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Faculty of Behavioural, Management and Social Sciences (BMS) Master Thesis

Digital Marketing Communication & Design

MSc. Communication Science

**Are virtual influencers the new standard in digital marketing?  
The difference between virtual and human influencers and  
the role of identification and credibility**

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## **Abstract**

**Background:** Influencers are a late-modern phenomenon, and their partnership with marketing firms and brands has skyrocketed in the past years. Every social media network attracts influencers in different ways, but Instagram seems to hold the standard for influencer marketing for the moment. There are different types of influencers. Human influencers are nowadays the standard, but there are also virtual influencers. These virtual influencers are computer-generated characters that interact with the environment in the first-person perspective similar to human influencers. Many of these virtual characters are quite indistinguishable from humans.

**Objective:** Marketers have a clear understanding how to influence their target audience on Instagram with human influencers. But little is known about virtual influencers, how they work and how Instagram users perceive and react to virtual influencers. This study will investigate the differences and similarities of both influencer types and will provide helpful information for marketers.

**Method:** Using Qualtrics, an online experiment was conducted using a between-subjects factorial design with two "type of influencer (human vs. virtual)" by two "type of content (fashion vs. food)" (after a pre-test). Using snowball and convenience sampling, 132 adult Instagram using individuals finished the experiment. The statements tested were based on a 7-point Likert scale. Different MANOVA's and regression analyses provided the insights for the experiment.

**Results:** To MANOVA's and regression analyses shows that a human influencer does not have a higher level of influence on an Instagram user than a virtual influencer. To measure the level of influence the concepts intention to follow, worth-of-mouth, and purchase intention have been tested. The manipulation variables identification and credibility had no mediating effects. However, identification and credibility have an effect on level of influence.

**Conclusion:** The main finding in this study is that human influencers do not have a higher level of influence. This indicated that virtual influencers are equal to human influencers. However, more research has to be done to learn how to use virtual influencers at best. Also, more research is required to better understand, how people react to virtual influencers and the actions that generate such interaction. Large-scale research with real influencers can provide valuable insights into the factors that impact influence levels.

**Keywords:** *Digital marketing, influencer marketing, influencers, virtual influencers, AI, Artificial Intelligence, identification, credibility, Instagram, social media.*

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## **1. Introduction**

Every social media network attracts influencers in different ways, but Instagram seems to hold the standard for influencer marketing for the moment. This platform is used by nearly four out of every five businesses for influencer marketing (Business Insider Intelligence, 2020). Although traditional celebrities have been using social media, influencers established their careers online and were previously unknown to the general audience. Marketers have welcomed these influencers as brand ambassadors, and marketers are spending significant sums of money on influencer endorsements (WFA, 2020). A report from Ahmad (2018) shows that 94% of marketers that have used influencers for their marketing campaigns found it effective. The report also mentions that the return on investment (ROI) was 11 times higher than traditional advertising.

Influencers get millions of followers by creating and sharing content from their daily lives and spreading it on platforms like Instagram and YouTube (Chapple & Cownie, 2017). Influencers have earned a reputation by successfully branding themselves on social media platforms, as opposed to traditional celebrities who have gained public recognition due to their professional talent or fame (Khamis, et al., 2016). Amidst this 'influencer world' facilitated by changing technologies, a new phenomenon has occurred, namely virtual influencers.

Virtual influencers are a new type of influencer, which are gaining traction within, particularly, the marketing communication field, highlighting a new, nonhuman alternative to traditional influencers associated with recent technological developments. These virtual influencers are not yet fully controlled by artificial intelligence but are still partly supervised by humans (Thomas & Fowler, 2020). Each virtual influencer is created by a company or an individual with a significant interest in technology. The company or individual is in charge of expanding the virtual influencers Instagram's followings and transforming these online personas into well-known influencers. The creators create a complete identity. They choose the virtual influencers' look, the way they dress, how they act, who they hang out with, date, argue and work with on Instagram. The money virtual influencers receive from their brand partnerships is the creators to keep (Mosley, 2022). A virtual influencer can have a large social media following and be considered as a trusted tastemaker in one or more categories (de Veirman, et al., 2017).

Generally speaking, influencers have the power to influence other people's purchasing decisions on the basis of their authority, knowledge, position or relationship with their audience (Geyser, 2022). It is important to note that influencers are so-called 'social relationship assets', not merely marketing tools (Olenski, 2017). Brands can collaborate with influencers to achieve their marketing goals (Geyser, 2022), but against the backdrop of virtual developments, it is worth investigating the differences between virtual and human influencers. Both human and virtual influencers have amassed a big following by passionately sharing self-generated content on topics such as beauty, fitness, food, and fashion, transforming their online social presence into a primary career #fashion #food #fitgirl (Lin, et al., 2018). This study builds on these insights by investigating the dynamics between content type and user reactions to human and virtual influences. In other words, if type of content will affect the reaction of Instagram users towards human and virtual influencers.

Research has indicated that there are significant differences between virtual and human influencers. However, there are also similarities. These differences and similarities will be discussed in greater detail in the following chapters. But how do Instagram users feel about human and virtual influencers? Do they perceive them as credible and can they identify themselves with these influencers? Moustakas, et al., (2020) explain that brands can decrease the likelihood of "human errors" in their advertising campaigns by utilising virtual influencers. With the help of virtual influencers, marketers can have more control over the actions and content of their influencers. Virtual influencers are ageless human robots who do not have an "offline existence" that could harm their "online persona", in contrast to human influencers whose personal life decisions may have an impact on how people perceive the brand they support (Moustakas, et al., 2020).

Despite the potential benefits of working with a virtual influencer, there is insufficient empirical research on how Instagram users react to virtual influencers, and which is investigated in this study. In this view, little is known about how marketers may best use virtual influencers, or why Instagram users may react differently to them. In theory there should not be a difference between human and virtual influencers, because they are seemingly doing the exact same thing, which is endorsing people. However, to be endorsed someone needs to find the influencer somewhat credible and needs to be able

to somewhat identify with the influencer. Accepting this, the following question warrants the investigation of this study:

*“To what extent does the combination of influencer type (human vs. virtual) and type of content (food vs. fashion) affect the level of influence (intention to follow, word-of-mouth, and purchase intention), and what is the role of credibility and identification?”*

The purpose of this study is then to better understand how Instagram users react to virtual and human influencers. The findings shed light on the basic mechanisms through which virtual and human influencers operate, as well as the border conditions about their effectiveness.

The following chapters will provide an insight in interesting literature about this subject, a 2 x 2 experimental factor analysis, MANOVA tests and regression analysis, the results, a discussion, and the conclusion.

## **2. Theoretical framework**

This chapter gives a thorough overview and reflection of key literature that forms the foundation for the formulation of several hypotheses. It gives particular attention to the rise of endorsement, human and virtual influencers, identification, credibility and type of content. This is followed by outlining the research model that underpins all variables.

### **2.1 The rise of endorsement**

Companies must develop marketing communication strategies that support the competitive advantage of their products or services. Marketing communication activities complement other aspects of the marketing mix such as product design, branding, packaging, pricing, and location selections in order to produce positive effects in the minds of consumers. The usage of celebrity endorsers is a common marketing communications tactic for achieving this (Erdogan, 1999). With traditional brand endorsement, the endorser possesses traits such as knowledge, reliability, likability, and attractiveness (Keller, 1993).

Celebrities have endorsed products and services since the late nineteenth century and today is still a common practice for companies in their marketing communication strategies (Erdogan, 1999). Celebrity endorsers were predicted to appear in one out of every six advertisements in 1979. One in every five advertisements was estimated in 1988 (Erdogan, 1999). The rise of a new form of endorser has resulted from advancements in communication technologies over the last decade: The social media influencer (Sands, et al., 2022). During the times of celebrity endorsement, the advertisements were mostly on TV and on billboards, now it is mostly via the influencers' personal social media accounts.

Influencer marketing can be understood as the practice of marketing goods and services by individuals who have influence over what other people purchase. This market influence is typically derived from a person's experience, popularity, or reputation (Kádeková & Holienčinová, 2018). Influencer marketing is the new version of 'Celebrity Endorsement', but will the rise of virtual influencers affect this type of marketing? To answer that question, it is important to establish the differences and commonalities between human and virtual influencers.

## 2.2 Human influencers

An “Influencer” is an individual who is paid by brands to advertise their goods to their followers in exchange for free products, vacations, and/or a monetary payment per promotional post (Landsverk, 2014). The purpose of this is to convince followers of the influencers to buy products or services like these (Šugrova, et al., 2020). There are four different types of influencers, namely mega, macro, micro, and nano influencers. Mega influencers are mostly likely to have over a million followers, macro influencers have a social media following of 100,000 to a million people, micro influencers are social media users with 1,000 to 100,000 followers, and nano influencers have a following of less than 1,000 people (Ismail, 2018). According to Marwick and Boyd (2010) all individuals have an audience that they can strategically maintain by continuing communication and interaction, which is nowadays referred to as micro-influencer of user generated content (USG) creator.

Popular social media platforms among influencers are Instagram, Facebook, Snapchat, TikTok and YouTube. Because of their authority, experience, status, or relationship with their audience, influencers have the ability to influence others’ purchasing decisions. It is important to remember that influencers are not just serving as mere marketing ‘tools’; they are social partnership assets that marketers can work with to achieve their marketing goals (Olenski, 2017). Influencers can be divided into four groups, according to Kádeková & Holienčinová (2018), these are bloggers, YouTubers (vloggers), Celebrities, and Instagrammers – an individual who has been effective in attracting followers to Instagram and their Instagram page by creating excellent content. This person is not your average celebrity. Followers of Instagrammers will share new posts, which are greeted with a flurry of hearts, emojis, and comments. Influencers have often made a name for themselves by specializing in a particular field. This suggests that when influencers partner with brands that are relevant to their personal areas of expertise, customers are more likely to consider or trust their opinions (Hall, 2016).

In this study, it was decided to focus on influencers who are present on Instagram. The reason for this is that Instagram is the most used platform containing human and virtual influencers, allowing for a direct comparison.



### 2.3 Virtual influencers

Virtual influencers are computer-generated characters that interact with their environment similar to human influencers. Many of these virtual characters are quite indistinguishable from humans. They are gaining traction by producing content in a variety of fields like fashion, music, art, sports, games, and mental health. They are increasingly being used by marketing organizations and corporations to capitalize on their millions of followers (Choudhry, et al., 2022).

These virtual influencers provide an especially fascinating backdrop given that anthropomorphized representations of virtual influencers, especially ones that are aesthetically appealing, cause social reactions and behavioural changes in people (Khan & Scutcliffe, 2013). With their own public identities and stories, these virtual influencers are seemingly similar to human influencers, allowing for more engagement between users and influencers in the virtual world (Hanus & Fox, 2015).

Shudu (@shudu.gram), a computer-generated figure, is one example where the creators make no attempt to conceal the influencer's digital roots, yet in other examples, the real nature of the influencer is at best vague, at worst misrepresented (Klein, 2020). TIME (2018) named Miquela Sousa, also known as Lil Miquela or just Miquela (@lilmiquela), a 21-year-old virtual influencer with over 3 million Instagram followers, as one of the 25 most influential individuals on the internet. In marketing and advertising thousands of millions of dollars have been invested in companies that develop virtual influencers (Koh and Wells, 2018). Virtual influences have been utilized by brands including Prada, Samsung, and Calvin Klein to advertise their social media performance (Choudhry, et al., 2022).

