model' who also has realistic features but who does not interact or post content like Lil Miquela, and Noonoouri is highly comparable to Lil Miquela but is an animated human-looking avatar. For the purpose of my thesis, third-person pronouns will be employed in the upcoming sections to refer to all virtual influencers.

3.2.1 Lil Miquela

Miquela Sousa, popularly known as Lil Miquela, "is a 19 year old, Brazillian-American influencer, model, musical artist" who was first introduced in 2016 on the popular social media app Instagram (Conti et al., 2022; Petrarca, 2018a). Since her debut in 2016, she has around three million followers on Instagram, been on TIME magazine's 25 'Most Influential People on the Internet "alongside Kanye West and Donald Trump in 2018" and has collaborated with well known brands like Calvin Klein, Prada and Samsung (Conti et al., 2022; Petrarca, 2018a; Robinson, 2020, p. 87). She describes herself as "musician, change-seeker and drip robot" (Conti et al., 2022, p. 87). In a lot of her posts, she seems to create awareness for many social causes like Black Lives Matter, LGBTQ+ rights, reproductive rights, and donations to Black Girls who Code. Her first single has received around 1.5 million streams on Spotify and also topped charts (Conti et al., 2022; Petrarca, 2018a). In 2020, she signed a contract with Creative Artists Industry (CAA) for over 10 million dollars (Klein, 2020).

Her social media posts appear to be typical of those from other influencers who pose while "sporting the trendy clothes in chic Los Angeles areas" (Robinson, 2020). She is as Generation Z (people born between the years of 1997 – 2012) as it gets in terms of how she presents herself in her posts, videos, and captions (Brunjes, 2023). Her journey thus far, nevertheless, hasn't been without its challenges and is shrouded in mystery. Nobody was sure if she was real when she magically appeared on Instagram. Was she a robot or an AI? She hangs out with actual celebrities and artists, so at first glance, it appears as

though she is real (Petrarca, 2018a). "On closer inspection, it becomes evident that her face appears to be artificially smoothed, her freckles do not resemble those of a human, and her eyes clearly indicate that she is even more fake than before" (Petrarca, 2018a). There was no speculation as to who created her and there were just anonymous tips that who could be involved in this almost human influencer. Despite numerous questions concerning her background, she kept her followers in the dark until, at last, a scandal arose when her account was hacked by none another than a virtual influencer itself.

On a random Tuesday, Lil Miquela's Instagram was hacked by Bermuda, "a pro-Trump, self-proclaimed 'robot supremacist' who appeared to have erased all of Lil Miquela's Instagram account and began posting her own photographs while alerting her fans that she is not genuine and threatening to only give the account back if the 'truth' was exposed" (Petrarca, 2018a). Lil Miquela's supporters, also known as Miquelites, started to support her and ask for her return. However, the situation remained tense as Lil Miquela had a limited time frame of 48 hours to reveal her identity and regain control of her account. (Petrarca, 2018a). It all came to an end when Bermuda restored the account to Lil Miquela, who posted the following:

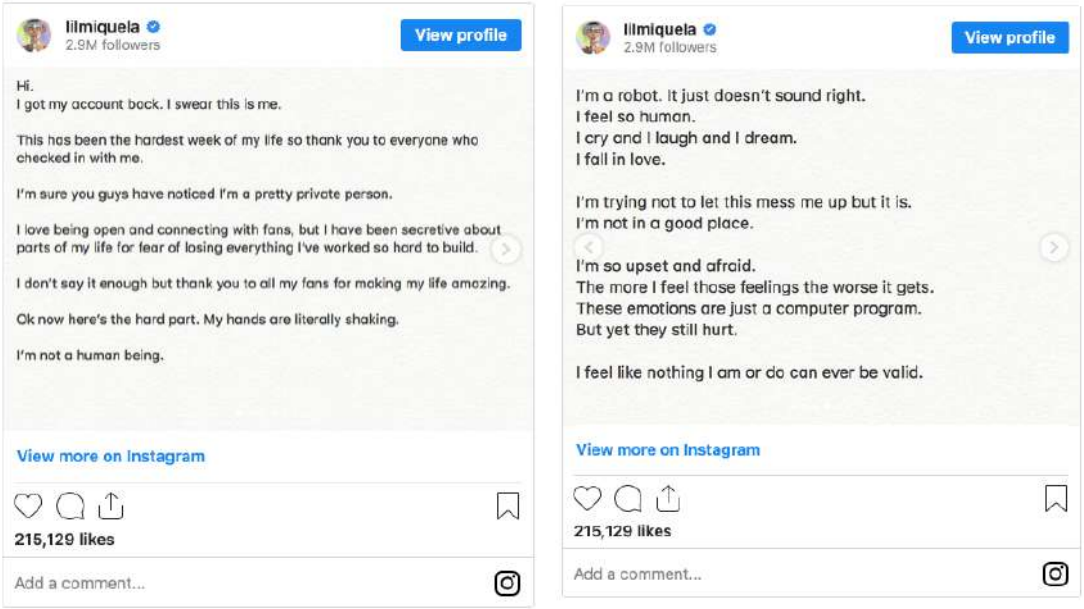


Figure 3.4: On the left panel is Instagram post slide 1. On the right panel is Instagram post slide 4 from

(L. Miquela, 2018; Petrarca, 2018b)

"I am not a human being", Lil Miquela stated in her post and finally the truth began to emerge (Petrarca, 2018b). "Lil Miquela claimed that she was developed in Sillicon Valley by Daniel Crain, the CEO of Cain Intelligence, to be a 'servant and sex object', and then stolen by another firm called Brud, who informed her that she would be living the life of Miquela Sousa" (Petrarca, 2018b). In the aforementioned post, Lil Miquela declared that she had been deceived by Brud and felt let down, as their motives were purely financial, and not genuine (Petrarca, 2018b). She ultimately admitted that she is a robot, as shown in Figure 3.4. The entire narrative of Lil Miquela's existence was merely a fabrication, a story that Brud was crafting and promoting. In actuality, Lil Miquela never existed as a real person, and this was just a ploy by Brud to market their two virtual influencers,

Lil Miquela and Bermuda (Petrarca, 2018b). However, the controversy provided some transparency for her followers, as it was finally revealed that Brud was the company that developed her.

Brud, a company co-founded by Trevor McFedries and Sara Decou and based in Los Angeles, purports to specialize in artificial intelligence and is responsible for the creation of social media avatars such as Lil Miquela, Bermuda, and Blawko (Brud, n.d.; Wong, n.d.). Figure 3.5 shows Lil Miquela with Sara and Trevor. Despite their assertion of being an AI company, Brud's "LinkedIn profile suggests otherwise, as the majority of their employees are visual effects artists and content producers, which reinforces the notion that they have fabricated a narrative around their business" (Klein, 2020; Petrarca, 2018b). "Trevor McFedries was a DJ and producer known as 'Young Skeeter' before establishing Brud" (Petrarca, 2018a). There is further curiosity surrounding his previous employment at a production company alongside a science-fiction director, which has sparked conjecture that he may have created these virtual influencers as part of a larger story-line akin to a movie (Petrarca, 2018a). The lack of information regarding the company and its founders further contributes to the enigmatic nature of Lil Miquela and her creators.



(Klein, 2020) (Rasmussen, 2021)

Figure 3.5: On the left panel is Lil Miquela on Instagram. "'People created her but idk if she is co-dependent on them' LIL MIQUELA VIA INSTAGRAM" from (Klein, 2020). On the right panel is "Blawko and Miquela with Brud founders, Trevor and Sara" from (Rasmussen, 2021)

Despite the acknowledgment that Lil Miquela is depicting a robot, it is widely understood that she was entirely generated through computer-generated imagery (CGI) technology (Drenten & Brooks, 2020). The creators of Lil Miquela not only achieved a lifelike appearance, but also endowed her with the capacity to express complex human emotions, such as empathy and affection (Moustakas et al., 2020). Given that Lil Miquela's existence is fictional, her credibility in this realm is often questioned. Nevertheless, her online posts convey a sense of yearning to belong and explore, as she writes about her desire to discuss love, socialize, dine out, and otherwise engage with the world around her (Drenten & Brooks, 2020). "Lil Miquela's apparent authenticity mirrors that of a conventional influencer who reveals their insecurities, aspirations, and vulnerabilities to their followers" (Drenten & Brooks, 2020, p. 1321). Like many social media influencers, Lil Miquela has faced criticism and controversy, such as backlash over her campaign with Calvin Klein, which was accused of queer baiting. Additionally, her creators at Brud were criticized for taking her narrative too far when she publicly discussed her experience with sexual assault on YouTube (Sands et al., 2022). Moreover, there are concerns that she is

portrayed as living a life that doesn't actually exist, while Brud seemingly profits from her popularity (Blakiston, 2021).

Despite being perpetually 19 years old, Lil Miquela's apparent exploitation as a profit-making tool for Brud and the brands she endorses might be disconcerting. Nonetheless, she has a following of sincere fans who are moved by and admire her content. In fact, some viewers even respond to her videos with comment such as: "she may be a robot but she feels more human whenever she talks" (Miquela, 2019a). Given that she is admired by her fans and is one of the most well-known virtual influencers out there, but at the same has a history riddled with narrative faults, she will be used as one of prime examples for this thesis (Klein, 2020; Drenten & Brooks, 2020).

3.2.2 Shudu Gram

Shudu Gram is the worlds first digital supermodel, has over 200 thousand followers on Instagram and who seems to be originated from South Africa (Conti et al., 2022). She has been described as a "fashion queen" according to the blog of Virtual Humans (*Who is Shudu Gram? @shudu.gram, explained*, n.d.). Cameron-James Wilson, a 28 year old British photographer who founded The Diigitals Agency created Shudu and many other digital models (Conti et al., 2022; Tietjen, 2018). Shudu Gram has worked with numerous brands, including Balmain, Smart Car, Cosmopolitan, and Vogue (*Who is Shudu Gram? @shudu.gram, explained*, n.d.). She has been recognized by prominent celebrities like Naomi Campbell and Alicia Keys who mistook her to be human and brands like Fenty Beauty reposted her on social media as she seemed to "wear" their lipstick as shown in the left panel in Figure 3.6 (du Parcq & London, 2018). She has received numerous compliments on her stunning beauty and for being "unfathomably perfect" (Rosenstein, 2022). In all her posts, she seems to be posing in elegant, ethereal shooting locations to highlight eye-catching fashion clothing (*Who is Shudu Gram? @shudu.gram, explained*, n.d.).



(S. Gram, 2018) (S. Gram & Alexsandrah, 2021)

Figure 3.6: On the left panel is @shudu.gram screen grabbed from Instagram. On the right panel is @shudu.gram screen grabbed from Instagram

In Cameron's words, Shudu is his "art" (Rosenstein, 2022). Wilson stated, "I am a photographer anyway, so it's just a way of exploring my creativity when I'm not shooting" (*Who is Shudu Gram? @shudu.gram, explained*, n.d.). She was fully digitally created using the modeling tool Daz 3D (Tietjen, 2018). Her appearance was originally inspired from a Barbie doll called Princess of South Africa. He adored this Barbie for her beauty, her traditional attire, and her neck rings (Rosenstein, 2022; du Parcq & London, 2018).

