

## **Trusting TikTok:**

The Influence of Human and Machine Agents on the Credibility of Beauty Product  
Information on TikTok

Student Name: Alysia Sewdin  
Student Number: 697738

Supervisor: Prof. Dr. Marc Verboord

Media & Creative Industries  
Erasmus School of History, Culture and Communication  
Erasmus University Rotterdam

Master Thesis  
*June 2025*

Word Count: Max. 12.796

Trusting TikTok: The Influence of Human and Machine Agents on the Credibility of  
Beauty Product Information on TikTok

**ABSTRACT**

*In recent years, TikTok has emerged as a leading platform for product discovery, particularly within the beauty industry. For Gen Z, the app functions not only as a source of entertainment but also as a trusted space for learning about products through influencers, algorithmic recommendations, and user interactions. However, the credibility of the beauty-related information presented on TikTok remains under-researched, especially when considering the interplay between human agents (e.g., influencers, engagement signals) and machine agents (e.g., algorithmic recommendations, search functions). This study addresses this gap by asking: How do human agents and machine agents influence Gen Z users' perception of the credibility of beauty product information on TikTok? To explore this question, a quantitative research design was employed. Data was collected through an online survey targeting Gen Z users (aged 18-27). The survey included validated scales for constructs such as perceived influencer expertise, reliability, physical attractiveness, meta-voicing, algorithm, and the search affordance. The dependent variable, credibility perception, was measured through multiple items reflecting trustworthiness and expertise. The data were analyzed using Ordinary Least Squares (OLS) regressions to test a set of predefined hypotheses. The findings reveal a nuanced picture. Among human agents, influencer reliability significantly predicted credibility perceptions, while expertise and attractiveness did not consistently show significant effects. Additionally, higher engagement signals (meta-voicing) were associated with increased credibility, suggesting that social proof still plays a crucial role in how Gen Z evaluates content. Regarding machine agents, both personalized algorithmic recommendations and search affordances significantly predicted higher perceived credibility, indicating that Gen Z users place trust in the platform's technological infrastructure as much as in individual content creators. A hierarchical regression comparing human and machine agents showed that the inclusion of human factors improved the overall model. However, only influencer reliability remained a significant individual predictor, while machine-based features, particularly algorithmic recommendations, consistently showed strong effects. These results suggest that Gen Z's credibility judgments are not driven solely by either human or machine agents, but rather reflect a hybrid model, where both play meaningful, though varied, roles.*

**KEYWORDS:** TikTok, Gen Z, Credibility, Social Media, Beauty Product Information

## Table of Contents

<b>ABSTRACT .....</b>	<b>2</b>
<b>1. Introduction.....</b>	<b>5</b>
1.1 <i>TikTok as a search engine.....</i>	<i>5</i>
1.2 <i>Assessing credibility of online information.....</i>	<i>6</i>
1.3 <i>Academic relevance .....</i>	<i>6</i>
1.4 <i>Societal relevance .....</i>	<i>7</i>
<b>2. Theoretical Framework.....</b>	<b>9</b>
2.1 <i>TikTok and the sub-genre #BeautyTok .....</i>	<i>9</i>
2.2 <i>Generation Z and their relationship with TikTok .....</i>	<i>10</i>
2.3 <i>Credibility of online information .....</i>	<i>10</i>
2.4 <i>Social media affordances .....</i>	<i>12</i>
2.4.1 <i>Influencers.....</i>	<i>13</i>
2.4.2 <i>Meta-voicing and social validation.....</i>	<i>14</i>
2.4.3 <i>Algorithmic recommendations.....</i>	<i>16</i>
2.4.4 <i>Searching and information discovery .....</i>	<i>16</i>
2.5 <i>Comparison of human and machine affordances .....</i>	<i>17</i>
<b>3. Methodology .....</b>	<b>19</b>
3.1 <i>Choice of research method .....</i>	<i>19</i>
3.2 <i>Sampling .....</i>	<i>20</i>
3.2.1 <i>Sampling design.....</i>	<i>20</i>
3.2.2 <i>Sampling description .....</i>	<i>20</i>
3.3 <i>Procedure.....</i>	<i>21</i>
3.4 <i>Operationalization.....</i>	<i>22</i>
3.5 <i>Data analysis .....</i>	<i>25</i>
3.6 <i>Validity and reliability.....</i>	<i>26</i>
3.6.1 <i>Validity.....</i>	<i>26</i>
3.6.2 <i>Reliability.....</i>	<i>27</i>
<b>4. Results .....</b>	<b>29</b>
4.1 <i>The impact of influencers on credibility perceptions.....</i>	<i>29</i>
4.2 <i>The impact of the meta-voicing affordance on credibility perceptions .....</i>	<i>30</i>
4.3 <i>The impact of the algorithm affordance on credibility perceptions .....</i>	<i>31</i>
4.4 <i>The impact of the search affordance on credibility perceptions.....</i>	<i>31</i>
4.5 <i>Comparative effects of human and machine agent on credibility perceptions.....</i>	<i>32</i>
<b>5. Conclusion .....</b>	<b>35</b>