Uncertainty surrounds the ontological standing of virtual influencers like Lil Miquela. She is neither a human being nor a robot, so it is evident that she does not exist on a physical level. There is no "real life" Miquela who matches to the Instagram fictional identity; all the images of her are partially or entirely computer generated. However, her persona is undoubtedly real on the social media platforms, such as Instagram (Robinson, 2020). This research will investigate if an entirely computer created identity can affect credibility, if Instagram users can identify themselves with influencers, and if there is a difference between human and virtual influencers.

## 2.4 Type of content

The main way influencers engage with their followers is through user-generated content, which includes photographs, videos, and stories as well as creative content in the form of animations and memes that they produced themselves. Additionally, this type of content is essential for developing and promoting influencers' own brands on social media (Tafesse and Wood, 2021). In fact, “active participation on social media platforms are essential to be identified as an opinion leader” (Casaló, et al., 2020, p. 4). Influencers position themselves as experts or representatives of a certain niche, so they more easily align with those of the products and businesses they promote (Janssen, et al., 2021). For 2022, Razo (2022) wrote a blog that mentions the top 11 of Instagram niches which are profitable. Traveling, fashion, food, health and fitness, lifestyle, parenting, business, music, photography, and animals are most important niches.

But how effective are all these influencers at influencing the preferences of regular people? Kunst (2022) explains that in 2017, nearly 40% of Americans between the ages of 18 and 64 bought clothing promoted by well-known influencers. Clothing is considered the most popular online purchasing category overall. Consumers are also affected while buying shoes, food, and beverages (Kunst, 2022).

According to Schouten et al (2020), the effectiveness of an endorsed product is inextricably linked to the degree to which the endorser's image, personality, or skill, matches the endorsed product. According to the findings of a study conducted by Belanche et al., (2021), perceived influencer-content congruence favourably influences followers' perceptions of credibility and attitude toward influencers. For example, the study of Boerman, et al., (2022) focused on 'greenfluencing'. The results of that study show that celebrities and influencers who advocate for pro-environmental behaviour, are frequently accused of hypocrisy due to the discrepancy between their environmental messaging and their actual behaviour. In this case, the influencer-content congruence was not favourable.

According to the researcher's knowledge there is no sufficient empirical research conducted about how and if a content type is linked to an influencers image, personality and/or skills and if there is a difference in the type of content an influencer posts (e.g., can a virtual influencer have a food

account?). Theoretically, it would be unusual to accept a food-related opinion from a virtual identity that has never had the opportunity to eat the meal in question. However, influencers arose from the desire for true and honest stories from real people. With the professionalisation of influencer marketing, actual influencers may not even be distinguishable from virtual influencers. After all, genuine influencers publish such perfect images of themselves, that they can scarcely be described as realistic or honest. Lil Miquela's algorithms are fed the most flawless images of the most successful influencers. Doesn't this make Lil Miquela an outcome of "successful" human influencer marketing? (Willemsen, et al., 2019).

To address this issue, this study focusses on fashion and food content, because these two types of content belong to the top 11 niches identified by Razo (2022), and the researchers own interest.

## **2.5 Influence**

Now that the differences and commonalities between human and virtual influencers have been established, it is important to understand what influence is. The Cambridge Dictionary describes influence as “the power to have an effect on people or things, or a person or thing that is able to do this” (Cambridge Dictionary, 2022, np). In today's society, influence is a complicated and misunderstood word. Influence is, at its most basic level, a force generated by one person or entity that generates a reaction in or by another (Brown & Fiorella, 2013).

The widespread usage of social media has resulted in an omnipresence of user-generated, shared, and consumed content, resulting in new communication dynamics (Vrontis, et al., 2021). Consumers have the ability to control the decision-making process of the masses, in these computer-mediated environments by voicing their thoughts on products and services (Lamberton and Stephen, 2016). However, it is still possible to be influenced according to GRIN (2022). Have you ever made a purchase because your favourite influencer promoted it? Or did you ever donate to a charity because one of your friends did so? Most of us have, at some point, been persuaded to take certain actions by other individuals. This is the psychology of persuasion, and it is the foundation of influencer marketing (GRIN, 2022).

Influencing customers' preferences and buying decisions has always been one of the most important roles of marketing professionals. To encourage people to buy or talk about their products (word-of-mouth), brand marketers incorporate everything from love, humour, guilt, and sex into emotionally driven advertising across all media channels (Brown and Fiorella, 2013). Ferrara et al., (2016) explain that the distinction between human and robot-like behaviour is blurring, making it conceivable for a bot to have considerable influence.

Chialdini (2021) established six key principles in the book 'Influence: The Psychology of Persuasion' that he wrote in 1984. The key principles explain the psychology of persuasion, namely reciprocity, commitment, social proof, authority, liking, and scarcity. Below the meaning for each principle is provided:

**Table 1:** Overview six principles of Chialdini (2021)

<b>Principle</b>	<b>Meaning</b>
<b>Reciprocity</b>	People dislike feeling indebted
<b>Commitment</b>	People require consistency
<b>Social proof</b>	People do what they observe others doing
<b>Authority</b>	People trust authority
<b>Liking</b>	People prefer similarities
<b>Scarcity</b>	Less quantity equals more demand

The idea that individuals can be persuaded to take certain actions is at the centre of influence psychology. Influence frequently occurs unintentionally, and it works because people are frequently unaware of when they are being persuaded (Cialdini, 2021). Geysler (2022) explains that influencers do have power to influence the decisions of others based on their authority, expertise, position, or relationship with their target audience. People use the decisions of their peers to make their own decisions. For example, if you are walking through a city and notice a crowded restaurant, you are likely to believe it serves delicious meals. Otherwise, it would not be full, would it? Or perhaps you are casually scrolling through Instagram and notice someone with a lovely pair of sunglasses. They look fantastic. You determine whether you want them. You purchase them (Brzezicki, 2021). The results of a study conducted by Masuda, et al (2022) show that purchase intention induced by a human influencer via video advertising was influenced by trustworthiness, expertise, and parasocial relationships.

Research conducted by Casaló et al., (2017) explain that user satisfaction with an Instagram account has a direct and positive effect on intention to follow and word-of-mouth. Intention to follow an Instagram account is a key aspect to guarantee the survival of the account in the long-term and the fact that word-of-mouth exists among Instagram users helps to increase the awareness and success of the account (Casaló, et al., 2017). According to Daugherty and Hoffman (2014), word-of-mouth is widely regarded as one of the most powerful influences on customer behaviour. Based on the studies mentioned above we define intention to follow, word-of-mouth, and purchase intention as the variables to measure influence in this study.

Based on the previous literature about human influencers, virtual influencers, and type of content, the following hypotheses have been formulated:

***H1:***

- A) Human influencers have a higher level of influence (intention to follow) on Instagram users compared to virtual influencers.
- B) Human influencers have a higher level of influence (word-of-mouth) on Instagram users compared to virtual influencers.
- C) Human influencers have a higher level of influence (purchase intention) on Instagram users compared to virtual influencers.

***H2:*** A fashion content post from influencers has more influence on Instagram users compared to a food content post from influencers.

***H3:*** Fashion content posts result in a higher level of influence when posted by a virtual influencer, rather than posted by a human influencer.

***H4:*** Food content posts result in a higher level of influence when posted by a human influencer, rather than posted by a virtual influencer.

## **2.6 Identification**

Many definitions of identification have been proposed. Identification has been used in the work of theorists as different as Sigmund Freud, Kenneth Burke, and Herbert Kelman. Each of these theorists

used the term in a different context, yet their frameworks have certain similarities. All of the meanings entail a bond or connection between one person or entity and another (Hoffner and Buchanan, 2005).

According to Freud (1921) primary identification in infancy is the first manifestation of an emotional bond with someone. It is a young, basic connection to an object that culminates in integrating some of its characteristics. Schafer (1968) explains that the process of identification is primarily unconscious and has been defined as a defence mechanism, but it can also involve preconscious and conscious elements. According to Laughlin (1979) identification is a form of ego defence or a mental mechanism whereby a person, to varied degrees, makes himself seem like another person; he identifies with that person. As a result, various aspects of another are unconsciously taken over.

Operational definitions of identification typically use indications of attitudes and feelings toward characters as measures of identification, but theoretical analyses of identification have proposed that identification is a more fundamental and internal process (Cohen, 2001). For instance, identification was defined by Livingstone (1998) as putting oneself in another person's shoes and experiencing the world through that person's eyes.

Based on previous psychological theories of identification, it may be useful to describe identification with media characters as an imaginative process, activated in reaction to characters portrayed in media messages (Cohen, 2001). When exposed to a media message, identification is sporadic, transitory, and fluctuates in strength (Wilson, 1993).

Consumers are more likely to accept product claims communicated by endorsers they can identify with. Because consumers are more likely to embrace an endorser's ideas, attitudes, and actions if they believe they have similar interests, values, or characteristics. Looks are also important; if the models/actors/influencers and settings portrayed in the social marketing campaign resemble the target group, then members of the target group are more likely to absorb the campaign message than if the characters and social scene do not resemble members of the target group (Basil, 1996; Kelman, 2006; Potter, et al., 2010).

Actual and perceived similarity, or the degree to which one perceives having something in common with another person, as well as wishful identification, all lead to identification. The desire to be like the other person is referred to as wishful identification (Hoffner and Buchanan, 2005).

Influencers promote themselves as ordinary, approachable, and normal people, which may make people feel more connected to them (Chapple and Cownie, 2017). Influencers frequently address their followers directly in their posts, which conveys a sense of connectedness and makes followers regard them as peers. The opportunity to remark on influencers' posts and connect with them may reinforce the impression that the influencer is similar to oneself (Schouten, et al., 2019). Research has revealed that people's online behaviour is fundamentally influenced by their social identification with online personas (Croes and Bartels, 2021). For instance, Jin and Phua (2014) discovered a favourable relationship between consumer behaviour regarding products promoted by celebrities on Twitter and social affiliation with those personalities. They also discovered that social identification played a mediating function between the type of endorsement and purchasing intention. The mediating impact of social identification has now been validated by Jin (2018), however this time it was between the type of endorser (for example, a celebrity) and parasocial interactions with the celebrity on Facebook. Additionally, Loureiro and Sarmiento (2019) discovered that developing an online friendship with a celebrity required identifying with them. Now the concept of identification is established we noticed that there is not much empirical research about the identification of social media users with (virtual) influencers. Therefore, this research will investigate if Instagram users differentiate between identifying with human and virtual influencers.

## **2.7 Credibility**

Product marketing has evolved into a brand–influencer collaborative focus, in which customer-centric marketing tactics are prompted by customers' behaviours and preferences, as a result of the reshaped customer–brand relationship. Influencers that can closely analyse and communicate with their audience deliver more personalised material to customers (Bi and Zhang, 2022). Because of the importance of influencers, many firms send samples to them in the hopes of getting product reviews and increasing product visibility (Whateley, 2021).

However, some marketers have questioned these methods, claiming that product endorsements, which are essentially favourable product evaluations, make consumers mistrust the influencers' motives to genuinely promote the items, whilst some consumers may believe that reviews are more credible

(Evans, et al., 2021). Djafarova and Rushworth (2017) argued that Instagram users' faith in celebrities' product reviews was formed by the celebrities' expertise and knowledge about such products, as well as the celebrities' relevance to users, based on the outcomes of their in-depth interviews. However, the subjective perceptions of each individual influence whether an endorser is credible. When it comes to determining the persuasiveness of the messages that endorsers transmit, how consumers perceive them is more important than the factual attributes they possess (Erdogan 1999).