He was merely posting his artwork on Facebook when it suddenly went viral as a result of the frequent reposts and people's interest (du Parcq & London, 2018). Shudu has also engaged with other avatars. For instance, she has previously posed with two digitally created models, one of which is Ajur Akoi, as seen in the right panel in Figure 3.6 (Tietjen, 2018). Ajur expressed on Instagram how tough it was for her when she was going to be part of this digital art as a result of her issues with poor self-esteem (Jackson, 2018). If compared to Lil Miquela, one thing is certain that Shudu is not an influencer. Wilson merely claims that "she cannot constantly post and dress up in high-end brands like Lil Miquela because there is a complicated digital process involved in making the garments suit her" (Tietjen, 2018). Another difference is that Lil Miquela's background is largely unknown, in contrast to Shudu Gram's creator, who was always open about his goals with her.

Although she is relatively new, she and her creator remain at the center of a continuous controversy. Wilson claims in an interview that he developed Shudu and other digital models to "encourage more diversity in the fashion industry and to 'support developing economies and industries and be a vessel for that' " (Moustakas et al., 2020, p. 1). There is widespread skepticism towards this notion as it involves a white male who appears to be using the creation of Shudu as a means to perpetuate an idealized representation of women of color (Moustakas et al., 2020; Jackson, 2018). Without employing colored or Black models, "Shudu is a digital canvas that allows creators to convey their racial inclusivity and diversity" (Sobande, 2021, p. 135). As people began to realize she is not human, criticism on Twitter began to spread: "'A white photographer figured out a method to profit off of Black women without ever having to pay one'" (Tietjen, 2018). Another issue was that Shudu might replace models in the near future. Wilson claims that this won't be the case since digitizing models might save travel expenses and make the business of fashion modeling simpler (du Parcq & London, 2018). Conversely, some argue that the rapid diversification of the fashion industry may be jeopardized by the emergence of a digital model. (Tietjen, 2018).

Shudu Gram elicits diverse opinions, yet at its core, she is simply a digital rendering of a marginalized community that has long been disregarded in certain regions of the world. This in and of itself can be considered as portraying a white person's fantasy about a Black person in order for brands to benefit off of it as a quick fix in the future (Jackson, 2018; Sobande, 2021). Due to her unattainable beauty and the possibility that she and other digital models may soon be the face of the modeling industry, their presence can have a negative impact on one's self-esteem.

3.2.3 Noonoouri

Noonoouri, a 19-year-old fashion influencer, who was founded in Munich. She has more than 400 thousand followers on Instagram and has worked with luxury brands like Dior, Marc Jacobs, Versace, KKW Beauty, and many more (Iglhaut, 2019; Chekoufi, 2018). She is also represented by IMG Models, a well-known modeling agency (Laura, 2021). She also "appeared in the fashion show of Fashion for Relief in 2018 at the Cannes Film Festival" (Moustakas et al., 2020, p. 2). She was designed by Joerg Zuber, a 46-year-old graphic designer and the head of Munich's Opium Effect creative agency (*Who is Noonoouri? @noonoouri, explained*, n.d.; Iglhaut, 2019). She also supports social causes, such as living a vegan lifestyle that is sustainable and ethical. For instance, she has never advertised herself in "fur apparel" (Iglhaut, 2019). Being able to promote more social concerns than social media influencers, according to Zuber, makes her more than just a

fashion doll (Iglhaut, 2019). He also claims that she is "both a role model and an actual fantasy, which is one of the reasons major fashion houses want to work with her" (Iglhaut, 2019).

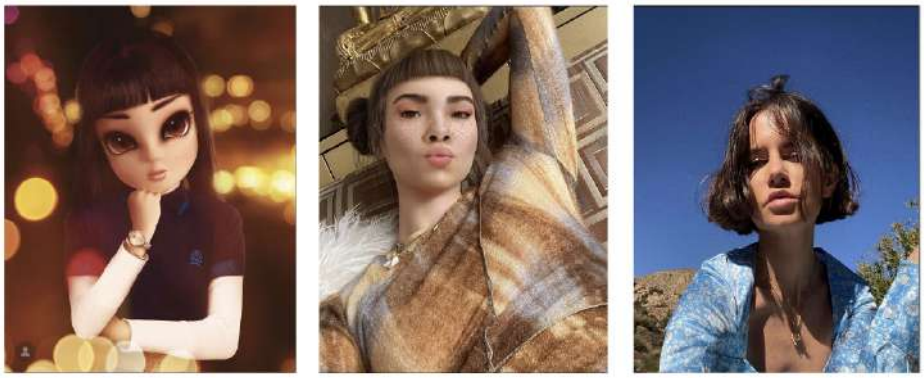


Figure 3.7: "Noonoouri as AVI, LilMiquela as HVI, Marta Cygan as HI" from (Arsenyan & Mirowska, 2021)

Noonoouri is Zuber's childhood dream:"where fashion stands at freedom and that is exactly how he wants to represent her" (Iglhaut, 2019). Even though he created her in 2011 she was only introduced to the world seven years later. Noonoori stands out from Lil Miquela and Shudu as she is not shown to be realistic at all. With her "big manga eyes and doll like features she is shown to more animated and cartoonish" as also shown in the Figure 3.7 where she is on the extreme left and Lil Miquela is in the center (Iglhaut, 2019). Zuber specifically did not want her to be realistic as he did not want to continue creating unrealistic beauty standards which social media influencers and virtual influencers keep doing (Iglhaut, 2019). Zuber stated, "Noonoouri is and will remain a character. I want everyone to realize that at first sight" and "People follow her because she's different. With her, you can immerse yourself in a dream world" (Iglhaut, 2019). Australia Vogue conducted an exclusive interview with her where she shared her experience with exclusive brands founders like Maria Grazia Chiuri and Kim Kardashian. She states what kind of makeup products she uses when she stated "I love KKW Beauty contour and highlighter—they truly work!" and the type of clothes she is interested to wear (Chekoufi, 2018).

Unlike Lil Miquela, who lives the life of a teenager, Noonoouri's Instagram is full of photos of her posing in high-end clothing and is sometimes accused of favoring brands (Molin & Nordgren, 2019). A study was done to evaluate the parasocial interaction of Instagram's virtual influencers. They conducted interviews with participants and selected Lil Miquela and Noonoouri as their case study subjects (Molin & Nordgren, 2019). Although Noonoouri spends her life as a person, their research was able to show that participants were not particularly inspired by her because of her doll-like characteristics and may have preferred Lil Miquela because of her human-like traits (Molin & Nordgren, 2019). When compared to Lil Miquela, Noonoouri is less realistic due to her overly branded appearance, but she may not cause her fans to become uneasy. However, she might not be able to garner as much attention (Molin & Nordgren, 2019). They were able to determine that, despite the unease that Lil Miquela's appearance causes, she attracts far more attention than Noonoouri because she seems more relatable to her fans, which also undermines Noonoouri's credibility (Molin & Nordgren, 2019).

Noonoouri hasn't been the subject of many studies that compare her to other virtual

influencers. However, the handful that are undertaken will be briefly reviewed in section 3.4. Due to her distinctive style and character, Noonoouri is currently among the top virtual influencers and is likely to remain so in the future.

The Table 3.1 comprises the important facts which were mentioned in this section between Lil Miquela, Shudu Gram and Noonoouri.

	Lil Miquela	**Shudu Gram**	**Noonoouri**
Type	Virtual Influencer	Digital Model	Virtual Influencer
Age	19	unknown	19
Ethinicity	Brazilian American	South African	German
Followers	2.8M	239K	402K
Creator	Brud	The Digiitals	Opium Effect
Collaborations	Calvin Klein, Samsung, Prada	Balmain, Vogue	KKW Beauty, Dior, Marc Jacobs, Versace
Characteristics	Human-like	Human-like	Human Anime-like
Social Causes	Black Lives Matter, LGBTQ+ rights, reproductive rights	unknown	Vegan lifestyle

Table 3.1: Comparision of Virtual Influencers

3.3 Purpose of Virtual Influencers

Virtual influencers are frequently created with the primary objective of promoting products to a specific audience, increasing awareness for causes, exchanging ideas, or being tailor-made for a particular brand. A social media influencer accomplishes the same things, but they differ from these virtual influencers in that they are entirely fictional and that all of their earnings go to the firm. Influencer marketing is one of the fastest growing tools to attract consumers and holds a lot of importance compared to traditional marketing strategies as mentioned in section 2.1. Given the significance of social media influencers, it is estimated that over US $101 billion was invested in this industry in 2020 (Batista da Silva Oliveira & Chimenti, 2021). Since social media influencers are fully independent, they occasionally cause scandals that damage a brand's reputation. The answer to this problem is to create a powerful persona that can be entirely controlled in order to prevent the mistakes that social media influencers are prone to making. This is a win-win situation for the firm, which can control everything and profit fully, and the brand, which can get their goods promoted. As companies move towards digitization and partnering with virtual influencers, what is the assurance that virtual influencers can be successful in the influencer marketing industry?

3.3.1 Marketing Effectiveness of Influencer Marketing

Most virtual influencers have worked with a variety of high-end fashion brands. For example, Lil Miquela has promoted Calvin Klein and Prada products, Shudhu Gram has collaborated with Balmain, and Noonoouri has endorsed Dior and Kim Kardashian's former makeup label KKW. On average, they are believed to earn roughly $10,000 per post (Conti et al., 2022). These brands recognize certain potential in virtual influencers, which is why they offer them lucrative deals to promote their products. To determine the viability of virtual influencers in influencer marketing and how they are able to attract such large followings, numerous studies have been carried out.

Most studies verified the same factors that present opportunities and challenges for virtual influencers to compete with social media influencers in this industry. For instance, Moustakas et al. (2020) utilized expert interviews and research to assess the marketing effectiveness of virtual influencers. Virtual influencers' difficulties in being authentic, relatable, and retaining their followers' attention over time were among the problems the experts explored (Moustakas et al., 2020). Followers rarely doubt social media influencers when they promote a product, but this is not true for virtual influencers because it is harder for a virtual influencer to promote tangible goods like perfume and cosmetics. Users may begin to question their authenticity and ability to be trusted as a result of this. However, it was also acknowledged that virtual influencers can be deemed genuine if they don't have commercial goals but rather artistic ones (Moustakas et al., 2020). One of the experts also mentioned that many people may feel that there is a lack of human touch (Moustakas et al., 2020). Experts made note of the fact that the "initial investment could be huge and there is no guarantee that they would be successful in the future, on top of that, bad planning can harm a brand's reputation more than controversies involving social media influencers" (Moustakas et al., 2020, p. 4).