5.1 Summary of findings .....	35
5.2 Discussion.....	36
5.3 Practical implications.....	38
5.4 Limitations and recommendations for future research.....	39
<b>6. References.....</b>	<b>41</b>
<b>7. Appendices.....</b>	<b>48</b>
7.1 Appendix A: Survey.....	48
7.1 Appendix B: Declaration of AI use .....	57

## 1. Introduction

### 1.1 TikTok as a search engine

On January 18<sup>th</sup>, 2025, the U.S. government's decision to ban the social media app TikTok in the U.S. sent a shockwave through its user base (Montgomery, 2025, para. 13; Schneid, 2025, para. 2). After the initial shutdown, many users took to their other social media channels to express their feelings of loss and frustration (Schneid, 2025, para. 4). Influencer Fyza Ali, who has amassed a following larger than 2 million across all social media channels, captured this sentiment by sharing the following text on her Snapchat story after the ban: *'I'm so mad right now. It's not just an app I have so many saved videos for educational purposes and things that help me be a mom. I use it more than Google to search things. Is anyone else's blocked??'* (Ali, 2025, para. 1). Across various channels, many individuals expressed similar feelings of frustration and loss, highlighting the extent to which TikTok has become deeply embedded into the daily lives of many of its users. This widespread emotional response is reflective of the platform's global significance (Su, 2023, p. 88; Athaya & Wandebori, 2024, p. 43). With an estimated 1.14 billion active users in 2024, and forecasts suggesting growth to approximately 1.9 billion users by 2029 (Ceci, 2025, para. 1), TikTok's role in daily life is likely to become even more pronounced.

Furthermore, the statement by Ali also underscores a key shift in social media use: TikTok has rapidly evolved from a platform primarily known for entertainment into a prominent tool for information discovery (Song et al., 2021, p. 2121). While the platform originally gained traction through dance trends and viral memes (Geyser, 2022, para. 9), its role has expanded significantly, particularly among younger audiences like Generation Z (Gen Z). As Pérez (2022, para. 3) notes, TikTok's emergence as an alternative search engine is beginning to challenge the dominance of traditional platforms like Google, with Gen Z increasingly favoring short-form video content over conventional, text-heavy search results (Seemiller & Grace, 2024, p. 70). This change in consumer behavior is especially notable in the beauty industry, as younger audiences such as Gen Z, are increasingly turning to TikTok as a primary search engine for beauty related inquiries (Tinuiti, 2025, p. 9). According to Williams et al. (2023, p. 482), Gen Z users consume beauty content in the form of recommendation, review, and explanation videos to inform themselves about beauty products and trends.