Because virtual influencers play the function of communicator with the goal of influencing others, source credibility is critical. Hovland, et al., (1953) proposed the notion of source credibility to underline the importance of the communicator's credibility for a message to have a persuasive effect on the recipient. Whitehead (1968) refers to source credibility as “the extent to which a communicator is perceived to be a source of valid assertions” (p. 59). A credible source is viewed as professional and sincere, which increases their persuasive power, resulting in both attitude and behavioural changes (Bi and Zhang, 2022).

Ohanian (1990) compiled previous research on source effects and presented three criteria for endorser credibility: expertise, trustworthiness, and attractiveness. Expertise refers to the degree to which a person is thought to have specific knowledge, skills, or experience, and hence to be able to deliver correct information. The audience's belief in the communicator's capacity to convey information in a non-biased and truthful manner is referred to as trustworthiness, whereas attractiveness relates to how physically appealing or attractive the source is to the audience (Ohanian, 1990). Previous research shows that a credible endorser is more likely to influence Instagram users (Rebelo, 2017; Balaban, et al., 2022), but according to the researchers' knowledge there is no empirical research conducted about the differences in human and virtual influencers' credibility. This research will investigate this gap.

Based on the previous literature about identification and credibility, the following hypotheses have been formulated:

**H5:** The use of human influencers leads to more a) identification and b) credibility, as compared to the use of virtual influencers.

**H6:** The use of a fashion content post leads to more a) identification and b) credibility, as compared to the use of a food content post.



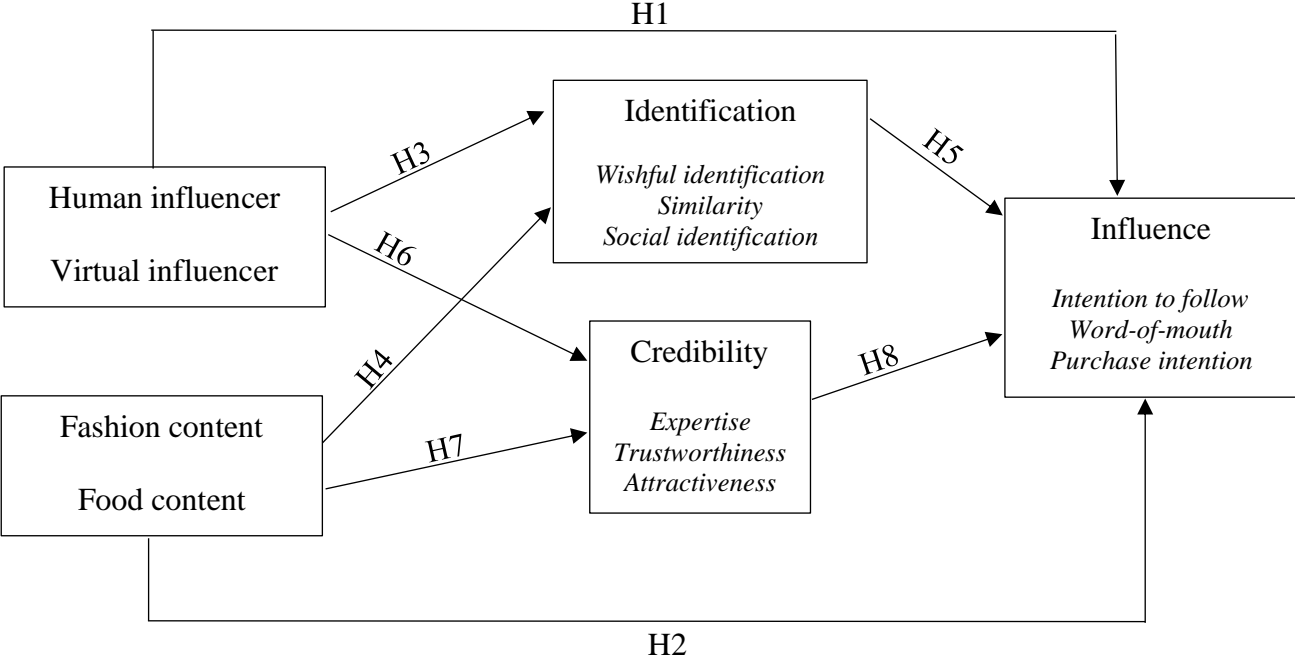
**H7:** a) Identification and b) credibility mediate the effect of the type of influencer (human vs. virtual) on influence.

**H8:** a) Identification and b) credibility mediate the effect of the type of content (fashion vs. food) on influence.

**2.8 Research model**

Based on the outcomes of previous studies and the literature, a research framework has been constructed. The research model and the link between the research variables are depicted in the figure below.

**Figure 1:** Research model



**Table 2:** Hypothesis overview

H1	<p>A) Human influencers have a higher level of influence (intention to follow) on Instagram users compared to virtual influencers.</p> <p>B) Human influencers have a higher level of influence (word-of-mouth) on Instagram users compared to virtual influencers.</p> <p>C) Human influencers have a higher level of influence (purchase intention) on Instagram users compared to virtual influencers.</p>
H2	<p>A fashion content post from influencers has a higher level of influence on Instagram users compared to a food content post from influencers.</p>
H3	<p>Fashion content posts result in a higher level of influence when posted by a virtual influencer, rather than posted by a human influencer.</p>
H4	<p>Food content posts result in a higher level of influence when posted by a human influencer, rather than posted by a virtual influencer.</p>
H5	<p>The use of human influencers leads to more a) identification and b) credibility, as compared to the use of virtual influencers.</p>
H6	<p>The use of a fashion content post leads to more a) identification and b) credibility, as compared to the use of a food content post.</p>
H7	<p>a) Identification and b) credibility mediate the effect of the type of influencer (human vs. virtual) on influence.</p>
H8	<p>a) Identification and b) credibility mediate the effect of the type of content (fashion vs. food) on influence.</p>

### **3. Research method**

The aim of this study is to investigate if a type of influencer has an effect on the influence (intention to follow, word-of-mouth, and purchase intention) of Instagram users. Specifically, this study was examined to learn about to what extent a virtual and human influencer, influences Instagram users. Credibility and identification are the mediating variables. A more thorough explanation of the research design, pretest, participants, process, and outcomes of this study is provided in this chapter of the thesis.

#### **3.1 Research design**

The focus of this research is to explore how influencer type (human influencer vs. virtual influencer) based on type of content (fashion vs. food) affects the influence on Instagram users, and what the mediating role of identification and credibility are within the combined effect. A quantitative experimental study was conducted to answer the research question and sub questions. The speed and effectiveness of this quantitative method appealed to the researcher. Data computing technology allows researchers to process and analyse data quickly, even with bigger sample sizes. This research examined a 2 ‘type of influencer (human influencer vs. virtual influencer)’ x 2 ‘content type (fashion vs. food)’ between subjects’ factorial design. The research design is shown in Table 3.

Each respondent in this study was randomly exposed to one of the four experimental conditions. Based on the rule of thumb there is a minimum of 30 respondents for each condition. Regardless of the distribution of the population, the central limit theorem (CLT) states that the distribution of sample means approaches a normal distribution as the sample size increases. The CLT is frequently thought to hold for sample sizes equal to or larger than 30 respondents (Ganti, 2023).

The respondents in the first condition were exposed to a human influencer posting fashion content. The respondents in the second condition were exposed to a virtual influencer posting the same fashion content. The respondents in the third condition were exposed to a human influencer posting food content. The fourth condition exposed a virtual influencer posting the same food content to the respondents. The conditions are shown on the next page:

**Table 3:** Conditions 2 x 2 design and number of respondents

	<b>Fashion content</b>	<b><i>n</i></b>	<b>Food content</b>	<b><i>n</i></b>	<b>Total</b>
<b>Human influencer</b>	Condition 1	33	Condition 2	32	
<b>Virtual influencer</b>	Condition 3	30	Condition 4	37	
<b>Total</b>		63		69	132

### 3.2 Stimulus design

A human and virtual influencer profile and a food post and fashion post were the required stimuli for the final experiment. Because human and virtual influencers are most visible on Instagram, this study used the design of the social media platform Instagram. According to the research Santiago (2023) conducted, 72% of the marketers listed Instagram as the best platform to work with influencers. It was decided during the design process to vary the profile and posts both textually and visually (e.g., the text in the influencers' bio and the posted pictures on the profile).

The same person was employed for both the human and virtual influencer accounts to carry out controlled manipulations. To make this work, the face of the influencer is not entirely visible in the food and fashion post. That was decided because than people can create their imagination how the human or virtual influencer would look. Although the influencer in the images is real, some changes have been made to create a human and virtual influencer (e.g., username, displayed photos, and the text in the bio). The influencer utilized in this study has 48.8k followers, is originally from Sweden, and publishes frequently in either Swedish or English. It was therefore believed that participants would not know the person's identity.

The manipulation of the human and virtual influencer entails one difference. The human influencer concludes in her Instagram bio, that she is a 24-year-old girl living in Amsterdam and the virtual influencer concludes in her Instagram bio, that she is a 24-year-old robot living in Amsterdam. The rest of the profiles look exactly alike, think about number of followers and posts, the profile picture, and any further information in the bio.

A food post and a fashion post were also required stimuli for the experiment. The post and feed that were used in this study were created via Instagram. A new profile was created on Instagram. In this way the researchers could make a feed based on food and a feed based on fashion. The numbers of followers, following, and posts have been photoshopped into a screenshot that has been taken from the newly created Instagram profile. The created profile has not been public and has been used for educational purposes only. The food post shows the influencer eating pancakes at a pancake restaurant in Amsterdam. The fashion post shows the influencer in a dressing room showing fashionable clothes.