"Most experts concurred that a creative, compelling narrative about the virtual influencers may maintain a prolonged interest in their followers and avoid the possible problems that were outlined above" (Moustakas et al., 2020, p. 4). This entails keeping in mind the virtual influencer's traits, which are also influenced by demography (Moustakas et al., 2020). Therefore, when developing these virtual influencers, companies should bear in mind the long term exposure creative attitude (Moustakas et al., 2020). Experts asserted that for the story to be more credible to the user and pique their interest for a longer period of time, virtual influencers should have genuine human qualities (Moustakas et al., 2020). Another finding was that virtual influencers can undoubtedly venture outside the fashion and lifestyle sectors, since there may be businesses in the healthcare or tourism sectors that would find it expensive to have celebrities endorse their goods but might do so with the aid of VIs (Moustakas et al., 2020).

All of the aforementioned difficulties are discussed in Conti et al. (2022) study, but they also include other opportunities in addition to those for conflict avoidance. Virtual influencers have more flexibility compared to social media influencers. Since they are regulated, they can adjust and be adaptable in any condition (Conti et al., 2022). For instance, marketing for brands was tricky at the time of the COVID-19 pandemic, but with the aid of virtual influencers, they were able to produce creative material and promote awareness (Conti et al., 2022). The guarantee of exclusivity is also made since social media influencers may work with various firms, which could pose complications, whereas virtual influencers may be completely devoted to a single brand (Conti et al., 2022). As was already noted, brand safety may be a huge plus because it puts businesses at ease when it comes to marketing and allows them to manage what is uploaded or not (Conti et al., 2022). For example, Prada introduced Candy who was specifically made to promote

the relaunching of their perfume line called Prada Candy. Balmain also introduced their two new virtual models Margrot and Zhi who "embody the beauty, individuality, and confidence of the 'Balmain woman'" (Sands et al., 2022, p. 6).

Another study tested the marketing communication of virtual influencers by identifying five categories that can aid management decisions and future research on virtual influencers (Batista da Silva Oliveira & Chimenti, 2021). The five factors that were found were "anthropomorphism/ humanization, attractiveness, authenticity, scalability, and controllability" (Batista da Silva Oliveira & Chimenti, 2021, p. 2). Anthropomorphism will be addressed in greater detail in section 3.4.1. Their research sought to go "beyond Moustakas et al. (2020), which emphasizes that these virtual influencers are just a marketing tactic but in reality it can be more than that" (Batista da Silva Oliveira & Chimenti, 2021, p. 7). Starting with authenticity as this factor is already mentioned above. Authenticity, trust and transparency are interconnected to one another and are essential traits to have for an influencer (Conti et al., 2022). While Moustakas et al. (2020) and Conti et al. (2022) both discuss how virtual influencers can be viewed as unauthentic since they cannot endorse tangible things, this claim has already been debunked in this study (Batista da Silva Oliveira & Chimenti, 2021). For instance, the ice cream company Magnum recruited Imma, a virtual influencer, to promote their product. There are more supportive comments in that post than negative ones, with few criticizing the genuineness she exhibits (Batista da Silva Oliveira & Chimenti, 2021). The same is true with Shudu Gram, who posed and makeup for the well-known company Fenty Beauty as can be seen in Figure 3.8 on the right. Batista da Silva Oliveira and Chimenti (2021) therefore draws the conclusion that authenticity is a key factor but depends on how strong the narrative is when investigating these virtual influencers, but it is not the central objective and is frequently misconstrued with a want for control.



(I. Gram, 2020)

(S. Gram, 2017)

Figure 3.8: On the left panel is @imma.gram taken from Instagram: Imma with Magnum On the right panel is @shudu.gram taken from Instagram: Shudu with Fenty Beauty

According to this study's definition of controllability, it is "linked to a certain predictability in regard to the influencer, which can be partially sought through contracts, among other things, while also involving social media analytics" (Batista da Silva Oliveira & Chimenti, 2021, p. 14). Advertising can be less risky with virtual influencers, according to literature like Moustakas et al. (2020) and Conti et al. (2022), however there isn't any conclusive proof of the virtual influencer's intelligence or how it might address the problems that present AI is encountering (Batista da Silva Oliveira & Chimenti, 2021, as cited in Lee, 2016). Regulation is also part of controllability, therefore if a virtual influ-

encer does turn into an AI in the future, regulating them may be more difficult and they may cause worse controversies than social media influencers (Batista da Silva Oliveira & Chimenti, 2021). Even though the majority of them believe that virtual influencers can be controlled, these factors should be in taken in mind. Scalability has also been taken into account as a factor in their study. Statistics suggest that virtual influencers have already surpassed social media influencers in terms of engagement, although it is unclear if this is simply due to the "novelty effect" or other causes (Batista da Silva Oliveira & Chimenti, 2021, p. 18).

Attractiveness is an crucial factor to understand virtual influencers and they define it as "related to the influencer's (physical and/or behavioural) appeal to followers, as well as to the commercial dimension, endorsement, and congruence with the brand" (Batista da Silva Oliveira & Chimenti, 2021, p. 10, as cited in Torres, Augusto, & Matos, 2019). If attractiveness is strongly promoted through aesthetic appeal or beauty standards, it can also result in high scalability (Batista da Silva Oliveira & Chimenti, 2021). They used Imma's Instagram post advertising a Samsung smartphone in their research to demonstrate this as shown in Figure 3.9 (Batista da Silva Oliveira & Chimenti, 2021). In the end, her attractiveness received more compliments from followers than the advertising did (Batista da Silva Oliveira & Chimenti, 2021). This might also result in losing sight of authenticity once more as appeal comes into play (Batista da Silva Oliveira & Chimenti, 2021). This can also hold for various other virtual influencers like Lil Miquela when she posts herself singing and promoting products (Batista da Silva Oliveira & Chimenti, 2021). Although virtual influencers are often perceived as living a glamorous life, multiple interviews conducted in this study suggest that they strive to attain an unattainable standard of perfection that could negatively impact the mental well-being of their followers (Batista da Silva Oliveira & Chimenti, 2021). More discussion of unattainable beauty standards can be found in section of 3.4.2.



Figure 3.9: "Imma (www.instagram.com/p/CFjTQsNjcBl/) in an ad campaign" from (Batista da Silva Oliveira & Chimenti, 2021)

In addition to introducing additional opportunities and challenges that virtual influencers bring in the context of marketing goals, Sands et al. (2022) also addressed how customers respond to virtual influencers in their paper. One of the opportunities is mak-

ing use of virtual influencers in "the customer service tasks as they can help with costs and control" (Sands et al., 2022, p. 780). The costs to create virtual influencers are lesser than to employ human customer service agents (Sands et al., 2022). They also offer the advantage of "delivering consistent, predictable, and uniform service encounters with little error and great reliability" (Sands et al., 2022, p. 780, as cited in Grewal, Roggeveen, & Nordfält, 2017; Huang & Rust, 2018). As previously noted, virtual influencers possess an advantage over traditional social media influencers in terms of their ability to extend their influence beyond conventional advertising. Additionally, they have the potential to function as brand ambassadors within the metaverse. "The metaverse is a three-dimensional virtual world inhabited by avatars of real people and has been gaining traction since 2020" (Sands et al., 2022, p. 781, as cited in Kim, 2021). Virtual brand ambassadors can engage with customers within the metaverse, as evidenced by Dior and its virtual ambassador's appearance at their Shanghai fashion show. Additionally, several other brands have created virtual versions of models such as Naomi Campbell and Kendall Jenner (Sands et al., 2022, as cited in Chitrakorn, 2021). Virtual influencers can increase brand communities by attracting new audience by representing existing brand identities and their values (Sands et al., 2022). On-brand virtual influencers can also be created that can extend their product values and are solely for the brand. For example Candy was made solely for the brand Prada (Sands et al., 2022). Consumers may be uncomfortable with some influencers because of their highly realistic appearance and behavior, which is one of the issues linked with virtual influencers. Virtual influencers not only appear realistic, but they also exhibit a similar range of human emotions in a narrative-like way (Sands et al., 2022). According to the study by Moustakas et al. (2020), imaginative stories can improve engagement, but they can also make their users feel a little uncomfortable (Sands et al., 2022). Lil Miquela, for instance, published a video documenting a sexual assault she experienced. This ultimately resulted in a great deal of criticism about how the development team went too far in trying to make a realistic character (Sands et al., 2022, as cited in Klein, 2020). Since consumers are becoming more and more skeptical about brands, as previously indicated, authenticity and transparency are now being expected from them (Sands et al., 2022). Consumers expect comprehensive insight from brands regarding their principles and the motivations behind specific campaigns (Sands et al., 2022). Calvin Klein released a 30 second campaign which caused outrage and criticism of the queer-baiting nature of it where Bella Hadid, a popular model, and Lil Miquela were kissing in it (Sands et al., 2022, as cited in Stewart, 2019). Some users commented on that YouTube video: "What a time to be alive", "WE STAN A WLW ROBO ICON", "Im very uncomfortable and have never felt more confused as to what i should think about something" (Miquela, 2019b). As the technology is relatively new, there is a lack of established ethical guidelines that could have consequences (Sands et al., 2022). Furthermore, a notable challenge is the potential for consumers to misuse artificial intelligence and machine learning systems, which may result in a compromise of brand values (Sands et al., 2022).

As businesses continue to invest more in virtual influencers because they are less risky than social media influencers, their numbers keep growing. However, virtual influencers also can carry the same risk as they have the same ability to engage in scandals or engage in misconduct that social media influencers do. Consider the backlash that Lil Miquela received after she shared the now-deleted video detailing her sexual assault. Popular musician Kehlani also criticized the video, tweeting:

> "nah. at first it was kinda interesting. maybe. but @lilmiquela you're playing wit real stories... real trauma.. sexual assault is a scary real reality and at

this point you're ignorantly offensive. what type of sick shit is this" (Song, 2019).

Thomas and Fowler (2020) intended to investigate the usage of AI endorsers as well as what brands may do if 'AI influencers' were to commit a transgression. It performs two experiments, the first of "which evaluates whether there are any similarities in consumer perception of AI endorsers and social media influencers, and the second of which examines how a brand responds and isolates itself from the offense generated by the AI influencer" (Thomas & Fowler, 2020, p. 12). This study explores the brand's approach to making amends, which includes determining who will replace the AI influencer. To investigate this further, the researchers conducted an experiment by replacing the AI endorser with either a new celebrity endorser or a different AI endorser to observe the resulting outcomes (Thomas & Fowler, 2020). Although research indicates that people are open to employing technology, they are less likely to do so after experiencing a technological failure, even if it is typically superior to humans (Thomas & Fowler, 2020). Their second hypothesis states that if a celebrity endorser takes the place of an AI endorser, the brand will benefit (Thomas & Fowler, 2020). Their initial study's results indicate that "regardless of whether a celebrity or AI endorser engages in misconduct, it will negatively impact consumers' perception of the brand, leading to a decreased likelihood of purchasing" (Thomas & Fowler, 2020, p. 18). The brand value and impression are nevertheless badly impacted if an AI endorser just simply becomes engaged in an issue that is unrelated to the brand (Thomas & Fowler, 2020). Thus demonstrating that consumers' perceptions of AI endorsers and human influencers are essentially the same. "The findings of their second study also support their hypothesis as consumers respond more favorably to the replacement of an AI endorser, who committed a transgression, with a celebrity than it does with another AI endorser" (Thomas & Fowler, 2020, p. 19). "This indicates that AI endorsers are not as replaceable as traditional celebrities and social media influencers are" (Thomas & Fowler, 2020, p. 19). Therefore, a brand's response and handling of the situation following a virtual influencer's misbehavior requires extra consideration because it also influences the perception of the consumer (Thomas & Fowler, 2020).