## 1.2 Assessing credibility of online information

This dependence on TikTok for credible information, especially regarding beauty products, raises a critical question on how audiences determine the credibility of information on the app. The concept of credible information is often conceptualized as information that is trustworthy and contains expertise (Özdemir et al., 2023, p. 3; Hyan Yoo & Gretzel, 2008, p. 137; Metzger, 2007, p. 2078; O’Keefe, 2002, p. 191; Tseng & Fogg, 1999, p. 41). Traditionally, the credibility of information was often guided by authority markers, such as professional titles and institutional affiliations, to help audiences assess whether information was credible (Metzger & Flanagin, 2013, p. 212). However, with the rise of social media platforms such as TikTok, these conventional markers have become absent or irrelevant (Metzger & Flanagin, 2013, p. 212). Moreover, it has been noted that traditional media are increasingly relying on social media platforms to gather information (Adornato, 2016, p. 88), underscoring a shift in content being largely user-generated instead of curated by professionals (Lin et al., 2016, p. 265). This openness of participation on social media also increases the likelihood of low-quality or false information circulating widely (Lachlan et al., 2016, p. 648), resulting in the fact that users are increasingly required to act as their own gatekeepers. Therefore, credibility judgments have become more individual and subjective, often shaped by *human agents* such as social media influencers (Lou & Yuan, 2019, p. 59; Özdemir et al., 2023; p. 2) and social validation (Song et al., 2021, p. 2128), or *machine agents* such as algorithms and other technological affordances (Song et al., 2021, p. 2128; Lin et al., 2016, p. 265). Thus, given that Gen Z consumers increasingly rely on social media for beauty product discovery and purchasing decisions (Williams et al., 2023, p. 482; Tinuiti, 2025, p. 9), it is crucial to examine which agents on TikTok contribute most to its perceived credibility in the beauty industry. Therefore, this study seeks to answer the following research question: *How do human agents and machine agents influence Gen Z users’ perception of the credibility of beauty product information on TikTok?*

## 1.3 Academic relevance

The academic relevance of this study lies in its contribution to the evolving body of research on credibility formation in digital environments, particularly within the context of short video platforms such as TikTok. Although prior research has investigated the perception of credibility of health-related information on short video platforms among its users (Song et al., 2021; Kong et al., 2021; Isaac et al., 2024), there is a noticeable gap in the literature concerning the credibility of beauty-related content. Given that the beauty

community is one of the platform's most active (Seekis & Kennedy, 2023, p. 118) and commercially influential domains (Williams et al., 2023, p. 482; Tinuiti, 2025, p. 9), it is crucial to examine the agents at play regarding credibility of beauty product related content.

While a growing number of studies have examined the persuasive power of *human agents*, such as influencers, on consumer trust (Özdemir et al., 2023; Alcántara-Pilar et al., 2024; Lou & Yuan, 2019), research into how *machine agents* contribute to perceptions of credibility is still emerging (Song et al., 2021; Lin et al., 2016). Moreover, studies in this area often treat human and machine agents in isolation, failing to account for the interplay or comparative effects of these different agents on users' evaluation of content credibility. This is a significant oversight given the hybrid nature of algorithmically mediated platforms like TikTok, where human and machine elements are deeply entangled in the user *experience*. As such, the comparative influence of human agents (e.g., influencers, social validation) and machine agents (e.g., algorithmic recommendations, search functions) on perceived credibility in the beauty domain remains underexplored.

This study addresses that gap by examining how Gen Z consumers, who constitute TikTok's most active user group (Doyle, 2023, para. 12), assess the credibility of beauty product information presented by different types of agents. In doing so, this approach extends social media credibility research by examining how multiple sources collectively shape perceptions, rather than focusing on single-source influence. By investigating the relative impact of human and machine agents on credibility perceptions within a specific and commercially significant domain, this study not only responds to current academic gaps but also provides a foundation for future research into the dynamics of trust and authority in social media environments.

#### **1.4 Societal relevance**

The societal relevance of this study lies in its examination of how credibility is negotiated on a platform that has become central to the way younger generations seek, share, and engage with information (Nigam, 2022, p. 421; Seemiller & Grace, 2024, p. 70). As TikTok evolves beyond entertainment into a primary space for knowledge acquisition, particularly in domains like beauty, understanding how credibility is constructed on the platform has tangible implications for multiple stakeholders. Therefore, this research is socially relevant for multiple reasons.

Firstly, for users, especially Gen Z, this research sheds light on the mechanisms that influence their trust in product information encountered on TikTok. As consumers

increasingly rely on online information (Lou & Yuan, 2019, p. 58; Metzger & Flanagin, 2015, p. 447), there is a growing risk of misinformation (Metzger & Flanagin, 2013, p. 212). By exploring how different agents, both human and machine, shape credibility perceptions, this study encourages more critical digital literacy. It offers insights into the cues users might unknowingly depend on when assessing trustworthiness, ultimately empowering them to make more informed and reflective decisions.

Secondly, for app developers and platform designers, this study contributes to a deeper understanding of how interface designs choices shape user behavior and trust. If credibility is significantly influenced by machine agents, such as TikTok's 'For You Page' or search features, developers carry responsibility for how their platforms mediate information trust. The findings from this study may inform design decisions around transparency.