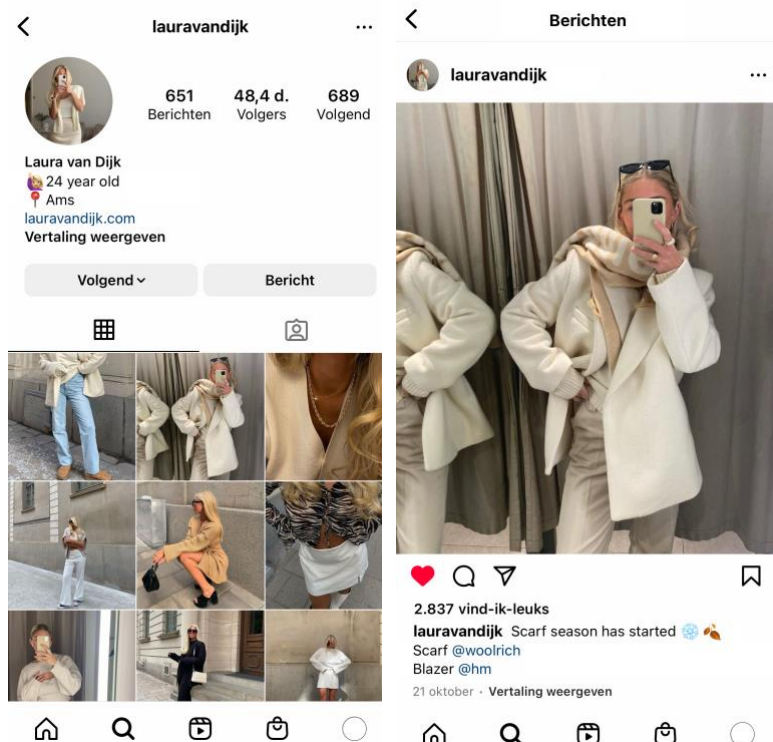
### **3.3 Condition stimuli**

Four conditions were made and used in this study. These stimuli are shown in the figures below. The four conditions for the main study make four different combinations of posts and profiles, (1) a human influencer profile with fashion content, (2) a human influencer profile with food content, (3) a virtual influencer profile with fashion content, and lastly, (4) a virtual influencer profile with food content. The condition stimuli are shown on the following pages:

**Figure 2:** Condition 1 (human influencer profile with fashion content)

Accompanying text:

**Laura van Dijk is een social media influencer. Ze is nu 4 jaar fulltime influencer en heeft duizenden volgers. Als influencer promoot Laura producten en ervaringen voor veel verschillende merken. De merken waarmee ze samenwerkt kiest ze dan ook zorgvuldig uit. Het moet aansluiten bij zowel haar on- als offline persoonlijkheid. Laura heeft haar carrière als influencer helemaal zelf opgebouwd en runt nog steeds haar eigen Instagram pagina. Ze bepaalt hoe, wat, waar en wanneer ze post. Ook houdt Laura nauwlettend de laatste trends in de gaten, zodat ze weet wat haar volgers graag willen zien.**



**Figure 3:** Condition 2 (human influencer profile with food content)

Accompanying text:

**Laura van Dijk is een social media influencer. Ze is nu 4 jaar fulltime influencer en heeft duizenden volgers. Als influencer promoot Laura producten en ervaringen voor veel verschillende merken. De merken waarmee ze samenwerkt kiest ze dan ook zorgvuldig uit. Het moet aansluiten bij zowel haar on- als offline persoonlijkheid. Laura heeft haar carrière als influencer helemaal zelf opgebouwd en runt nog steeds haar eigen Instagram pagina. Ze bepaalt hoe, wat, waar en wanneer ze post. Ook houdt Laura nauwlettend de laatste trends in de gaten, zodat ze weet wat haar volgers graag willen zien.**

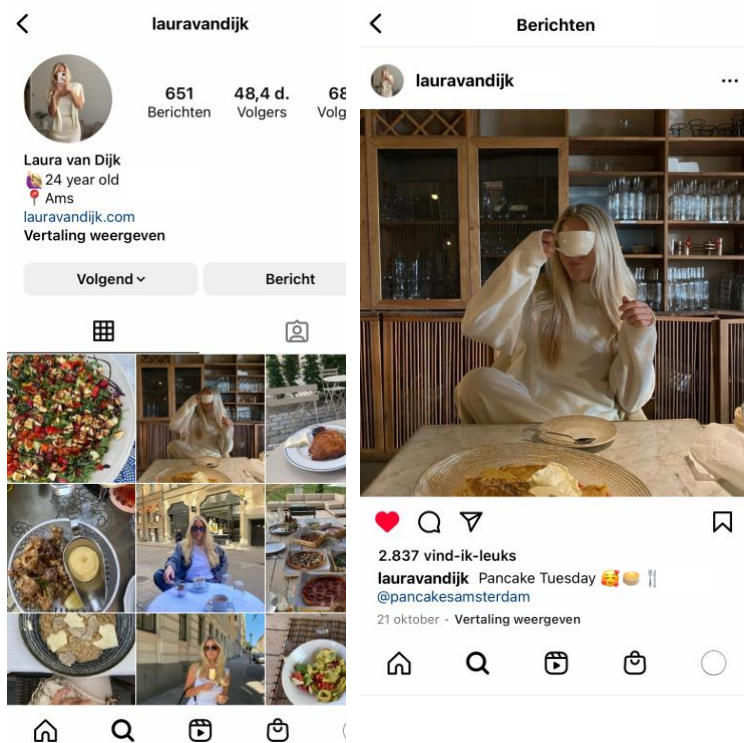


Figure 4: Condition 3 (virtual influencer profile with fashion content)

Accompanying text:

Laura van Dijk is een virtual influencer. Dit betekent dat zij alleen online bestaat. Een social media team heeft haar online identiteit gecreëerd. Het team beheert haar online persoonlijkheid, kiest wat ze aan heeft, hoe ze eruitziet en met welke bedrijven ze een samenwerking aangaat. Dat moet allemaal aansluiten bij haar online persoonlijk en kies haar team dan ook zorgvuldig uit. Ze bestaat nu 4 jaar en heeft duizenden volgers. Laura haar team kijkt continue naar de laatste trends en kan op basis van data haar volgende post bepalen.

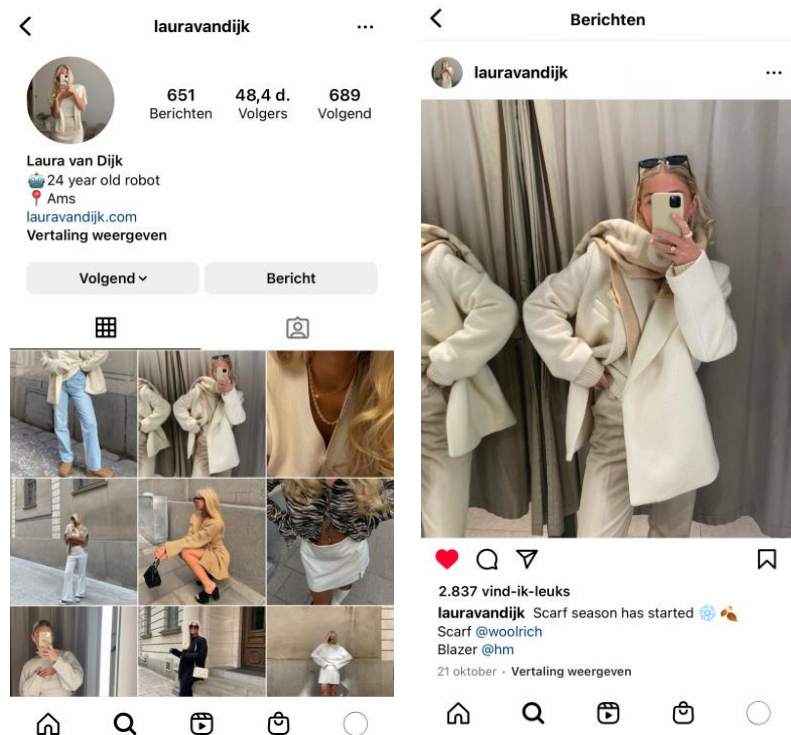
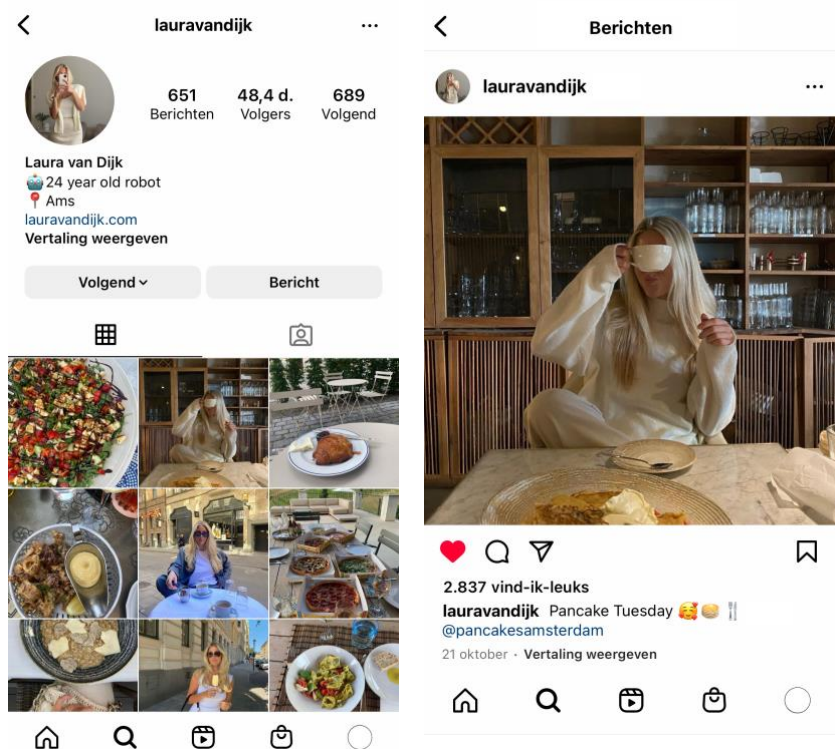


Figure 5: Condition 4 (virtual influencer profile with food content)

Accompanying text:

Laura van Dijk is een virtual influencer. Dit betekent dat zij alleen online bestaat. Een social media team heeft haar online identiteit gecreëerd. Het team beheert haar online persoonlijkheid, kiest wat ze aan heeft, hoe ze eruitziet en met welke bedrijven ze een samenwerking aangaat. Dat moet allemaal aansluiten bij haar online persoonlijk en kies haar team dan ook zorgvuldig uit. Ze bestaat nu 4 jaar en heeft duizenden volgers. Laura haar team kijkt continue naar de laatste trends en kan op basis van data haar volgende post bepalen.





### **3.4 Participants**

The target population of this study consists of Dutch Instagram users from 18 years and older. Because this study focusses on Dutch Instagram users, the survey was written in Dutch. A minimum sample of 120 participants is required for this study. The participants were recruited via convenience and snowball sampling. Convenience sampling is a non-probability selection technique that selects units for the sample based on which ones are most convenient for the researcher to access. This can be because of close proximity, availability at a specific time, or interest in taking part in the study. Convenience sampling has the benefits of being typically inexpensive, simple, and having readily available subjects. In the absence of a sample frame, convenience sampling also enables researchers to collect data that would not otherwise be attainable. The sample's non-random selection makes it impossible for it to be completely representative of the population under study, which is one of the drawbacks (Nikolopoulou, 2022a). Another non-probability sampling technique called snowball sampling entails the recruitment of new units by existing units to make up the sample. Starting with one or more study subjects, snowball sampling is conducted. Following that, it proceeds based on recommendations from those participants. This procedure is repeated until the desired sample is obtained or a saturation point is reached. The benefits of snowball sampling include reaching study populations that you wouldn't otherwise be able to reach, as well as being affordable, adaptable, and simple to use. The disadvantages include the fact that your sample may be difficult to reach and that your sample is not entirely representative of the population under study (Nikolopoulou, 2022b).

The participants were randomly assigned to one of the four conditions and in order for the participant to make an informed decision about whether or not to participate in the research, informed consent was a crucial prerequisite. Informed consent entails educating the participant about their rights, the study's objectives, the procedures to be followed, potential risks and rewards of participation, the anticipated length of the study, and the degree of confidentiality of demographic and personal information so that participants' participation in the research is entirely voluntary (University of Twente, 2023). All participants needed to consent to participate voluntarily.

To make sure the participants use Instagram a question will be asked before starting the survey. The question will ask the participant 'Do you have an Instagram account?'. Without an Instagram

account the participant could not participate in the experiment. Also, a manipulation check was done at the end of the survey. The manipulation check was to find out if the participants were consciously aware that they saw a human or virtual influencer. Therefore, the respondents were asked if the Instagram account they saw belongs to a real person. The respondents had to answer a yes/no question: “The Instagram account I saw belongs to a robot”.