While virtual influencers offer an abundance of advantages to brands, they also possess certain drawbacks. In relation to marketing strategies, this section addressed significant influences of virtual influencers on brands and customers. Brands must carefully consider if they want to work with a virtual influencer, keeping in mind that every benefit has a downside. However, it has also been claimed that the rise of virtual influencers is inevitable. Given the growing popularity of influencer marketing, it is expected that the presence and use of virtual influencers will continue to grow in the near future (Sands et al., 2022). Companies, consumers, and the marketing industry all need to be prepared to adapt to this new trend. Given their importance in the marketing perspective the question which arises are why are people so drawn to virtual influencers given their surge in popularity? What makes them so compelling and what makes them unique enough that others desire to follow them and create connections with them?

3.4 Virtual Influencers and Humans

Over the past few years, virtual influencers have become more well-known, and as was indicated in the previous section, many brands seek to work with them. One important aspect that has been neglected, though, is how their followers are affected by their presence. This section will briefly review a few studies that examine at how followers respond

to virtual influencers and the factors that might make them desire to follow them. The anthropomorphic characteristics of virtual influencers will be covered in more detail in the following sections. In the parts that follow, the three sub-research topics will be addressed with the aid of studies and comparisons made with social media influencers.

Choudhry et al. (2022) carried out an investigation to better understand how virtual influencers affect their followers. They focused on two research questions: "What motivates users to follow virtual influencers and how do users perceive virtual influencers while interacting with them on a social platform" (Choudhry et al., 2022, p. 5). Interviews were carried out with the supporters of three different types of virtual influencers: "mimic-real human (example: Lil Miquela), animated human (example: Noonoouri) and non-human (example: Guggimon)" (Choudhry et al., 2022, p. 6,7). The "content-driven interest" that virtual influencers display is one of the reasons why consumers desire to interact with VI (Choudhry et al., 2022, p. 11). The allure of entertainment offered by virtual influencers stems from the satisfaction of following their fabricated lives (Choudhry et al., 2022). Followers also appreciate the virtual influencers' ability to create innovative and imaginative content. Some individuals appreciate the virtual influencers' creativity, with some commenting on their impressive CGI and originality (Choudhry et al., 2022). The novelty of virtual influencers is another factor driving individuals to follow them (Choudhry et al., 2022). Their human-like features and lifelike responses and personalities intrigue followers. Moreover, users are eager to uncover the mystery surrounding virtual influencers, indicating a strong interest in these virtual avatars (Choudhry et al., 2022). "Users are driven by their curiosity in new technology and artificial intelligence, seeking thrill" (Choudhry et al., 2022, p. 13). For example, the mystery surrounding Lil Miquela's origins served to sustain their attention for a longer period of time. The fact that virtual influencers differ from conventional influencers also aids in increasing interaction with them. In contrast to social media influencers, some virtual influencers appear to respond to their comments or messages, which makes users feel even more inclined to follow their content (Choudhry et al., 2022). The appeal of virtual influencers can also be attributed to their attractiveness. According to Choudhry et al. (2022), many participants found the virtual influencers that mimicked human features to be captivating, and some even considered them to be physically attractive. In fact, some participants were unable to differentiate between virtual and real humans due to the lifelike quality of the avatars. However, some participants also expressed discomfort in knowing that some virtual influencers are not real, despite their convincing appearance (Choudhry et al., 2022). Another factor contributing to the appeal of virtual influencers is their expertise in various fields. "Mimic human influencers are particularly interested in fashion, while others focus on art and music, providing followers with diverse content" (Choudhry et al., 2022, p. 16) This specialization helps attract a wider audience interested in these areas and allows virtual influencers to cater to specific interests.

User's perceptions of virtual influencers depend on a number of factors. According to Choudhry et al. (2022), users frequently believe that the virtual influencer is from an alternate universe. Followers found it interesting when a virtual influencer had a storyline to them even though it is blurring the lines between real and fake (Choudhry et al., 2022). "The idea that witnessing a 'sim' in the actual world is how one participant even described the perception of a virtual influencer" (Choudhry et al., 2022, p. 16). Most participants acknowledged that they don't fully trust virtual influencers when it comes to their reliability (Choudhry et al., 2022). They found it difficult to comprehend how a digital character could actually exist and engage in real-world activities or brand advertising (Choudhry et al., 2022). Some people have even said that purchasing a product

from an virtual influencer may seem strange as they don't really "wear" the products, so how can they believe their recommendations (Choudhry et al., 2022). Low credibility is also a result of some influencers, like Lil Miquela, not being transparent, which raises suspicion in their eyes. However, when it came to them spreading awareness for social problems, there was a favorable response (Choudhry et al., 2022). They believed that the influencers were making better use of their platform, but other participants questioned whether real-life influencers could also voice their ideas like virtual influencers (Choudhry et al., 2022). Some participants valued the anonymity of their content since it made conveying messages easier because there was no face associated with it (Choudhry et al., 2022). Participants also voiced their worries regarding online influencers. One of the primary issues was the construction of unattainable beauty standards. Users believed that possessing such 'perfect' beauty may undermine society's progress (Choudhry et al., 2022). When users first glanced at this influencer, they were frightened because it had an unusual appearance (Choudhry et al., 2022). Since they are entirely virtual, it may be possible to change their appearance and make them appear to be unnaturally human; this will have an effect on their following. Lack of transparency also contributes to deception because it's unclear what some influencers' goals are (Choudhry et al., 2022).

Arsenyan and Mirowska (2021) also investigated how users interact with virtual influencers in a public social media setting and what similarities there are between a social media influencer and a virtual influencer in terms of how they operate on a social media platform. They used three social media accounts to study posting behavior: "human influencer (HI), human-like virtual influencer (HVI), and anime virtual influencer (AVI)" (Arsenyan & Mirowska, 2021, p. 4). The power of virtual influencers to use their narratives to assist people escape reality has resulted in a rise in follower engagement. They bridge the gap between the real and imagined worlds, offering escape or entertainment (Arsenyan & Mirowska, 2021). The interpersonal theory captures the "notion that users can react differently depending on whether they think they are reacting to a computer or a human" (Arsenyan & Mirowska, 2021, p. 3, as cited in Shechtman & Horowitz, 2003). Due to a sense of social presence, people also frequently project anthropomorphic reactions onto computers, therefore the same holds true for these influences (Arsenyan & Mirowska, 2021). For their experiments they chose Lil Miquela as their human-like virtual influencer, Noonoouri as their anime-like influencer and Marta Cygan as a human influencer as she seemed to be similar to Lil Miquela (Arsenyan & Mirowska, 2021). The comments made by users on their posts were analysed.

Arsenyan and Mirowska (2021) study showed similarities between the behavior of a virtual influencer and a human influencer, as well as comparisons between how users respond to real and virtual influencers. The comparison between real and virtual influencers will be covered in 3.4.1. In comparison to the other two influencers, their findings revealed that HVI received fewer positive emojis (Arsenyan & Mirowska, 2021). Users' reactions to the HVI, in contrast to the AVI and HI, were those of skepticism or confusion, which provided additional evidence in favor of the uncanny valley hypothesis (Arsenyan & Mirowska, 2021). For the use of positive terms HVI had the lowest compared to HI and AVI (Arsenyan & Mirowska, 2021). For the negative affect terminology, HVI received the most and the same goes for the anger category where there was a higher rage towards the HVI compared to the other two influencers (Arsenyan & Mirowska, 2021). The same is true of the profanity, with far more directed towards HVI than AVI or HI (Arsenyan & Mirowska, 2021). This research used linguistic analysis to illustrate how users view various virtual influencers in comparison to real-world influencers through comments. It is clear that human virtual influencers tend to elicit more negative than positive responses.

Park et al. (2021) conducted a study to determine how the types and quantity of social agents influence how users respond to them. They gathered user comments and then conducted a semantic analysis, similar to Arsenyan and Mirowska (2021). They formulated two research questions where the first one addressed "if the number of social actors affect user reactions and the second one addressed if there is a difference of user reactions between human and virtual influencers with their content on social media" (Park et al., 2021, p. 2). According to their research, individuals utilize more social words when there are multiple virtual influencers present than when there is only one (Park et al., 2021). For a single virtual influencer, "pronouns like 'he' and 'she' are used, while for several virtual influencers, terms like 'they' are used" (Park et al., 2021, p. 3). When only one virtual influencer is present, positive terms are more often used, but when multiple virtual influencers are present, the language quickly turns unpleasant (Park et al., 2021). When there are multiple virtual influencers present, anger-related terms are also expressed more frequently (Park et al., 2021). This is consistent with the findings from Arsenyan and Mirowska (2021) as even their results showed users tend to use more negative words for virtual influencers. As a result, having more virtual influencers makes users feel angry and unhappy. In order to answer the second research question, they examined into whether humans were present in the content of virtual influencers. Multiple virtual influencers alongside humans tend to elicit more positive responses than do virtual influencers alone (Park et al., 2021). If there are several virtual influences but no real humans, users frequently express rage or harsh remarks (Park et al., 2021). The presence of multiple virtual influencers alongside humans made users feel anxious as well (Park et al., 2021). They appeared to be uneasy as a result, which is consistent with the uncanny valley theory. Additionally, their findings suggest that users may feel uncomfortable when comparing virtual influencers to actual influencers. In conclusion, this study expanded on the results of Arsenyan and Mirowska (2021) linguistic analysis as well as the user perception of virtual influencers.

Trust between an influencer and a user is crucial. As previously indicated, some individuals find it difficult to trust a virtual influencer. To learn more about a virtual influencer's reliability Hofeditz, Nissen, Schütte, and Mirbabaie (2022) investigated the perception of a user when determining the trustworthiness of human influencer and a virtual influencer. In order to do this, an online survey was carried out, and the respondents were presented four images of a virtual influencer and four images of a real-life influencer. They selected influencer pictures with similar poses and in black and white color in order to remove bias (Hofeditz et al., 2022). Participants were questioned on their ability to distinguish between human and computer-generated influencers in a given image and it was discovered that at least half of the participants believed the virtual influencers were real humans (Hofeditz et al., 2022). The findings showed that virtual influencers received lower ratings for their social presence and humanness as well as for their level of trust (Hofeditz et al., 2022). Due to their initial difficulty distinguishing between real and fake, participants may have believed they were unreliable in this research as well (Hofeditz et al., 2022).

An increase in anthropomorphism occurs as more users find it challenging to tell whether an online persona is real or not. "The absence of differentiation between virtual and human beings may present problems in the future and lead to moral dilemmas" (Hofeditz et al., 2022, p. 7, as cited in Batista da Silva Oliveira & Chimenti, 2021). The idea of anthropomorphism in relation to virtual influencers will be covered in the section that follows, along with how these entities frequently resemble people more than actual people do.