Third, in the context of the beauty industry, where influencer marketing and TikTok-native branding strategies dominate (Bhatnagar et al., 2024, p. 7; Hassan et al., 2021, p. 2; Fitri & Ananta, 2025, p. 192), the implications are equally critical. Beauty brands rely on the platform not just for exposure, but as a space where consumers actively seek beauty product information and form opinions regarding beauty trends and products (Williams et al., 2023, p. 482; Tinuiti, 2025, p. 9). Understanding which types of agents are perceived as most credible enables marketers to optimize their strategies, balancing authenticity, promotional content, and algorithmic optimization for maximum effectiveness.

Finally, this research speaks to broader societal questions about trust and credibility in the digital age. As users increasingly rely on social media platforms like TikTok to navigate everyday decisions (Song et al., 2021, p. 2121), the lack of professional gatekeeping and editorial oversight becomes especially problematic. Unlike traditional publishing platforms, where information is typically filtered through established authority structures and accompanied by clear indicators of expertise, contemporary platforms such as TikTok circulate information in informal formats that often lack these conventional credibility markers (Metzger, 2007, p. 2078). This shift raises critical questions about how users assess the trustworthiness of content in digital environments where these traditional markers are largely absent. This study intervenes in that conversation by offering a nuanced examination of how trust is constructed, consumed, and commodified within one of the most influential digital ecosystems of the current era.



## **2. Theoretical Framework**

### **2.1 TikTok and the sub-genre #BeautyTok**

TikTok is one of the fastest-growing social media platforms, centered around short-form video content. Launched internationally in 2018, it allows users to create, edit, and share videos with a range of filters, effects, and soundtracks (Su, 2023, p. 88; Song et al., 2021, p. 2121). Unlike traditional social networks, TikTok's primary mode of content discovery is algorithm-driven rather than following-based (Schellewald, 2023, p. 1570; Seekis & Kennedy, 2023, p. 117). Upon opening the app, users are instantly directed to their personal 'For You Page' (FYP), which curates videos based on their viewing habits, search history, and engagement patterns (Langlais et al, 2024, p. 3; Kumsawat et al., 2024, p. 4). TikTok's user base has grown exponentially, surpassing 1 billion monthly active users as of May 2024, with 60% of its audience belonging to Generation Z (Doyle, 2023, para. 12).

The platform supports both passive and active forms of engagement. Many users scroll through content without interacting, a behavior commonly referred to as "scrolling" (Langlais et al., p. 4). Others engage more actively by liking, commenting, sharing, or participating in trends and challenges (Su, 2023, p. 90). TikTok also facilitates direct communication between users through messaging and duets, where individuals can respond to or collaborate with others' videos. These interactive affordances enhance the platform's immersive and collaborative experience (Abbasi et al., 2023, p. 345).

Beyond entertainment, TikTok has become a cultural phenomenon, influencing fashion, beauty, and lifestyle trends (Song et al., 2021, p. 2121; Williams et al., 2023, p. 482). One of the most prominent examples of this is #BeautyTok, the platform's thriving beauty community. The hashtag #Beauty has amassed over 100 billion views as of November 2022, making beauty one of TikTok's most popular categories (Seekis & Kennedy, 2023, p. 118). While this sub-community features aspirational and aesthetic content, #BeautyTok is especially known for the vast amount of beauty product information it offers. Users actively exchange knowledge, recommendations, and personal experiences through product reviews, try-on sessions, tutorials, and before-and-after transformations (Athaya & Wandebori, 2024, p. 44). At the core of this content are beauty products, which Dalziel and De Klerk (2021, p. 115) define as products used to care for, clean, and improve the human body. Similarly, Natalie and Siregar (2024, p. 1620) describe them as substances applied externally to enhance or maintain one's appearance and fragrance. This constant stream of informational content makes #BeautyTok a key space where users seek, share, and

evaluate beauty product information (Williams et al., 2023, p. 482; Athaya & Wandebori, 2024, p. 44). This space is particularly relevant for Generation Z users of TikTok, who represent a highly engaged audience on #BeautyTok (Williams et al., 2023, p. 482; Athaya & Wandebori, 2024, p. 46).