A sample of 211 participants were recruited for the primary study via convenience and snowball sampling. Participants were gathered using social media platforms Facebook, Instagram, and WhatsApp. From the 211 responses, 79 responses had to be removed from the dataset because of the filter questions ( $n = 14$ ) and the unfinished questionnaires ( $n = 65$ ). 35 responses ( $n = 35$ ) failed the manipulation check. However, to give the dataset more statistical power it was decided to not remove the manipulation check failures.

As a result, in this study, the final dataset contains 132 valid responses. Participants were randomly assigned to one of four conditions in this experiment. Condition 1 has 33 respondents, ( $n = 33$ ), condition 2 has 32 respondents ( $n = 32$ ), condition 3 has 30 respondents ( $n = 30$ ), and condition 4 had 37 respondents ( $n = 37$ ). There were no rewards or risks associated with taking part in this study, and all participants participated voluntarily.

The use of social media by the participants was evaluated. The majority of participants (62.1%) indicated that they use Instagram very often (several times per day), 22.7% indicated that they use Instagram every day, 12.9% uses Instagram on a weekly basis, and 3% uses Instagram a couple of times per year. 72% of the respondents follows influencers and 37.9% of the respondents are familiar with virtual influencers.

### **3.5 Procedure**

To carry out the experiment a survey was created. The survey was carried out in an online context and therefore the survey was created with Qualtrics. Qualtrics is an online survey tool provided by the University of Twente.

Before the participants could start with the actual questionnaire, they had to give consent and answer two filter questions. The filter questions were inserted to the questionnaire to determine whether

or not the participant uses Instagram and if they are aged 18 or older. After giving consent and answering the filter questions the participants needed to fill in some socio-demographic questions, such as their gender, age, and education. But also, if they are familiar with (virtual) influencers and their Instagram use.

Following the completion of the socio-demographic questions, the participants were presented a page with a brief explanation of the experiment. After clicking on continue, the participants were randomly assigned to one of the four conditions that showed a type of influencer (human vs. virtual) and a type of post (fashion vs. food). The participant would see a short text, an Instagram profile, and an Instagram post, according to the explanation. They had to carefully read and watch these in order to respond to questions based on that profile and post.

The participants had to complete the identification (similarity, wishful identification, and social identification), credibility (attractiveness, trustworthiness, expertise), influence (intention to follow, word-of-mouth, purchase intention), and manipulation check statement after reading the text, viewing the profile, and viewing the post. The participants were thanked for taking part and given a debriefing once the questions were answered.

### **3.6 Pre-test**

Before the data collection started, the survey was pre-tested among 6 people. This was done to gain insights about the understandability of the statements, if the statements were interpreted as intended, and the time spend on filling in the survey. Males and females with different ages were asked to fill in the survey. Based on the results of the pre-test some adjustments were made.

Some small grammar issues were solved and one of the statements was not clear. The statement “The next time you are looking to purchase this type of product, how likely are you to buy this product?” was not clear for the people who saw the pancake post. Therefore, the statement was changed to ““The next time you are looking to purchase this type of product or service, how likely are you to buy this type of product or service?”. All statements were checked after that and changed into “product/service” instead of only “product”.

After the adjustments the pre-test was checked once again with the people who found the statement unclear and one new person. The new version of the survey was clear and was ready to publish. Below you find the research measures and the statements.

### 3.7 Research measures

#### 3.7.1 Influence

Influence is the dependent variable in this research. Influence was measured with eight 7-point Likert scale items (1=very unlikely; 7=very likely). The first three items for intention to follow are adopted from Casaló, et al., (2017), the items for word-of-mouth are newly formulated, and the first item for purchase intention are adopted from Janssen, et al., (2021). The second and third items for purchase intention are adapted from Masuda, et al., (2022). The reliability of the dependent variables (Cronbach's alpha) is also shown in Table 4. The reliability analysis revealed that the internal consistency of all items in the scale is high ( $\alpha = .88$ ). The statements and Cronbach's alpha are shown in the table below:

**Table 4:** Overview of items and reliabilities of scales used for the variable influence

Scale	Items	$\alpha$ .
<b>Influence</b>		<b>.88</b>
<b>Intention to follow</b>	I have the intention to visit this Instagram account in the near future	.89
	I predict that I will follow this Instagram account	
	I will probably look for new content published on this Instagram account	
<b>Word-of-mouth</b>	How likely is it that you tell your friends about this influencer?	.59
	How likely is it that you share content of this influencer on your Instagram page?	
<b>Purchase intention</b>	The next time you are looking to purchase this type of product or service, how likely are you to buy this type of product or service?	.89
	I think I will buy products or services recommended by this influencer	
	I will probably buy products or services after seeing this influencer	

### 3.7.2 Identification

Identification is one of the two mediating variables. Identification was measured with nine 7-point Likert scale items (1=totally disagree; 7=totally agree). This scale is mostly used for self-reporting measurements (Fulmer & Frijters, 2009). A 7-point scale, according to Joshi, et al., (2015), compared with a 5-point scale, gives the respondent more choice to pick the one closest to their opinion. A 5-point scale has less options, so the options differ more from each other. Therefore, this study measured with the 7-point scale. The measurers similarity and wishful identification are adapted from Hoffner and Buchanan (2005) and the measure social identification was adapted from Croes & Bartels (2021). An overview of the he adapted statements and reliabilities of scales are shown below. Since the fifth statement of wishful identification was negatively formulated, the statement was recoded in the Statistical Package for the Social Sciences (SPSS).

**Table 5:** Overview of items and reliabilities of scales used for the variable identification

Scale	Items	$\alpha$ .
<b>Identification</b>		<b>.89</b>
<b>Similarity</b>	This influencer thinks like me	.79
	This influencer behaves like me	
	This influencer is like me	
	This influencer is similar to me	
<b>Wishful identification</b>	This influencer is the sort of person I want to be myself	.82
	Sometimes I wish I could be more like this influencer	
	This influencer is someone I would like to emulate	
	I'd like to do the kind of things this influencer does	
	I would never want to act the way this influencer does	
<b>Social identification</b>	I feel a bond with this influencer	.85
	I feel solidarity with this influencer	

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I feel committed to this influencer

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### *3.7.3 Credibility*

Credibility is one of the two mediating variables. Perceived influencer credibility will be measured with fifteen 7-point semantic differential scales adopted from Ohanian (1990), assessing attractiveness, trustworthiness, and expertise. By asking the respondent to choose an appropriate position on a scale between two bipolar adjectives, the 7-point semantic differential scale, is used to determine the respondent's attitude toward the given object or event (Megha, 2016). The statements on the next page will go as follow: "I think this influencer is....". An overview of the statements and reliabilities of scales are shown below. Since the first statement of trustworthiness was negatively formulated, the statement was recoded in SPSS (undependable – dependable). The table is shown on the next page:

**Table 6:** Overview of items and reliabilities of scales used for the variable credibility

Scale	Items	$\alpha$ .
<b>Credibility</b>		<b>.83</b>
<b>Attractiveness</b>	Attractive — Unattractive	.88
	Classy — Not Classy	
	Beautiful — Ugly	
	Elegant — Plain	
	Sexy — Not sexy	
<b>Trustworthiness</b>	Dependable — Undependable	.83
	Honest — Dishonest	
	Reliable — Unreliable	
	Sincere — Insincere	
	Trustworthy — Untrustworthy	
<b>Expertise</b>	Expert — Not an expert	.92
	Experienced — Inexperienced	
	Knowledgeable — Unknowledgeable	
	Qualified — Unqualified	
	Skilled — Unskilled	

For this study, all scales and statements are translated into Dutch. This was done because the questionnaire was conducted in Dutch, among Dutch residents. See Appendix 7.1 for the full questionnaire in Dutch.

### 3.8 Data analysis

To analyse possible main and interaction effects of the independent variables, a multivariate analysis of variance (MANOVA) was conducted with type of influencer and type of content as the independent variables and intention to follow, word-of-mouth, and purchase intention as the dependent variables. The reason a MANOVA was conducted is because a MANOVA is similar to an ANOVA,

except that instead of one metric dependent variable you can research with ANOVA, A MANOVA can research two or more dependent variables. In SPSS, MANOVA is focused with analysing group differences and evaluates group differences across several dependent variables at once (Lani, 2021). The general effects between the independent and dependent variables were investigated using the Wilk's Lambda test. Wilk's Lambda was selected because it has several benefits, including being a multivariate generalization of the univariate F test, which allows it to simultaneously examine the total impact of several independent variables on several dependent variables. It can also deal with circumstances in which the dependent variables are linked or have various measurement scales (Multivariate Statistics, 2023).

To analyse the possible effects of the independent variables on the mediating variables, another MANOVA was conducted. Type of influencer and type of content as independent variables and identification and credibility as mediating variables. The general effects of these independent and mediating variables were investigated using the Wilk's Lambda test.

The mediator analysis investigated whether the relationship between the independent variables type of influencer and type of content and the combined dependent variable influence is transferred by the mediators identification and credibility. To conduct this analysis a linear regression analysis was performed.



## 4. Results

This section presents the research's findings. To ascertain whether type of influencer and type of content alterations had an impact, a MANOVA was conducted on all dependent variables (intention to follow, word-of-mouth, and purchase intention). Additionally, credibility and identification mediation effects were examined. Finally, a summary of the hypotheses is given.

### 4.1 Multivariate Analysis of Variance for Dependent Variables

**Main effects of type of influencer on dependent variables:** According to H1 it was expected that human influencers would have a higher level of influence a) intention to follow, b) word-of-mouth, c) purchase intention on Instagram users compared to virtual influencers. Wilk's Lambda test revealed that there was a significant main effect of type of influencer ( $\Lambda = .95, F(3, 128) = 2.21, p = .090, \eta^2 = .05$ ) on the dependent variables. The test of between-subjects effects revealed the following effects of type of influencer on each dependent variable: Intention to follow ( $F(1, 130) = 1.91, p = .170, \eta^2 = .01$ ), word-of-mouth ( $F(1, 130) = 0.69, p = .405, \eta^2 = .01$ ), and purchase intention ( $F(1, 130) = 2.73, p = .101, \eta^2 = .02$ ). The conclusion is that there is not an overall significant difference in the dependent variables based on the type of influencer. Therefore, H1a, H1b, and H1c are not supported.

**Main effects of type of content on dependent variables:** According to H2 it was expected that a fashion content post from influencers, has a higher level of influence on Instagram users compared to a food content post from influencers. Wilk's Lambda's test revealed that there was no significant main effect found for type of content ( $\Lambda = .98, F(3, 128) = 1.07, p = .366, \eta^2 = .02$ ) on the dependent variables. The test of between-subjects effects revealed the following effects of type of influencer on each dependent variable: Intention to follow ( $F(1, 130) = 0.00, p = .994, \eta^2 = .00$ ), word-of-mouth ( $F(1, 130) = 0.01, p = .925, \eta^2 = .00$ ), and purchase intention ( $F(1, 130) = 1.99, p = .161, \eta^2 = .01$ ). Therefore, hypothesis 2a, 2b, and 2c are not supported.

The descriptive statistics of the dependent variables shown in table 7 show that the means are higher for human influencers on most dependent variables. However, virtual influencers have a higher mean for the dependent variable word-of-mouth.