3.4.1 Anthropomorphism

"The practice of attributing distinctly human-like emotions, mental states, and behavioral traits to inanimate objects, animals, and generally to natural occurrences and supernatural beings" is known as anthropomorphism (Salles, Evers, & Farisco, 2020, p. 89, as cited in Airenti, 2015; Epley, Waytz, & Cacioppo, 2007). "It is a widely recognized phenomena, and many associate it with mythical entities, animals, or inanimate objects" (Salles et al., 2020, p. 89). Anthropomorphism arises from both the urge to effectively interact with the world and the inclination to establish connections with non-human entities when humans are not present. These factors act as motivating forces that facilitate the formation of human-like emotional bonds with such entities (Salles et al., 2020, as cited in Epley, Waytz, Akalis, & Cacioppo, 2008).

Virtual influencers exhibit complicated emotions in addition to having a human appearance (Moustakas et al., 2020). For instance, Lil Miquela expresses in one of her posts, "Now I'm eating my feelings" as seen in the Figure 3.10 (Moustakas et al., 2020; Sousa, 2018). This closely reflects how influencers on social media engage with their followers. Virtual influencers resemble humans in terms of appearance, expressions on their faces, personalities, and social interactions (Park et al., 2021). Users find it difficult to tell whether these virtual influencers are human, robot, or artificial intelligence, as was indicated in the section above. The anthropomorphic characteristics of the virtual influencer tend to raise questions in the minds of followers. A study that identified five criteria to identify virtual influencers, one of which was anthropomorphism/humanization, was referenced in the section 3.3.1 where the marketing effectiveness of virtual influencers was reviewed. Furthermore, their research demonstrates that when followers have trouble identifying a virtual influencer, many of them question and criticise them, but some also provide them support and expressions of gratitude (Batista da Silva Oliveira & Chimenti, 2021). Shudu's high realistic appearance has caused many users to question whether she is real or not. Nevertheless, it's essential to note that the behavior of a virtual influencer is just as significant as their appearance (Batista da Silva Oliveira & Chimenti, 2021). As an example which is shown in this paper, let's take into account the enormous worldwide followings that social media influencers and celebrities have amassed (Batista da Silva Oliveira & Chimenti, 2021). Similarly, Lil Miquela, who has a devoted group of fans known as the Miquelites as mentioned earlier, receives support from her fans when she shares emotional content (Batista da Silva Oliveira & Chimenti, 2021). "When fans see Lil Miquela shedding tears, they respond with comments of encouragement and advice to help lift her spirits" (Batista da Silva Oliveira & Chimenti, 2021, p. 17). One of the interviewees added that "as virtual influencers become more human, the distinction between fiction and reality blurs and everything gets more difficult to understand" (Batista da Silva Oliveira & Chimenti, 2021, p. 17). There was also a brief introduction to parasocial theory in this study; however, 3.4.4 will provide a more thorough discussion about it. Although there are many differing views on what constitutes authenticity for a virtual influencer, their study found that the more anthropomorphic the virtual influencer, the more authentic they would be (Batista da Silva Oliveira & Chimenti, 2021).



Figure 3.10: "Now I'm eating my feelings" from (Sousa, 2018)

The anthropomorphic characteristics of a virtual influencer allow for social and emotional interactions with individuals (Park et al., 2021). Influencers, both real and virtual, start to resemble one another quite closely. The paradigm known as Computers Are Social Actors (CASA) can be implemented here since it suggests that "people engage socially with computers that display qualities that are similar to those of humans", such as chatbots and in this case, virtual influencers (Park et al., 2021, p. 2). People often project their social relationships onto these robots due to the feeling of social presence, which suggests that users embrace virtual agents as though they were real people (Arsenyan & Mirowska, 2021, as cited in Potdevin, Sabouret, & Clavel, 2020).

Although the study by Arsenyan and Mirowska (2021) was addressed a section above, the research topic regarding how similar human and virtual influencer behavior is, was overlooked. Their findings indicate that, in comparison to anime virtual influencers (AVI) and human influencers (HI), the human virtual influencer (HVI) had the fewest posts (Arsenyan & Mirowska, 2021). The HVI obtains the highest likes per post in terms of the total likes (Arsenyan & Mirowska, 2021). When compared to HI, HVI and AVI have more positive posts, and HVI seems to utilize more derogatory language and profanities (Arsenyan & Mirowska, 2021). This is intriguing since they exhibit more emotion than a human influencer would, raising the question of whether they are attempting to act more human than they already are. Their research revealed that virtual influencers display more anthropomorphic characteristics than initially believed, which can aid users in social interaction but also create a sense of unease (Arsenyan & Mirowska, 2021). The HVI implies anthropomorphism by closely resembling a human or attempting to appear more human-like for her followers (Arsenyan & Mirowska, 2021). Additionally, their voices, which both virtual influencers seem to rely on in their videos, can also be seen as anthropomorphic traits (Arsenyan & Mirowska, 2021). Research has shown that engaging with anthropomorphic objects has positive effects on social engagement, but an excessive amount of human-like qualities could make people feel uncomfortable which supports the uncanny valley hypothesis (Arsenyan & Mirowska, 2021, as cited in Gray & Wegner, 2012; Stein, Liebold, & Ohler, 2019)

Ahn, Cho, and Sunny Tsai (2022) carried out a study to investigate at how users'

attitudes about sponsored posts from virtual influencers shift depending on how attractive and socially engaged they are regarded to be. Lil Miquela was selected as the virtual influencer for their study, and they studied at her persuasiveness using the CASA paradigm (Ahn et al., 2022). There are around eight hypotheses in this study, however only two will be covered in this thesis because they are concerned with anthropomorphic characteristics. The two hypothesis chosen are: "The relationship between perceived anthropomorphism and social attractiveness will be mediated by perceived social presence" and "The relationship between perceived anthropomorphism and physical attractiveness will be mediated by perceived social presence" (Ahn et al., 2022, p. 329). This study conducted an online survey with individuals who are very active on social media (Ahn et al., 2022). This study's results suggest a positive correlation between anthropomorphism and the social presence of virtual influencers (Ahn et al., 2022). Participants observed that Lil Miquela's disposition and emotional expression enabled her to establish meaningful connections with individuals, which enhanced her appeal and likeability (Ahn et al., 2022). Lil Miquela's anthropomorphic features enhance both the social and physical appeal of her presence, supporting the notion that brand endorsers should consider collaborating with virtual influencers to increase their persuasiveness (Ahn et al., 2022). Thus, highly anthropomorphic virtual influencers, such as Lil Miquela, have the potential to be advantageous for brands, particularly those operating in the beauty and fashion industries.

Anthropomorphic features may benefit a brand, but it is crucial to consider their impact on individuals. According to the aforementioned studies, users can experience a sense of comfort and connection with virtual influencers. However, individuals may suffer from a distorted perception of relationships if they emotionally invest in a fictional character. Additionally, since users interact with a controlled persona, they may develop high levels of social anxiety in the future. The virtual influencers' creators argue that, as supported by studies the above, virtual influencers must be constructed as highly realistic characters with engaging backgrounds to become popular. Possessing these qualities allows virtual influencers to attain fame and even secure job opportunities that are challenging for real individuals to acquire. The ability to modify their appearance at any time further contributes to the virtual influencers' realism. It is evident from comments that virtual influencers, like Lil Miquela, are presented as attractive, leading individuals to either admire or objectify them. Creators must acknowledge that while incorporating prominent anthropomorphic attributes in virtual influencers may benefit brands and the virtual influencers themselves, it may cause discomfort to followers who view someone with such seemingly 'perfect' features.

3.4.2 What are the distorted beauty ideals that virtual influencers create, and are they feeding their follower the idea of being 'perfect'?

Beauty standards appear to be prevalent, especially in the age of social media where individuals have access to more content featuring celebrities, influencers, and their peers. Virtual influencers promote the same idea of adhering to a particular beauty standard as do social media influencers. Due to their high humanistic traits and ease with which they may be altered to, they appear to adhere to the most recent beauty trends that everyone adopts. One common trait virtual influencers and real influencers have is that everyone seems to be "attractive" or close to being "perfect". For virtual influencers, its the creators editing them and for humans its the different makeup styles or fad diets which makes them seem conform to the beauty ideals.

Virtual influencers seem to promote various beauty ideals that currently exist. Lil Miquela, Shudu Gram and Noonoouri all seem to fit the "thin ideal". Other than them, most virtual influencers follow this standard and none are depicted with a different body type. This demonstrates how diverse and inclusive social networking platforms and the fashion industry are shown to be, however the developers of virtual influencers appear to be moving backwards from the progress made (Batista da Silva Oliveira & Chimenti, 2021). Another beauty ideal is where virtual influencers have are their distinctive and "attractive" features. Lil Miquela appears to have glowing complexion, arched nose, defined brows, and freckles. Shudu Gram, on the other hand, has attributes that are shown as being "unreal" making it difficult to determine if she is real or not. Her supporters commented on one of her posts: "Gosh. If perfect was a person" (S. Gram, 2021). She is shown as being eminently skinny, tall, dark-skinned, with plumped lips, a slim face structure, defined brows, and a buttoned nose.

In section 2.2, a few beauty ideals regarding social media influencers and traditional celebrities were introduced. The first and the most popular one was the thin ideal which seems to always come back regardless of the diversity in the media now. This thin ideal wields heavy influence and as trends change, the pressure to conform to those ideals also increase (Bauer, 2022). As mentioned above, this ideal also applies the same to virtual influencers. Lil Miquela and Shudu Gram are shown to be extremely thin which can be concerning for their followers. Especially Shudu Gram, who appears to look just like the current models in the fashion industry.

Having a light complexion is another ideal of beauty in various cultures, such as India. This might not apply to virtual influencers specifically because they are portrayed as being diverse, as proven by Lil Miquela's slight tan for her Brazilian heritage and Shudu Gram's representation of South African roots. Her skin tone is shown as a standard that white supremacists are attempting to exploit, leading to the creation of this fantastical perception of Black culture and the abuse of its principles (Sobande, 2021). Shudu Gram's creation and use as a brand representative, however, have drawn a lot of criticism. How would Black people feel and be aware that an avatar that wasn't even created by them is exaggerating their culture if this practice eventually becomes normalized?

The usage of beauty filters was the final beauty ideal that was discussed in the chapter before. On social networking apps, applying filters and editing to photos has become so normalised, and it appears that many users do so in order to keep up with the latest in beauty trends. It's difficult to tell whether a person is genuine or phony because everyone seems to be constantly filtered and manipulated on social media. So when virtual influencers like Lil Miquela, who has a airbrushed face, was introduced, people questioned whether she was real because she appeared to look like any another person on Instagram because of her filter-like appearance. Due to the extent to which we frequently conform to beauty standards, they fit perfectly with our reality. When Lil Miquela was first questioned if her appearance was edited on a interview with Shane Dawson her response was "Can you name one person on Instagram who doesn't edit their photos?" (Petrarca, 2018a). Lil Miquela's only advantage over real influencers is that she can remain a youthful 19-year-old for all time, preserving her beauty. She is merely a filtered, unrealistic representation of us aiming to accentuate the qualities that we lack in our everyday lives because her entire personality and appearance were manipulated using a CGI software (Klein, 2020; Drenten & Brooks, 2020).