## **2.2 Generation Z and their relationship with TikTok**

Generation Z (Gen Z) are defined as the generational cohort born between 1995 and 2010, which in 2025 includes individuals aged 15 to 30 years (Seemiller & Grace, 2024, p. 1; Williams et al., 2023, p. 481). According to Doyle (2023, para. 12), Gen Z makes up the majority of TikTok's users. This is not unexpected, given that a defining characteristic of Gen Z is their upbringing in the digital era, surrounded by constant, instant, and diverse communication options such as in-app messaging, video calls, and social media platforms (Seemiller & Grace, 2024, p. 31; Williams et al., 2023, p. 481; Nigam, 2022, p. 421). This technological environment is all they have ever known, fundamentally shaping their communication styles, expectations, and preferences, distinguishing them from previous generations (Nigam, 2022, p. 421). This also extends into their learning habits, with video-based content, whether tutorials, reviews, or interactive modules, playing a central role in how they consume information (Seemiller & Grace, 2024, p. 70).

Moreover, Gen Z's beliefs, attitudes, and behaviors are highly influenced by their social environment, particularly the opinions of peers and those with whom they maintain close connections (Dalziel & De Klerk, 2021, p. 113). In this context, social media platforms like TikTok serve not only as entertainment but also as peer-influenced spaces for product discovery and decision-making. Aligned with this notion, Williams et al. (2023, p. 482) highlight that younger audiences, especially Gen Z, increasingly turn to TikTok as a primary search engine for beauty product recommendations, reviews, and trends.

Given that Gen Z constitutes the majority of TikTok's user base (Doyle, 2023, para. 12) and heavily relies on social media for beauty-related information (Williams et al., 2023, p. 482), this study focuses on this cohort as its target population. By examining which affordances of TikTok contribute most to its perceived credibility in the beauty industry, this research aims to better understand the platform's role in shaping Gen Z's credibility perception.

## **2.3 Credibility of online information**

The rise of the Internet has directly led to a significant expansion of users' access to

a wide range of information sources (Metzger, 2007, p. 2078). Whereas in the past, only individuals with sufficient power and financial resources could serve as sources due to the high expenses of producing and disseminating information on a large scale (Metzger, 2007, p. 2078). However, digitization allows for anyone to be an author as these aforementioned limitations are not in order on the Internet (Metzger, 2007, p. 2078). On platforms like TikTok, this means that users are continuously exposed to a stream of easily accessible content from all kinds of creators (Su, 2023, p. 89). Furthermore, many websites, including TikTok, function with little monitoring, contributing to the possibility of spreading misinformation (Metzger & Flanagin, 2013, p. 212). While this allows for more diverse perspectives, it also raises questions about how credibility is assessed in environments such as TikTok, where content is abundant (Fitri & Ananta, 2025, p. 193) and fast-paced (Klug et al., 2021, p. 85).

Credibility in the context of online information refers to the believability of both the content and its source (Lin et al., 2016, p. 265; Metzger, 2007, p. 2078), and the degree to which the audience considers the source to acquire expertise and knowledge regarding the product or service (Djafarova & Rushworth, 2017, p. 3). Research has consistently indicated that credibility is a multifaceted construct, most commonly conceptualized through the dimensions of trustworthiness and expertise (Özdemir et al., 2023, p. 3; Hyan Yoo & Gretzel, 2008, p. 137; Metzger, 2007, p. 2078; O'Keefe, 2002, p. 191; Tseng & Fogg, 1999, p. 41). Trustworthiness reflects the extent to which a source is perceived as honest and unbiased (Hyan Yoo & Gretzel, 2008, p. 137; Özdemir et al., 2023, p. 3), while expertise concerns the perceived competence or knowledgeability of the source (Özdemir et al., 2023, p. 3; Ohanian, 1990, p. 41). These dimensions form users' overall judgments of whether the information presented can be relied upon. For instance, a TikTok creator might be perceived as trustworthy due to their transparency about sponsored content, or as an expert because of their (professional) background. Thus, on TikTok, interaction with human agents such as content creators play a big role in the assessment of credibility of information (Alcántara-Pilar et al., 2024, p. 2).

However, determining credibility online is particularly challenging, as much of the information lacks traditional authority markers, such as clear author identification or institutional affiliation, that once guided users in evaluating source reliability (Metzger & Flanagin, 2013, p. 212). This issue is further amplified on TikTok, where content is predominantly surfaced via algorithmic recommendation rather than by direct user selection (Schellewald, 2023, p. 1570; Seekis & Kennedy, 2023, p. 117). As a result, users often

encounter beauty product information from unfamiliar creators, making credibility assessments even more reliant on peripheral cues rather than prior knowledge or following behavior (Klug et al., 2021, p. 85).