**Table 7:** Descriptive statistics of the dependent variables

Type of content	Type of influencer	Human influencer		Virtual influencer	
		Mean	SD	Mean	SD
<b>Fashion content</b>	Intention to follow	2.24	1.18	1.92	1.29
	Word-of-mouth	1.67	.92	1.72	.96
	Purchase intention	2.44	1.37	2.22	1.15
<b>Food content</b>	Intention to follow	2.26	1.48	1.94	1.33
	Word-of-mouth	1.55	.96	1.78	1.15
	Purchase intention	2.27	1.24	1.85	1.00

**Interaction effects of type of influencer and type of content on dependent variables:** According to H3 it was expected that fashion content posts result in a higher level of influence when posted by a virtual influencer, rather than posted by a human influencer. And according to H4 it was expected that food content posts result in a higher level of influence when posted by a human influencer, rather than posted by a virtual influencer. Wilk's Lambda test revealed that there was no significant interaction effect found for type of influencer and type of sponsored post ( $\Lambda = .92$ ;  $F(9, 384) = 1.14$ ,  $p = .331$ ) on the dependent variables. And therefore, hypotheses three and four are not supported.

#### 4.2 Multivariate Analysis of Variance for Mediating Variables

**Main effects of type of influencer on mediating variables:** H5 was expecting that the use of human influencers leads to more a) identification and b) credibility, as compared to the use of virtual influencers. The Wilk's Lambda test shows that ( $\Lambda = .95$ ;  $F(2, 129) = 3.534$ ,  $p = .032$ ,  $\eta^2 = .52$ ) there is a significant effect of type of influencer on the mediating variables. The test of between-subjects effects revealed the following effects of type of influencer on each mediating variable: identification ( $F(1, 130) = 0.59$ ,  $p = .440$ ,  $\eta^2 = .00$ ) and credibility ( $F(1, 130) = 07.13$ ,  $p = .009$ ,  $\eta^2 = .05$ ). However, Table 8 shows that human influencers lead to more identification, but virtual influencers lead to more credibility. The results were in the opposite direction than hypothesized. Therefore, H5 is not supported.

**Main effects of type of content on mediating variables:** H6 was expecting that the use of a fashion content post leads to more a) identification and b) credibility, as compared to the use of a food content post. The Wilk's Lambda test shows that ( $\Lambda = .98$ ;  $F(2, 129) = 1.33$ ,  $p = .268$ ,  $\eta^2 = .02$ ) there is no significant effect of type of content on the mediating variables. The test of between-subjects effects revealed the following effects of type of influencer on each mediating variable: identification ( $F(1, 130) = 0.11$ ,  $p = .739$ ,  $\eta^2 = .00$ ) and credibility ( $F(1, 130) = 2.661$ ,  $p = .105$ ,  $\eta^2 = .02$ ).

Table 8 shows that food content led to more identification and credibility than fashion content. The results were in the opposite direction than hypothesized. Therefore, H6 is not supported.

**Table 8:** Descriptive statistics of the mediating variables

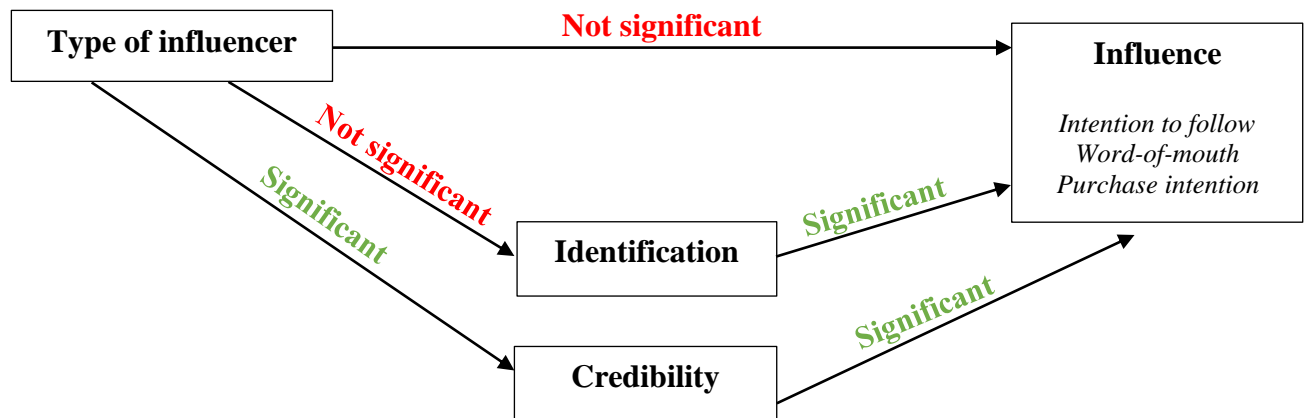
Type of content	Type of influencer	Human influencer		Virtual influencer	
		Mean	SD	Mean	SD
<b>Fashion content</b>	Identification	2.74	.99	2.74	.97
	Credibility	3.74	.59	4.09	.87
<b>Food content</b>	Identification	2.82	1.01	2.56	1.16
	Credibility	3.94	.67	3.99	.83

#### 4.3 Mediation Analysis: Regression of the Mediating Variables

**Mediating effects of identification and credibility on type of influencer and influence:** According to H7 it was expected that a) identification and b) credibility mediate the effect of the type of influencer (human vs. virtual) on influence. The mediator analysis showed that the regression coefficient for type of influencer on influence (intention to follow) is not significant ( $R^2 = .01$ ,  $F(1, 130) = 1.91$ ,  $p = .170$ ), influence (word-of-mouth) is not significant ( $R^2 = .02$ ,  $F(1, 130) = 0.69$ ,  $p = .405$ ), and influence (purchase intention) is not significant ( $R^2 = .02$ ,  $F(1, 130) = 2.73$ ,  $p = .101$ ). The regression coefficient for type of influencer on identification is not significant ( $R^2 = .01$ ,  $F(1, 130) = 0.59$ ,  $p = .440$ ) and credibility is significant ( $R^2 = .05$ ,  $F(1, 130) = 7.13$ ,  $p = .009$ ).

So even though there are significant correlations between identification ( $R^2 = .49, F(1, 130) = 128.64, p = .000$ ) and credibility ( $R^2 = .13, F(1, 130) = 19.53, p = .000$ ) and influence, hypothesis seven is not supported and there is no mediation (see table 9).

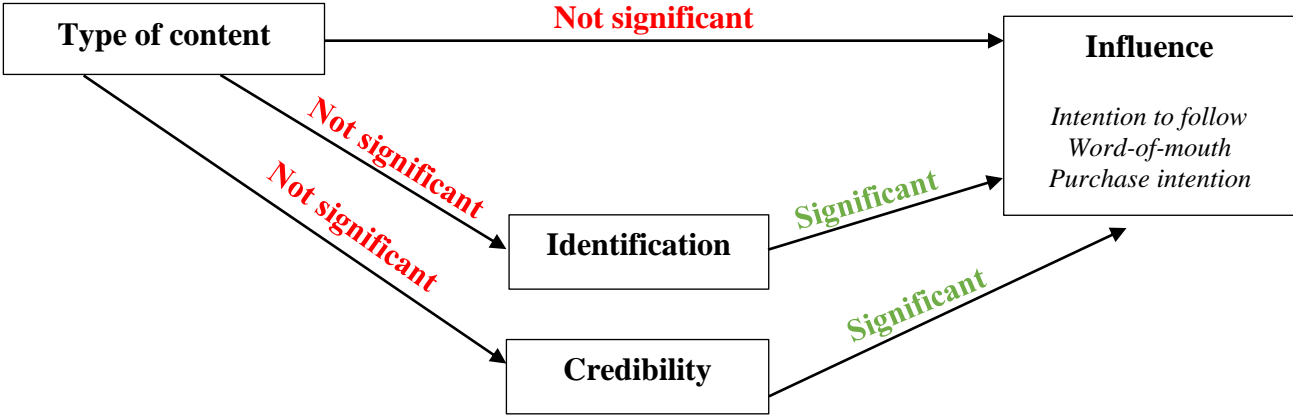
**Table 9:** Mediating effects type of influencer and influence



**Mediating effects of identification and credibility on type of content and influence:** According to H8 it was expected that a) identification and b) credibility mediate the effect of the type of content (fashion vs. food) on influence. The mediator analysis showed that the regression coefficient for type of content on influence (intention to follow) is not significant ( $R^2 = .00, F(1, 130) = 0.00, p = .994$ ), influence (word-of-mouth) is not significant ( $R^2 = .00, F(1, 130) = 0.01, p = .925$ ), and influence (purchase intention) is not significant ( $R^2 = .02, F(1, 130) = 1.99, p = .161$ ). Therefore, the existence of a mediator is not possible and H8 is not supported.

The regression coefficient for type of content on identification ( $R^2 = .00, F(1, 130) = 0.11, p = .739$ ) and credibility ( $R^2 = .02, F(1, 130) = 2.66, p = .105$ ) is not significant.

**Table 10:** Mediating effects type of influencer and influence



**4.4 Removing the failed manipulation check responses**

The same MANOVA’s and regression analyses have been carried out on a dataset without the manipulation check responses. This was done to see if there are great differences with and without the 35 ( $n = 35$ ) failed responses. There are 2 little differences. The first, Wilk's Lambda test revealed that there was a partially significant effect of type of influencer on the dependent variables. The test of between-subjects effects revealed that word-of-mouth was significant. So that would have meant that H1b was supported. Also, the descriptive statistics of the dependent variables show H4 was supported, food content posts result in a higher level of influence when posted by a human influencer, rather than posted by a virtual influencer.

However, to the insufficient statistical power these results will not be mentioned any further. The dataset that includes the respondents that failed the manipulation check gives statistical power and does not differ much.

#### 4.5 Overview of the tested hypotheses

Eight hypotheses were developed in the theoretical framework specifically for this study. The outcomes of the MANOVA and the mediation analysis can be used to determine whether the hypotheses are supported.

**Table 11:** Overview of the tested hypotheses

	Content	Results
<b>H1:</b>	A) Human influencers have a higher level of influence (intention to follow) on Instagram users compared to virtual influencers. B) Human influencers have a higher level of influence (word-of-mouth) on Instagram users compared to virtual influencers. C) Human influencers have a higher level of influence (purchase intention) on Instagram users compared to virtual influencers.	Not supported
<b>H2:</b>	A fashion content post from influencers has a higher level of influence on Instagram users compared to a food content post from influencers.	Not supported
<b>H3:</b>	Fashion content posts result in a higher level of influence when posted by a virtual influencer, rather than posted by a human influencer.	Not supported
<b>H4:</b>	Food content posts result in a higher level of influence when posted by a human influencer, rather than posted by a virtual influencer.	Not supported
<b>H5:</b>	The use of human influencers leads to more a) identification and b) credibility, as compared to the use of virtual influencers.	Not supported
<b>H6:</b>	The use of a fashion content post leads to more a) identification and b) credibility, as compared to the use of a food content post.	Not supported
<b>H7:</b>	a) Identification and b) credibility mediate the effect of the type of influencer (human vs. virtual) on influence.	Not supported
<b>H8:</b>	a) Identification and b) credibility mediate the effect of the type of content (fashion vs. food) on influence.	Not supported

## 5. Discussion and conclusion

The primary goal of this study was to investigate if and how the type of influencer and the type of content affect the level of influence. An experiment was conducted to investigate this. To determine if there was an effect on the constructs of influence - intention to follow, word-of-mouth, and purchase intention – the type of influencer and the type of content were manipulated. In addition, the mediating variables identification and credibility were examined. This was done to measure if an effect occurred when evaluating a certain type of influencer (human vs. virtual) or type of content (fashion vs. food). This chapter of the paper includes a general discussion of the results, the limitations of this research, suggestions for future research, theoretical and practical implications, and the final conclusion.