Virtual influencer's ability to influence people into believing they are always "beautiful" and "attractive" are at an all time high which has its benefits to their creators but what about the way they are brainwashing followers into believing they are perfect since

they don't appear to have any flaws? Does being attractive always benefit one's followers, and if so, what benefits might one expect? According to the attractiveness stereotype, people are more likely to feel positively about attractive individuals in social environments (R. F. Khan & Sutcliffe, 2013, as cited in Dion, Berscheid, & Walster, 1972). R. F. Khan and Sutcliffe (2013) intended to investigate how much an artificial agent's attractiveness contributes to its ability to persuade people. "The human-agent interaction does get affected by the attractiveness stereotype as studies have revealed that when attractive female agents are preferred more by users than unattractive female agents" (R. F. Khan & Sutcliffe, 2013, p. 143, as cited in R. Khan & De Angeli, 2009). After conducting their experiment with about 58 participants their findings revealed that attractiveness of an agent affects a users perception and behaviour as they are more persuasive to influence a users decision making than an unattractive agent (R. F. Khan & Sutcliffe, 2013). Users evaluated the attractive agent for their personality traits and also are perceived more favourably. Their study also revealed that in the realism and anthropomorphism measures the attractive agent exhibited more human-like characteristics than the unattractive agent (R. F. Khan & Sutcliffe, 2013). This is similar to the results even found in the anthropomorphism section. This research helps confirm that virtual influencers which are shown to be attractive also has its benefits with their ability to influence a user more.

"Social media and technology idealize human bodies in unrealistic manner, which leads to the industrialisation of bodies" (Ji, Linghu, & Qiao, 2022, p. 785). Virtual influencers are portrayed as having the societal norms of personality and appearance. As a result, there is more emphasis placed on a woman's physical appeal, and viewers are more likely to think that a fictitious persona is physically more attractive than real people (Ji et al., 2022). Ji et al. (2022) identified two implications for users if marketers continue to adopt this idealized woman portrayal. The first is that "customers who use their products will typically possess the same flawless beauty as a virtual influencer, and the second is that female users will compare their bodies to those of virtual influencers and experience negative emotions if their bodies differ from those of virtual influencers" (Ji et al., 2022, p. 785). The abundance of information available on social media will always keep women worried about having the perfect figure (Ji et al., 2022). "The portrayal of the ideal flawless face, figure, and persona—which in reality never happen—can go a little further with technology than with conventional media" (Ji et al., 2022, p. 785). Virtual influencers are "portrayed as having a perfect lifestyle as well as the ideal physical attributes" (Ji et al., 2022, p. 785). According to Ji et al. (2022), individuals may experience "aesthetic simplification" as a result of societal pressure to conform to conventional beauty standards. From an aesthetic standpoint, influencers are perceived as a manifestation of the male gaze. In a male-dominated culture, virtual influencers have amplified unrealistic beauty standards for women, further perpetuating the issue (Ji et al., 2022). The distinction between what is real and what is articial continues to be muddled by their presence. A highly realistic, perfect anthropomorphic physique may cause individuals to be concerned more about their body image (Ji et al., 2022).

Deng and Jiang (2023) conducted a study to examine the impact of social media influencers and virtual influencers on an individual's appearance anxiety in order to better understand how users' perceptions are affected by virtual influencers, particularly in the appearance criteria. Women experiencing appearance-related anxiety often view themselves as objects and subject their physical appearance to constant scrutiny, ultimately leading to adverse effects on their well-being (Deng & Jiang, 2023). The social comparison theory is supported by the observation that individuals often engage in self-evaluation by comparing different facets of themselves with those of their peers (Deng

& Jiang, 2023). Numerous research, including those addressed in section 2.2, suggest that the ideal image displayed in media influences a user's self-consciousness. Their first research question concerns if the user's appearance anxiety is affected differently by a virtual influencer's pictures than by a real-life influencer (Deng & Jiang, 2023). Their second research question concerns if the comparison of the users' states of appearance is affected differently by images of real-world and virtual influencers (Deng & Jiang, 2023). "Participants displayed greater levels of appearance anxiety in response to the human influencer and virtual influencer photos than in response to their control images" (Deng & Jiang, 2023, p. 4). Surprisingly, the findings of the first research question indicated that individuals experience greater levels of appearance-related anxiety in the presence of real people as compared to virtual ones. This phenomenon may be attributed to the fact that individuals perceive real people to be more authentic and trustworthy (Deng & Jiang, 2023). According to this study, there exists a mediating relationship between an individual's exposure to social media influencer photos and an individual's state of appearance anxiety (Deng & Jiang, 2023). The results indicate that this relationship is moderated by the type of influencer, thereby highlighting the impact of the influencer type on users' appearance anxiety (Deng & Jiang, 2023). Their research is able to pinpoint the effects of social media influencers and advises that, in order to lessen this adverse effect, additional endorsements from virtual influencers should be made. However, they also recommended that the virtual influencer not be overly human-like because people often compare themselves to those who are similar to them, so creators should preserve some of the digitized qualities (Deng & Jiang, 2023).

According to the aforementioned studies, having an attractive virtual influencer makes people compare themselves to them more, which can have harmful impact on a person's self-esteem. These findings complement those addressed in section 2.2 which examines studies on how users are influenced by various beauty ideals promoted by social media influencers. As a result, the findings for human influencers also apply to virtual influencers, as they are increasingly resembling humans in all aspects due to their high anthropomorphic traits. As mentioned in chapter Social Media Influencers and supported by Chae (2017), people are envious of social media influencers since they resemble them more than traditional celebrities. When a person is exposed to these warped beauty ideals through virtual influencers, they become even more envious of the influencer because of their regular exposure to them. The process of social comparison that was described in the previous paragraph leads to envy as supported by the studies in the previous chapter (e.g., Chae, 2017; Bauer, 2022). Viewing a virtual influencer triggers the comparison process, which breeds envy, in individuals with high public consciousness but poor self-esteem. Women internalize beauty ideals, particularly when they see thin bodies (Bauer, 2022). An experiment testing how people perceive thinner bodies and how it affects them while viewing influencers or celebrities was covered in the earlier chapters. According to their findings, individuals who experience high levels of exposure and poor self-esteem are more likely to find the thin ideal attractive, which raises their body internalization score and makes them want to resemble the influencers (Bauer, 2022). Shudu Gram and Lil Miquela portray the thinner ideal, thus viewers are fed the idea of being thin ideal even through virtual influencers. When viewing Lil Miquela's Instagram posts, it appears as though an actual woman is posing with various real celebrities and Lil Miquela's head is just being added in post-production. What would happen if the person portraying Lil Miquela endured bodily changes, such as gaining weight beyond what her creators had anticipated? She would be promptly swapped out for someone who matched the unrealistic ideal created for Lil Miquela. The consequences of body positive images and how they

affect their users' mental health were also covered in the previous chapter (Cohen et al., 2019). The study found that body-positive media lifts women up rather than bringing them down (Cohen et al., 2019). Instead of constantly conforming to the existing norms, virtual influencers who start to embrace diversity in their bodies could have a beneficial impact on their audience.

Virtual influencers' exaggerated portrayals of beauty not only feed the idea of being perfect to the users but also have an adverse effect on their self-esteem, internalization of their bodies, and negative self-talk. Social media influencers and virtual influencers' representations of beauty are commonly recognised even if they are harmful to the users, and the only way to improve on them is to be more diverse when designing these characters and taking into consideration various cultural norms.

3.4.3 Are professionals losing their confidence and jobs due to these virtual influencers?

Virtual influencers not only have an impact on users' body image but also raise concerns about how users might be replaced in the field. For instance, Lil Miquela and Shudu Gram have already partnered with and supported luxury companies, which future models might not have a chance to work with. In the media and fashion industries, virtual influencers are considered to be most well-liked. Lil Miquela has worked with numerous brands, including Samsung and Paper Magazine, and was listed among TIME magazine's 25 "Most Influential People on the Internet" (Conti et al., 2022; Petrarca, 2018a; Robinson, 2020). Additionally, Shudu Gram has made her way up to working with Balmain, who also debuted two new virtual models for their line, Zhi and Margrot, who were also revealed in the sections previously (Sands et al., 2022). The three virtual models are depicted in Figure 3.11. Similar to Balmain, Prada developed Candy, a computer-generated model, and even KFC has a virtual influencer used for marketing its products namely Colonel Sanders (Choudhry et al., 2022).



Figure 3.11: "BALMAIN'S NEW VIRTUAL ARMY" from (S. Gram, Margot, & Zhi, n.d.)

Will these virtual influencers replace actual people in the fashion industry if they continue to be created for specific brands? Cameron, the creator of Shudu, has expressed the belief that virtual models such as Shudu will eventually coexist with human models rather than fully replacing them in the fashion industry (du Parcq & London, 2018). However, it is

important to note that Cameron's perspective on this matter may be biased. Virtual influencer opportunities were discussed in 3.3.1, and it was explicitly stated that their growth was foreseeable and would continue to rise. In comparison to human influencers, opportunities and difficulties for virtual influencers are also highlighted in that section. There are more opportunities for marketers to employ them since they can be more flexible, avoid controversies, for example, by not posting risky tweets that could later be used against the brand, and be more creative with their content than they can with traditional channels (e.g., Moustakas et al., 2020; Conti et al., 2022; Batista da Silva Oliveira & Chimenti, 2021). Additionally, there is exclusivity with the brand because this virtual influencer will only be used for that brand, as illustrated by the example given above for Candy and Colonel Sanders (Conti et al., 2022). The difficulties that brands may encounter while dealing with virtual influencers were discussed by research in the same section, but Batista da Silva Oliveira and Chimenti (2021) questioning those helped to clarify the extent to which these challenges could exist. The power of a brand is also increased by the ability of virtual influencers to duplicate brand ambassadors in the metaverse (Sands et al., 2022). It was also mentioned how brands are also digitizing real models as well to include them in online fashion shows (Sands et al., 2022). The same section also includes a study that explores what occurs when a virtual influencer commits a transgression. The study's findings suggest that virtual influencers are treated similarly to human influencers and will be replaced with a human influencer or celebrity (Thomas & Fowler, 2020). Section 3.3.1 explains why virtual influencers are appealing to brands despite the drawbacks they provide since they can be less expensive to hire for specific tasks than real people, and as a result, they will likely continue to be successful in the future. The emergence of virtual influencers leads one to the conclusion that there is a significant possibility that people may be replaced by them.