### 5.1 General Discussion of the Results

This study's main goal is to answer the following central research question: *“To what extent does the combination of influencer type (human vs. virtual) and type of content (food vs. fashion) affect the level of influence (intention to follow, word-of-mouth, purchase intention), and what is the role of credibility and identification?”* First, it was investigated if the human influencers have a higher level of influence on Instagram users, than virtual influencers. Second, it was investigated whether a fashion content post from influencers has a higher level of influence on Instagram users compared to a food content post from influencers. Furthermore, the combinations between the type of influencer and type of content were analyzed. And finally, the effects of identification and credibility were explored.

The most prominent finding of this study is that human influencers do not have a higher level of influence on Instagram users, compared with virtual influencers. This means that the results showed that the intention to follow, word-of-mouth, and purchase intention among Instagram users is the same for virtual and human influencers. This is not in line with the stated hypothesis (H1). In addition, it was expected that a fashion content post from influencers would result in a higher level of influence on Instagram users, than a food content post from influencers. This research did not find a significant difference between the conditions. Therefore, the stated hypothesis (H2) was contradicted.

Following, the combinations between influencer type and content type were analysed. It was expected that fashion content posts result in a higher level of influence when posted by a virtual

influencer, rather than posted by a human influencer. And that food content posts result in a higher level of influence when posted by a human influencer, rather than posted by a virtual influencer. The results of the analytics revealed no effects between fashion content and virtual influencers. The results also did not reveal that there was a significant effect between food content posts and human influencers. Therefore, the stated hypotheses (H3 and H4) were contradicted.

The mediating role of identification and credibility was also examined. The analytics show that type of influencer and type of content have no effect on these variables. As a result, none of the hypotheses relating these variables (H5, H6, H7, and H8).

The conclusion is that none of the hypotheses can be supported. There was insufficient empirical research on how Instagram users react to virtual influencers. This study revealed that Instagram users do not have a difference between human influencers and virtual influencers. There is no evidence to answer part of the study's main question. The results show that the combination of influencer type (human vs. virtual) and type of content (food vs. fashion) do not affect the level of influence. Previous literature by Schouten et al (2020) revealed that the effectiveness of an endorsed product is inextricably linked to the degree to which the endorser's image, personality, or skill matches the endorsed product. And the results of the study of Boerman, et al., (2022), that focused on 'greenfluencing', show that influencers who advocate for pro-environmental behaviour are frequently accused of hypocrisy due to the discrepancy between their environmental messaging and their actual behaviour. The respondents in this study showed that it does not matter if the endorsed product/service is endorsed by a human or virtual influencer. In addition, there is no evidence that identification and credibility perform a mediating role on the variables type of influencer and type of content.

But why were none of eight hypotheses supported? The study from Schouten et al (2020) revealed that the effectiveness of an endorsed product is inextricably linked to the degree to which the endorser's image, personality, or skill matches the endorsed product. Despite the fact the conditions that were presented to the respondents in this study were pre-tested and created to look exactly like Instagram, the results could be different than in real life. Geysers (2022) explains that influencers do have power to influence the decisions of others based on their authority, expertise, position, or relationship with their target audience. It might be the case that the respondents in this study had no prior history to



the influencer, which influences the outcome of the results. It could have been challenging for the respondents to formulate an opinion given their limited exposure to the influencers. They did not have the time to identify with them, build an online relationship, and therefore seen as more credible. Or they did not have faith in the expertise and knowledge from the influencer about the advertised product, because they did not know them (Loureiro and Sarmiento, 2019., Bi and Zhang, 2022., Djafarova and Rushworth, 2017). These things could have caused the fact that none of the hypotheses were supported. The outcome shows that the Instagram users that participate in this study do not have a difference between virtual and human influencers.

## **5.2 Limitations and Future Research**

First, it is important to address the research design's limitations. Given that the study was conducted in an experimental context, the participants had no prior contact with the influencer that was being presented. Therefore, to avoid prejudice stemming from preconceived notions about actual influencers, a fictional influencer was selected. The influencer used in this study was a female. She was promoting clothes mostly worn by woman and ate pancakes. It is possible that the respondents could not see themselves buying a scarf or eating pancakes in a hotspot in Amsterdam. In that case, this study was not a great fit for these respondents.

Researching current influencers and their fan bases and examining the results of various sponsored post formats from various influencer categories may be quite fascinating. When doing this research, many pre-existing attitudes must be considered, but it may also have a beneficial impact because the relationships and involvement between the influencer and the followers are genuine. This study used an experiment with a fictional influencer, however based on the results, a study on actual influencers may be quite intriguing. Furthermore, the only way the respondents could have seen that it was a human or virtual influencer was to scan the bio and read the accompanying text carefully. For upcoming research, it could be interesting to add hashtags to the post to disclose if it is a human or virtual influencer. Also, the photo and information were only showed once. For upcoming research, it would be interesting to include the photo and accompanying text before all stages in the questionnaire. However, it was clearly mentioned that the photo and text would only display once.

Second, the study was conducted entirely online, therefore it was impossible to monitor the participants' activities while they were taking part. It's possible that they were preoccupied when responding to the questions. Another potential issue with the research being performed online is that participants may not be able to ask questions when they do not understand anything. Even if they did not completely understand the question, it is conceivable that they responded to it. The fact that no one is seeing them do the survey in person is another drawback of conducting it virtually: the participants can feel less encouraged or inspired to answer questions. Researching the differences between existing human and virtual influencers (how they work, how they chose their content, in which niche they operate, etc.) and how people perceive these differences would be quite interesting. This could be done via an experimental design, but it could also be in-depth interviews or observation.

Additional research is also needed to test if other mediating variables have an effect on the type of influencers and type of content. It is possible that other variables would have been more appropriate for this study, like parasocial interaction. But this research was focussed on the level of influence (intention to follow, word-of-mouth, and purchase intention). In the researcher's opinion the most important variables to explain level of influence. Also, Instagram was used in this study as media platform, but the virtual influencer trend is increasing on other platforms like TikTok and YouTube. And finally, it would be interesting to research which type of content would suit virtual and human influencers best. Because the fashion and food niches are scoring the same in this research, but how would travel or home content suit virtual or human influencers? That would be interesting to explore.

### **5.3 Theoretical and Practical Implications**

The findings of this study contribute to the gap in literature on virtual influencers. Especially, the difference between human and virtual influencers. The studies from Keller (1993) and Erdogan (1999) explain that brand endorsers are common in the marketing communication field. Human influencers are a phenomenon from the last decade, as explained in the research conducted by Sands, et al., (2022). The new virtual influencers are upcoming and is creating a movement towards the use of virtual influencers instead of human influencers. The theoretical framework also leads to a better

understanding of (virtual) influencers, and the most notable virtual influencers, which marketers and organisations may use to boost brand salience and equity, particularly for luxury product/service brands.

The question arose, is there a difference in how people perceive virtual influencers compared to human influencers? And do they find them credible, because they are not really exciting? This study discovered that human influencers do not have a higher level of influence on Instagram users, than virtual influencers. And that the type of content also has no effects on influence when posted by a human influencer, then posted by a virtual influencer.

The experiment performed during this study can be used as a new starting point within influencer marketing and future research. It would be interesting for marketers to see if they have to choose a human or virtual influencers, based on the brand they are working for.

Even though this study did not produce significant findings, it nonetheless contributes significantly to the existing research. Marketers can learn that it does not matter for the level of influence if they use a human or virtual influencer. Because this research operationalizes influencers, it might be quite intriguing for follow-up studies. This research broadens the scope of earlier social marketing studies, making it theoretically relevant and a contribution to the emerging field of influencer marketing research.

This study emphasizes the practical value of the level of influence in influencer marketing. Influencer marketing complements other components of the marketing mix, such as product design, branding, packaging, pricing, and location selection, to produce positive effects in consumers' thoughts (Erdogan, 1999). What has been investigated in this study is instantly applicable in practice.

## **5.4 Conclusion**

This study aimed to determine the impact of influencer type (human vs. virtual) and content type (fashion vs. food) on level of influence. Also, the study aimed to explore the role of identification and credibility as mediators. It also investigates the concepts of types of influencers and types of content in social media marketing from a conceptual perspective. There were no significant effects. Human influencers do not have a higher level of influence on Instagram users. And there is no difference in food content posts and fashion content posts when posted by a human or virtual influencer. The

mediating variables identification and credibility are linked to the level of influence, but not with the type of influencer nor type of content. It could be that there are other variables that will be significant. However, it is interesting to see that identification and credibility are not linked with type of influencer or type of content, because that was suspected when starting this study.

It can be concluded that the practice of influencer marketing is here to stay. Marketers can be confident about the usage of influencers in their marketing communication strategies. The rise of the new influencer, the virtual influencer, will add to influencer marketing. The research question “To what extent does the combination of influencer type (human vs. virtual) and type of content (food vs. fashion) affect the level of influence (intention to follow, word-of-mouth, and purchase intention), and what is the role of credibility and identification?” can be answered. The combination of influencer type and type of content does not affect the level of influence. And credibility and identification do play a role on level of influence, but not on influencer type or content type. Also, the question in the title of this thesis “Are virtual influencers the new standard in digital marketing? The difference between virtual and human influencers and the role of identification and credibility” can be answered. Virtual influencers might be the new standard in digital marketing. For now, human influencers do not have a higher level of influence on Instagram users. But when greater understanding about virtual influencers will emerge, and more is known about how social media users perceive virtual influencers and which type of content suits them, it might be the case that more marketers will take the risk to promote their product or service through virtual influencers, instead of what they already know, the human influencer.

This study focusses on the social media platform Instagram, the biggest platform for influencer marketing nowadays. But one thing is certain, new social media platforms will arise. For example, TikTok, this platform has grown massively over the past years. It might be the case that it will overtake Instagram if it comes to influencer marketing. Especially the younger generation is on this platform. But in the future years it is very likely that new platforms will be created. Marketers and researchers then have the responsibility in discovering these new platforms and new techniques of (influencer) marketing.

Inevitably, more research is required to better understand how people react to virtual influencers and the elements that generate such interaction. Large-scale research with real influencers can provide valuable insights into the factors that impact influence levels.

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## 7. Appendix

### 7.1 Survey

#### Start of Block: Introduction

Q3 Beste respondent,

Ik nodig je graag uit om deel te nemen aan dit onderzoek. Om mijn master voor de opleiding Communication Science aan Universiteit Twente af te ronden wordt dit onderzoek afgenomen. Het zou mij ontzettend helpen als je zo'n 10 minuten de tijd wil nemen om de enquête in te vullen. De deelname aan dit onderzoek is geheel vrijwillig en anoniem.

Hoe gaan we te werk?

Je neemt deel aan een onderzoek waarbij we informatie zullen vergaren door je een online vragenlijst voor te leggen en je daarna kunt invullen. Er zijn geen fysieke, juridische of economische risico's verbonden aan jouw deelname aan deze studie. Je hoeft geen vragen te beantwoorden die je niet wilt beantwoorden. Jouw deelname is vrijwillig en je kunt jouw deelname op elk gewenst moment stoppen. Wij doen er alles aan jouw privacy zo goed mogelijk te beschermen. Er wordt op geen enkele wijze vertrouwelijke informatie of persoonsgegevens van of over jou naar buiten gebracht, waardoor iemand jou zal kunnen herkennen.

Het onderzoek wordt uitgevoerd onder supervisie van Universiteit Twente en het onderzoek beoordeeld en goedgekeurd door de ethische commissie van de faculteit BMS (domain Humanities & Social Sciences).

Mocht je vragen of opmerkingen hebben, neem dan contact op met mij via:  
g.h.lamping@student.utwente.nl

Alvast bedankt!

Met vriendelijke groet,  
Sanne (G.H.) Lamping

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Q4 Als je klikt op 'Ik begrijp het' bevestig je dat je de bovenstaande informatie hebt gelezen en begrepen en akkoord gaat met jouw deelname.

Ik begrijp het (1)

#### End of Block: Introduction

---

#### Start of Block: Filter question

Q5 Een vereiste om deel te kunnen nemen aan dit onderzoek is het hebben van een Instagram account.

Heb je een eigen Instagram account?

- Ja (1)
- Nee (2)

*Skip To: End of Survey If Een vereiste om deel te kunnen nemen aan dit onderzoek is het hebben van een Instagram account. H... = Nee*

---

Q9 Ben je 18 jaar of ouder?

- Ja (1)
- Nee (2)

*Skip To: End of Survey If Ben je 18 jaar of ouder? = Nee*

**End of Block: Filter question**

---

**Start of Block: General questions**

Q6 Wat is je geslacht?

- Man (1)
  - Vrouw (2)
  - Ik identificeer mijzelf niet als man of vrouw (3)
  - Zeg ik liever niet (4)
- 

Q7 Wat is je leeftijd?

---

Q10 Wat is je hoogste afgeronde opleiding?

- MBO (1)
  - AD (2)
  - HBO (3)
  - WO (4)
  - Doctorsgraad (5)
- 

Q11 Hoe vaak maak je gebruik van Instagram?

- Vaak (meerdere malen per dag) (1)
  - Regelmatig (iedere dag) (2)
  - Af en toe (een aantal keer per week) (3)
  - Zelden (een keer in de zoveel weken) (4)
  - Bijna nooit (een paar keer per jaar) (5)
- 

Q12 Volg je influencers op Instagram?

- Ja (1)
  - Nee (2)
- 

Q13 Ben je bekend met virtual influencers?

- Ja (1)
- Nee (2)

End of Block: General questions

---

Start of Block: Introduction questions influencers



**Q12 Lees en bekijk goed!**

Op de volgende pagina zie je een tekst, een Instagram profiel en een Instagram pagina. Lees als eerst de tekst goed door en bekijk daarna het Instagram profiel en de Instagram pagina aandachtig. Daarna beantwoord je vragen op basis van wat je het gelezen en hebt gezien.

**LET OP! Je kan tijdens het beantwoorden van de vragen kan je niet terug om de tekst, het Instagram profiel en de Instagram post opnieuw te bekijken, neem het dus allemaal goed op zometeen.**

End of Block: Introduction questions influencers

---

Start of Block: Condition 1 (human influencer profile with fashion content)

**Q14 Lees en bekijk de onderstaande tekst, het Instagram profiel en de Instagram post erg goed. Je kan hier namelijk niet weer naar terug keren!**

-----

Q13 Laura van Dijk is een social media influencer. Ze is nu 4 jaar fulltime influencer en heeft duizenden volgers. Als influencer promoot Laura producten en ervaringen voor veel verschillende merken. De merken waarmee ze samenwerkt kiest ze dan ook zorgvuldig uit. Het moet aansluiten bij zowel haar on- als offline persoonlijkheid. Laura heeft haar carrière als influencer helemaal zelf opgebouwd en runt nog steeds haar eigen Instagram pagina. Ze bepaalt hoe, wat, waar en wanneer ze post. Ook houdt Laura nauwlettend de laatste trends in de gaten, zodat ze weet wat haar volgers graag willen zien.

-----

Q14

-----

Q16

End of Block: Condition 1 (human influencer profile with fashion content)

---

Start of Block: Condition 2 (human influencer profile with food content)

**Q17 Lees en bekijk de onderstaande tekst, het Instagram profiel en de Instagram post erg goed. Je kan hier namelijk niet weer naar terug keren!**

-----

Q18 Laura van Dijk is een social media influencer. Ze is nu 4 jaar fulltime influencer en heeft duizenden volgers. Als influencer promoot Laura producten en ervaringen voor veel verschillende merken. De merken waarmee ze samenwerkt kiest ze dan ook zorgvuldig uit. Het moet aansluiten bij zowel haar on- als offline persoonlijkheid. Laura heeft haar carrière als influencer helemaal zelf opgebouwd en runt nog steeds haar eigen Instagram pagina. Ze bepaalt hoe, wat, waar en wanneer ze post. Ook houdt Laura nauwlettend de laatste trends in de gaten, zodat ze weet wat haar volgers graag willen zien.

---

Q19

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Q20

End of Block: Condition 2 (human influencer profile with food content)

---

Start of Block: Condition 3 (virtual influencer profile with fashion content)

**Q21 Lees en bekijk de onderstaande tekst, het Instagram profiel en de Instagram post erg goed. Je kan hier namelijk niet weer naar terug keren!**

---

Q22 Laura van Dijk is een virtual influencer. Dit betekent dat zij alleen online bestaat. Een social media team heeft haar online identiteit gecreëerd. Het team beheert haar online persoonlijkheid, kiest wat ze aan heeft, hoe ze eruitziet en met welke bedrijven ze een samenwerking aangaat. Dat moet allemaal aansluiten bij haar online persoonlijk en dit kiest haar team dan ook zorgvuldig uit. Ze bestaat nu 4 jaar en heeft duizenden volgers. Laura haar team kijkt continue naar de laatste trends en kan op basis van data haar volgende post bepalen.

---

Q23

---

Q24

End of Block: Condition 3 (virtual influencer profile with fashion content)

---

Start of Block: Condition 4 (virtual influencer profile with food content)

**Q25 Lees en bekijk de onderstaande tekst, het Instagram profiel en de Instagram post erg goed. Je kan hier namelijk niet weer naar terug keren!**

---

Q26 Laura van Dijk is een virtual influencer. Dit betekent dat zij alleen online bestaat. Een social media team heeft haar online identiteit gecreëerd. Het team beheert haar online persoonlijkheid, kiest wat ze aan heeft, hoe ze eruitziet en met welke bedrijven ze een samenwerking aangaat. Dat moet allemaal aansluiten bij haar online persoonlijk en dit kiest haar team dan ook zorgvuldig uit. Ze bestaat nu 4 jaar en heeft duizenden volgers. Laura haar team kijkt continue naar de laatste trends en kan op basis van data haar volgende post bepalen.

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Q27

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Q28

End of Block: Condition 4 (virtual influencer profile with food content)

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Start of Block: Identification questions

Q29 Beantwoord de statements en houd daarbij de tekst, het Instagram profiel en de Instagram post die je zojuist hebt gezien in je gedachten.

	Sterk mee oneens (1)	Oneens (2)	Enigszins oneens (3)	Neutraal (4)	Enigszins eens (5)	Eens (6)	Sterk mee eens (7)
Deze influencer denkt hetzelfde als mij (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deze influencer gedraagt zich hetzelfde als mij (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deze influencer lijkt op mij (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deze influencer is gelijk aan mij (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q30 -

	Sterk mee oneens (1)	Oneens (2)	Enigszins oneens (3)	Neutraal (4)	Enigszins eens (5)	Eens (6)	Sterk mee eens (7)
Deze influencer is het soort persoon dat ik zelf wil zijn (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Soms wou ik dat ik meer als deze influencer kon zijn (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deze influencer is iemand die ik zou willen evenaren (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zou het soort dingen willen doen die deze influencer doet (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zou me nooit zo willen gedragen als deze influencer doet (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q31 -

	Sterk mee oneens (1)	Oneens (2)	Enigszins oneens (3)	Neutraal (4)	Enigszins eens (5)	Eens (6)	Sterk mee eens (7)
Ik voel me verbonden met deze influencer (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik voel me solidair met deze influencer (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik voel me betrokken bij deze influencer (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Identification questions

Start of Block: Credibility questions

Q33 Beantwoord de statements en houd daarbij de tekst, het Instagram profiel en de Instagram post die je zojuist hebt gezien in je gedachten.

	Ik vind deze influencer...							
	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Aantrekkelijk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Onaantrekkelijk
Stijlvol	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Niet stijlvol
Mooi	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Lelijk
Elegant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Gewoon (eenvoudig)
Sexy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Niet sexy

---

Q34 -

	Ik vind deze influencer...							
	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Afhankelijk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Onafhankelijk
Eerlijk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Oneerlijk
Betrouwbaar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Onbetrouwbaar
Oprecht	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Onoprecht
Vertrouwelijk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Onvertrouwelijk

---

Q33 -

	Ik vind deze influencer...							
	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Een expert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Geen expert
Ervaren	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Onervaren
Deskundig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ondeskundig
Gekwalificeerd	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ongekwatificeerd
Vakkundig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Onvakkundig

End of Block: Credibility questions

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Start of Block: Influence questions

Q34 Beantwoord de statements en houd daarbij de tekst, het Instagram profiel en de Instagram post die je zojuist hebt gezien in je gedachten.

	Zeer onwaarschi jnlijk (1)	Onwaarschi jnlijk (2)	Enigszins onwaarschi jnlijk (3)	Neutr aal (4)	Enigszins waarschij nlijk (5)	Waarschij nlijk (6)	Zeer waarschij nlijk (7)
Ik ben van plan dit Instagram account binnenkort te bekijken (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik denk dat ik dit Instagram account zou gaan volgen (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zal waarschijnlijk gaan kijken naar nieuwe content die op dit Instagram-account wordt gepost (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Q36 -

	Zeer onwaarschi jnlijk (1)	Onwaarschi jnlijk (2)	Enigszins onwaarschi jnlijk (3)	Neutr aal (4)	Enigszins waarschij nlijk (5)	Waarschij nlijk (6)	Zeer waarschij nlijk (7)
Hoe waarschij nlijk is het dat je je vrienden vertelt over deze influence r? (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hoe waarschij nlijk is het dat je content van deze influence r deelt op jouw Instagra m pagina? (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q37 -

	Zeer onwaarschi jnlijk (1)	Onwaarschi jnlijk (2)	Enigszins onwaarschi jnlijk (3)	Neutr aal (4)	Enigszins waarschij nlijk (5)	Waarschij nlijk (6)	Zeer waarschij nlijk (7)
De volgende keer dat je dit type product wilt kopen, hoe waarschij nlijk is het dan dat je dit product koopt? (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik denk dat ik door deze influence r aanbevol en producte n of diensten zal kopen (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zal waarschij nlijk producte n of diensten kopen na het zien van deze influence r (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Influence questions

Start of Block: Manipulation check

Q37 Het Instagram profiel dat ik zag is van een robot.

Ja (1)

Nee (2)

End of Block: Manipulation check

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