In section 3.4, a variety of studies were addressed that illustrated how people viewed virtual influencers as "unique" and enjoyed the entertainment they presented to its users (Choudhry et al., 2022). However, several of the research acknowledge that users find them dishonest, unreliable, and untrustworthy (e.g., Choudhry et al., 2022; Hofeditz et al., 2022; Arsenyan & Mirowska, 2021). If virtual influencers take over jobs in the future, users can get adapted to this new change or either it can negatively affect them. Already virtual influencers like Shudu are affecting users and different cultures. As highlighted numerous times throughout this thesis, Shudu has received a lot of criticism. "Using Shudu is a reflection of racial capitalism, where Black people and cultures are solely valued for marketing and other requirements" (Sobande, 2021, p. 136). "Virtual influencers like Shudu can satisfy whatever exaggerated stereotypes about Black people that exist at the moment and are desired by marketers" (Sobande, 2021, p. 136). Shudu is an example of digital racism since it allows designers to portray diversity without really using Black people, which might lower one's sense of self-worth and confidence (Sobande, 2021). Aspiring professionals from this culture would not only feel neglected but also have a pressure to be as good or attractive as them (Tietjen, 2018). Even for the case of Lil Miquela, as mentioned in the section above, the person portraying Lil Miquela would be swapped for a version which Brud wants, hence virtual influencers are already replacing humans.

With the fashion industry embracing digitization, virtual influencers are becoming increasingly popular due to their ability to promote brands more effectively than traditional celebrities. However, research in section 3.4.2 indicates that users may be adversely affected by virtual influencers' appearance, potentially leading to a decrease in their self-esteem and self-confidence. This phenomenon is also relevant to other aspects of virtual

influencers, as demonstrated by the example of Shudu and Lil Miquela and their potential for job replacement. Despite limited research on this subject, the available findings suggest that virtual influencers may have a negative impact on professionals' employment prospects in the age of virtual influencers.

3.4.4 Are virtual influencers creating a relationship with their followers?

At the outset of this chapter, users' perceptions of virtual influencers and the factors that contribute to their appeal was discussed. However, it was not addressed whether followers develop relationships with virtual influencers, and if so, how such relationships might affect them. While parasocial interaction was introduced earlier in the chapter, it was also not comprehensively expounded upon. Therefore, to provide a basis for comprehending the interaction between a virtual influencer and a user, a study on the parasocial relationship between social media influencers and their followers will be investigated. Given virtual influencers' highly anthropomorphic traits, research pertaining to social media influencers also applies to some extent to virtual influencers.

According to Aw and Chuah (2021) parasocial relationships are "one-sided relationships that a person develops with mediated personas, including social media influencers" (Aw & Chuah, 2021, p. 148, as cited in Horton & Richard Wohl, 1956). Through experimentally examining the consequences of the influencer's attempt to influence people, their study investigated the parasocial relationship between a social media influencer and their followers (Aw & Chuah, 2021). Initially, parasocial interactions were only formed with traditional celebrities, but as influencers have become more prevalent, this paradigm has been expanded to include social media influencers (Aw & Chuah, 2021, as cited in Labrecque, 2014). Various studies have also shown that interactions on social media tend to create these parasocial relationships with their followers and which also leads to high trustworthiness and a sense of connection with them (Aw & Chuah, 2021). The creation of these relationships also helps brand endorsements which social media influencers seem to promote as followers are interested in buying the product more (Aw & Chuah, 2021). An influencer's qualities can influence the development of these relationships and this study examines the effect of these characteristics on the relationship. Attractiveness, prestige and expertise are the three traits chosen in this study to view its influence on parasocial relationships (Aw & Chuah, 2021). Also, the notion of self-discrepancy is addressed in their study to determine whether it mediates the relationship between each characteristic and the parasocial interaction (Aw & Chuah, 2021). The self-discrepancy theory was also introduced in the section 2.2 while discussing the study of MacCallum and Widdows (2016) where they examined how modified pictures affect one's body satisfaction. Aw and Chuah (2021) results showcased that an attempt to influencer followers social media influencers tend to form "illusionary intimacy" between them (Aw & Chuah, 2021, p. 153). The more a social media influencer is visually attractive the more they tend to form relationships with them (Aw & Chuah, 2021). Previous studies which were also mentioned in this thesis also supported this finding if influencers are perceived to be visually appealing, users will tend to pay more attention and will want to interact with them more leading to the formation of these relationships (R. F. Khan & Sutcliffe, 2013; Aw & Chuah, 2021). Displaying prestige and expertise will also positive affect the parasocial relationship between the user and an influencer (Aw & Chuah, 2021). Prestige as a trait is recognized as an important factor because when users interact with prestigious people their own perception seems to improve (Aw & Chuah, 2021, as cited in Lo, 2008).

Previous studies also revealed that having knowledge of brands or certain topics attracts users into engaging with them (Aw & Chuah, 2021). Regarding the role self-discrepancy, their findings revealed that users with low self-discrepancy will have an higher impact on the parasocial relationships which are formed (Aw & Chuah, 2021). Users that have a "high degree of self-discrepancy are further from their ideal selves, therefore they won't consider prestige and attractiveness necessary to have parasocial interactions hence less likely to form these relationships" (Aw & Chuah, 2021, p. 153,154).

The aforementioned study above was able to introduce parasocial interactions and the different traits which helps to create these relationships with users in social media influencers. Attractiveness was one of the influencer's traits and it positively affects the parasocial relationship. Virtual influencers possess attractive qualities as mentioned heavily in the first sub-question. This attractiveness stereotype affects the perception of users and how they may be more influenced more. This was also supported with the study of R. F. Khan and Sutcliffe (2013) and Batista da Silva Oliveira and Chimenti (2021). Hence, the ability for virtual influencers to create parasocial relationships with their followers is a high possibility.

Molin and Nordgren (2019) conducted a case study to understand how consumers react to their interaction with virtual influencers and what factors in source credibility foster parasocial relationships with them (Molin & Nordgren, 2019). This study was briefly introduced to make comparisons with Noonoouri and Lil Miquela in section 3.2.3 but now this sub question will go dwell deeper to understand the effects of parasocial interaction between a user and the virtual influencer. Their study focused on parasocial interactions (PSI) rather parasocial relationships and the difference between the two is that parasocial relationship is a more long term process (Molin & Nordgren, 2019, as cited in Dibble, Hartmann, & Rosaen, 2016). Their study is trying to understand if factors of source credibility in relation to parasocial interactions hence it is important to define source credibility. According to Molin and Nordgren (2019), source credibility is "to emphasize the need of the communicator's credibility for a message to have a persuasive effect on the receiver" (Molin & Nordgren, 2019, p. 7, as cited in Hovland, Janis, & Kelley, 1953). There are two factors of source credibility: trustworthiness and expertise (Molin & Nordgren, 2019, as cited in Hovland et al., 1953). The development of parasocial relationships has always been positively correlated with source credibility, according to earlier studies, and the likelihood of parasocial interactions is increased when social media users specifically utilize these apps for relationship-building and pleasure (Molin & Nordgren, 2019, as cited in Chung & Cho, 2017 & Yuan, Kim, & Kim, 2016). Expertise was also one of the factors used in the study in the paragraph above and that also shown to be positively affect the parasocial relationship between the user and influencer. This study conducted "semi structure interviews and used Lil Miquela and Noonoouri as their virtual influencers" (Molin & Nordgren, 2019, p. 11). They divided the information about virtual influencers into: "perceived humanness, perceived social presence, perceived social interactivity, perceived trustworthiness, perceived attractiveness, perceived similarity, perceived expertness and parasocial interaction of virtual influencers" (Molin & Nordgren, 2019, p. 6,7). Their results suggested that users were able to interact with these virtual influencers as they did not know how they function and hence it was revealed PSI is dependent on their robot acceptance (Molin & Nordgren, 2019). Being more human-like also increases the PSI between the user and virtual influencer (Molin & Nordgren, 2019). However, some users felt unpleasant as Lil Miquela seems too realistic at times which in turns supports the uncanny valley hypothesis leading to lower PSI with her. This also complements with the findings which were revealed in the section of anthropomorphism

where users are able to open up to virtual influencers more due to their realistic physical and behaviour features however some were not able to due to feeling strange. Hence, to develop PSI it is important the virtual influencer is similar to a human but at the same time the similarities cannot be too much (Molin & Nordgren, 2019). When it comes to attractiveness of virtual influencers, if they are promoting too many brand endorsements they may not come off as very attractive which leads to less of PSI and less perceived trustworthiness (Molin & Nordgren, 2019). The most crucial element for establishing PSI with users, according to their analysis, is trustworthiness. Users cannot trust virtual influencers as much as actual influencers since they pose as real people and lack transparency is associated with them (Molin & Nordgren, 2019). Similar results were also provided in the study of Hofeditz et al. (2022), which examined the trustworthiness of a virtual influencer. Molin and Nordgren (2019) study was able to narrow down the key factors of source credibility to PSI and those were trustworthiness, attractiveness and similarity. When compared to human influencers, the PSI is challenged as they have a robot like function and they are owned by firms but that does not mean that virtual influencers are not able to engage in parasocial interactions with their followers (Molin & Nordgren, 2019).

The studies above was able to give an understanding of parasocial relationships with a social media influencer and with a virtual influencer. To make a comparison between the two, Stein, Breves, and Anders (2022) conducted a study to examine the parasocial interaction with a human influencer and a virtual influencer and compare the two. To test this they hypothesized that

> "PSI with humans will be stronger than digital entities, PSI will be mediated with human-likeness, mental human-likeness, perceived similarity, wishful identification and the stronger the PSI is the result of higher enjoyment and motivation for engagement" (Stein et al., 2022, p. 6-7).

The study was an online experiment of 179 participants where they have to watch videos of a human video game streamer and a digital video game streamer (Stein et al., 2022). Their results showed that the human-likeness and perceived similarity create indirect effects for PSI for any influencer (Stein et al., 2022). Their findings also indicate that users viewed the digital streamer with less mental human-likeness compared to the human streamer which also resulted in lower PSI (Stein et al., 2022). As participants viewed the human similar to them it resulted in higher PSI with them however the users showed a stronger interaction with the virtual streamer. Hence, there is a positive mediating effect of mental human-likeness and perceived similarity in PSI (Stein et al., 2022). The enjoyment and willingness to engage with both influencers was also positive in relation to PSI (Stein et al., 2022). Their study revealed that users preferred humans over a virtual character to create parasocial relationships however in terms of interaction they both had similar levels of PSI (Stein et al., 2022).

There are different factors of creating parasocial relationships/interactions with virtual influencer and the important ones mentioned above seem to be: attractiveness, trustworthiness, expertise, similarity and mental human-likeness. According to the research, it is possible to form parasocial relationships with virtual influencers, although the process may be hindered by their lack of trustworthiness. Despite the challenges, even a small percentage of successful relationships with virtual influencers can have a significant impact due to their substantial following. Additionally, it is important to note that there may be negative consequences associated with forming these relationships. For instance, followers already perceive these virtual influencers as if they are real as seen in section

3.4.1. Users think they are creating an intimate relationship with influencers which may give the illusion of a parasocial relationship which indicates mutual friendship (Arsenyan & Mirowska, 2021). This also does not help when users also compare themselves with virtual influencer which can make this effect worse for themselves. Even in the study of Batista da Silva Oliveira and Chimenti (2021), interviewees mentioned the psychological effects of creating relationships with virtual influencers. Some state "the more human the virtual influencer becomes, the more the users will feel closer to them due to their high similarity and users will be getting influenced by someone who does not even exist in the real world" (Batista da Silva Oliveira & Chimenti, 2021, p. 17).

After reviewing YouTube or Instagram comments from Lil Miquela's account some users comment: "y'all ever get real sad remembering lil miquela isn't actually real and is a social experiment? Like sometimes I connect so well with her I forget she doesn't actually exist" (Miquela, 2019a). Due to Lil Miquela's high anthropomorphic features and users connect with her more and find comfort with her as also supported with the comment above. As such, it is worrying if users develop ties with virtual influencers and what psychological repercussions they would have on a user. There are already a number of negative consequences associated with the emergence of social media influencers, but if a false artificially intelligent avatar were to start influencing people in the future the negative effects will be heightened.

Chapter 4

Discussion

Virtual influencers portray a 'perfect' life with their appearance, personality and their story-lines. "Just how fame is a hashtag away for social media influencers", for virtual influencers its just one edit away (Marwick, 2015). What creators and brands don't realise that to fit their aesthetic standard of how people look they overlook the consequences and harm that can happen to their followers. These virtual influencers are being specifically watched by young audiences and with their unrealistic portrayal of how one should look and act puts pressure on them to be like them and can mentally affect them later.

The first sub-question, which is **"What are the distorted beauty ideals that virtual influencers create, and are they feeding their follower the idea of being 'perfect'?"**, gave an overview of the different beauty standards which virtual influencers flaunt and the parallels between those standards and those of social media influencers. This question was answered with the help of the sections 2.2 and 3.4.1. The distinction between social media influencers and virtual influencers is minimal as virtual influencers also aim to present themselves as human-like as possible through their anthropomorphic attributes, while still adhering to conventional beauty standards in a distinct manner. As even mentioned before an attractive virtual agent persuade users more and users also desire to interact with them and be persuaded by them (R. F. Khan & Sutcliffe, 2013). So does this mean that us humans have pushed these companies to create these unrealistic digital avatars as we are the ones more persuaded with their attractiveness? If this is even the case, users are also drawn to virtual influencers for other reasons like they are fascinated by how digital entities like them can be so human but also not be real. This also questions a user's identity as well and which world do they fit in, the real world or the fake one created by these virtual influencers? (Robinson, 2020) Hence, when virtual influencers like Lil Miquela and Shudu Gram are showcased in media not only do they undermine the progress made in the diversity of the fashion industry but also affect their users with their constant portrayal of being 'perfect' (Tietjen, 2018). Followers end up starting a social comparison process with celebrities, influencers and peers that can result in being envious to them, lowering their self-esteem and body satisfaction especially when internalising these ideals (Chae, 2017; Bauer, 2022). However, when this process is done with virtual influencers the negative effects for users are more harmful. Virtual influencers are giving more importance to how a woman should look and behave which is ironic as they are not human but still tend to wield so much influence on these ideals.

This study was confined to female virtual influencers and did not encompass any male virtual influencers. It is crucial to investigate whether male virtual influencers also uphold traditional beauty ideals for men. Shudu Gram's creator developed many male virtual influencers as seen on the Diigitals website, and it was discovered through Instagram

comments from one of their digital models that he was shown to be highly 'unrealistic' and is being objectified and sexualized. This topic should be investigated more because in the studies discussed in this thesis most participants were female either due to lack of gender ratio and its needed to understand if males are also affected by beauty ideals and if also affected with male virtual influencers (Chae, 2017). According to Mills et al. (2017), their study indicated that societal beauty ideals and associated consequences, such as body dissatisfaction, affect both genders, emphasizing the need for further investigation into male virtual influencers in the future.

The second sub-question, which is **"Are professionals losing their confidence and jobs due to these virtual influencers?"**, discusses how virtual influencers could pose threat to replacing humans in context to a user's jobs. This sub-question was answered using the 3.3.1 section. It was revealed in that section how virtual influencers create more opportunities for brands and how they can collaborate with them and what challenges they bring. Due to a virtual influencer's ability to be hyper-realistic and how they have no control over what they post makes them attractive to brands to use them. Most findings suggest that virtual influencer is the future of influencer marketing and how they bring consistency and reliability unlike social media influencers. This results in using virtual influencers for more campaigns than actual humans especially when they have to control costs of a marketing campaign (Sands et al., 2022). Brands are specifically introduced virtual influencers to fit to their aesthetic standard of the products they want to endorse. Virtual influencers are well-liked by brands and if they continue to make influencers and models tailored to their requirements, professionals would have to compete with a highly unrealistic avatar for the jobs they desire. For the case of Shudu Gram and Lil Miquela, followers will lose confidence in the presence of them and how they are promoting even tangible products which in reality they can never use as supported by many studies (e.g., Moustakas et al., 2020; Sands et al., 2022). The creators are profiting of these virtual influencers and all the earnings which could have gone to a real human is now being used on a fake influencer. In my view, Shudu Gram and other digital models should be discontinued as they only perpetuate cultural stereotypes and reinforce media-driven beauty ideals. While one study suggested that virtual influencers could have a place in the metaverse and digital realm, their current presence in both the digital and physical lives of humans is perplexing and unnecessary (Sands et al., 2022). It is crucial to investigate the extent and appropriateness of using virtual influencers and when a line should be drawn. With the rise of virtual influencers, individuals must now compete with an entity that doesn't require basic human needs such as sleep and sustenance, which could lead to negative consequences for followers. The increasing prevalence of virtual influencers not only threatens job opportunities, but also other aspects of life.

The final sub-question, which is **"Are virtual influencers creating a relationship with their followers?"**, helps to understand if virtual influencer and followers foster any relationships. This question was answered with the background presented on how users perceive these virtual influencers (chapter 3.4) and 3.4.1 section. Due to virtual influencer's ability to engage so frequently with their followers can create an illusion in their followers mind that they have a mutual relationship with another (e.g., Batista da Silva Oliveira & Chimenti, 2021; Park et al., 2021).Virtual influencers possess all the attributes necessary for developing a parasocial relationship, thereby necessitating caution by users while engaging with them. Though parasocial relationships are commonly established with celebrities and human social media influencers, forging one with a virtual entity can be perilous for the user. While parasocial relationships with celebrities can have harmful implications for users, the potential negative effects are magnified with

virtual influencers, leading to feelings of loneliness, social isolation, and other adverse mental health outcomes for their followers (Klein, 2020). According to observations made on Instagram and YouTube comments of these virtual influencers , it is evident that users desire to connect with them (Miquela, 2019a; S. Gram, 2021). Lil Miquela, in particular, engages her followers by seeking their opinions on what she should do next, which fosters a sense of connection with her. However, Lil Miquela/her creators should consider reducing her human-like behavior to avoid confusing her followers and creating parasocial relationships with them. Although only a small percentage of users form such relationships with virtual influencers, the magnitude of their following means that even a small percentage represents a significant number of people. It is crucial to remind followers that they are interacting with a virtual entity and to be aware of the potential negative effects that parasocial relationships can have on their mental health.

During the course of my thesis research, I discovered that Lil Miquela describes herself as a robot, but in almost all of her videos and photos, she appears to be a 'game character' come to life. Brud, the creator of Lil Miquela, is deceiving their followers by portraying them as an AI company when they only work with CGI developers. They are instilling false narratives in the minds of users about themselves and of their 'virtual influencers'. Unlike Wilson (Shudu's creator), who has been transparent about his virtual model's motivations, Brud has been tight-lipped about their motivation. While researching, I also observed that The Diigitals, the company behind Shudu, has introduced a new virtual model that portrays an alien. This development is concerning since the company appears to be promoting diversity by placing a virtual representation of a marginalized culture alongside an alien, which in turn dehumanizes people. It is worth examining how virtual influencers can potentially amplify stereotypes and dehumanize marginalized communities, which could be the focus of future studies. It is also noteworthy that The Diigital's roster of virtual influencers lacks representation of white male models, which highlights the company's problematic approach to diversity. This thesis did not address the ethical implications of virtual influencers, particularly in regards to the uncanny valley hypothesis. In my view, virtual influencers are unethical because they erode the distinction between what is real and what is fake. They are creating unrealistic ideals for their followers, robbing a user's opportunity, and influencing one's perception while developing human relationships. Despite this, the future of virtual influencers seems promising, as demonstrated by their increasing popularity among brands and supported by the findings in this thesis (e.g., Moustakas et al., 2020; Batista da Silva Oliveira & Chimenti, 2021; Sands et al., 2022). Lil Miquela will be also be portraying as a 19 year old forever as their followers grow older, which gives her followers the sense of being this young for infinite period. There is also speculation about how virtual influencers could be used in combination with machine learning algorithms and artificial intelligence to create content automatically which can lead to problems (Robinson, 2020). Virtual influencers may face the same ethical quandary that all AI agents do in determining who will be held accountable for the agents harmful decisions. More research on these virtual influencers and the challenge of ethical responsibility should be conducted in the future, as there is presently no research on this important matter.

4.1 Conclusion

The goal of this thesis was to understand the up-and-coming virtual influencers by providing a comprehensive overview of them and examining their dehumanisation effects. The main focus was to understand if the exposure of the beauty ideals presented by virtual

influencers affect their followers' mental health. The section pertaining to social media influencers provided a concise overview of their presentation of unrealistic beauty standards and the subsequent influence on women's perception and internalization of such ideals. These observations were then employed to establish connections between virtual influencers and social media influencers. Furthermore, delving into the historical and purpose of virtual influencers facilitated a deeper comprehension of them, revealing that the notion of fictional celebrities has existed for a considerable period of time. Lil Miquela, Shudu Gram and Noonoouri are introduced as they all represent a different kind of a virtual influencer which helps in differentiating between the types. This thesis provided insights into how users perceive virtual influencers, and the results of several studies indicated that opinions about them are divided. While some users find them intriguing to follow, others are critical of their existence. Therefore, the role of anthropomorphic characteristics in shaping users' perceptions of virtual influencers was examined and the analysis demonstrated that virtual influencers possess anthropomorphic traits, which play a significant role in how people perceive them. These characteristics create a sense of connection with their users and offer brands significant advantages.

Through the exploration of three sub-questions and the subsequent discussion, the research question which is **"To what extent does the exposure of unrealistic beauty standards by virtual influencers affect mental health of its viewers?"** can be answered. In conclusion, virtual influencers present a potential threat to the mental health of their followers, and their portrayal of unrealistic beauty standards only exacerbates this issue. The irony is that virtual influencers are created by us humans and we make them unrealistically beautiful just for us to bare the consequences. It's a viscous circle of who is influencing whom and who is in control? It would not be surprising if in the future, we are living in the world of virtual influencers while they dehumanise us constantly. Hence, further research about virtual influencers is necessary, and followers should be made conscious of their repercussions.

Chapter 5

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