Furthermore, a platform's interface and design also shape how credibility is constructed. For example, Shariff (2017, p. 62) found that specific features on Twitter, such as verification badges or follower counts, played a significant role in how users evaluated the credibility of tweets. This aligns with Fogg's (2003, p. 722) notion of surface credibility, which refers to credibility judgments based on a user's immediate reactions to the interface or design of a platform. In sum, this insight highlights the importance of machine agents such as technological features in the formation of credibility judgments, highlighting the need to examine how both human and machine agents help contribute to credibility perceptions among its users.

## **2.4 Social media affordances**

As the previous section has outlined, credibility perceptions of online information are shaped not only by human agents (Lou & Yuan, 2019, p. 67), but also by machine agents that influence user interpretation (Shariff, 2017, p. 62; Fogg, 2003, p. 722). To conceptualize both human and machine agents, this research uses the concept of affordances to analyze how TikTok users assess the credibility of beauty product information on the platform. Originally introduced by Gibson (1979/2014, p. 127), the term affordances refers to the action possibilities that an environment offers to an individual. In the context of online media, affordances are technology features that enable certain actions (Evans et al., 2017, p. 36; Majchrzak et al., 2013, p. 39), such as the comment section or the 'like' feature of a social media platform. However, recent literature has expanded on this definition by arguing that affordances are not merely objective features of technology but can also be defined as how users interpret and act upon them within specific contexts, shifting the focus from purely technical features to how users interact with them (Evans et al., 2017, p. 36; Scharlach & Hallinan, 2023, p. 1). This user-centered perspective has been applied to examine how people engage with and make sense of information on social media platforms (Zhao et al., 2020, p. 230; Majchrzak et al., 2013, p. 39).

In their research on credibility of health information on TikTok, Song et al. (2021, pp. 2125, 2128) outline three affordances that may influence users' perception of credibility: meta-voicing, recommendation (by algorithm), and searching. Given this study's focus on perceived credibility of beauty product information, these three affordances remain

analytically relevant and are therefore included in the research. Furthermore, this study also includes human creators on TikTok as an affordance, as they are human agents whose presence, behavior, and presentation shape the way content is consumed and interpreted (Freberg et al., 2011, p. 90; Lou & Yuan, 2019, p. 59). This framing aligns with the relational view of affordances, which emphasizes that affordances emerge through the interaction between platform features and user perception (Evans et al., 2017, p. 36). For this reason, this research outlines four types of affordances: influencers (content creators), meta-voicing (likes, comments, and shares), algorithmic recommendations, and searching. It should be noted that the aforementioned affordances are not exhaustive, however, because of the established influence on credibility perceptions in prior literature and the practical constraints that precluded a comprehensive analysis of all TikTok affordances, the decision was made to include these four affordances in this research. These affordances will be discussed in the following sections.

#### *2.4.1 Influencers*

Social media influencers are individuals who have cultivated a substantial following on digital platforms by consistently sharing content within a specific niche or expertise. They are often viewed as independent third-party endorsers who shape consumer attitudes and behaviors through personal and authentic content (Freberg et al., 2011, p. 90; Gamage & Ashill, 2022, p. 316). Unlike traditional advertising, influencer-created content is perceived as more relatable and trustworthy, particularly when it aligns with the influencer's own lifestyle or area of specialization (Lou & Yuan, 2019, p. 59). This form of peer-to-peer communication has become especially influential in the beauty industry, where consumers often seek out reviews and tutorials to mitigate perceived risks associated with product purchases (Gamage & Ashill, 2023, p. 316; Williams et al., 2023, p. 482; Tinuiti, 2025, p. 9).

Influencers play a pivotal role in shaping consumers' perception of credibility on social media platforms like TikTok. According to Djafarova and Rushworth (2017, p. 3), an influencer's perceived credibility is largely determined by three key characteristics: physical attractiveness, expertise, and reliability. Similarly, Alcántara-Pilar et al. (2024, p. 5) examined influencer credibility on TikTok and found that these three factors also drive purchase intentions. Their study emphasized that while physical attractiveness can enhance engagement, reliability and expertise have a stronger impact on trust and purchase behavior (Alcántara-Pilar et al., 2024, p. 11). This aligns with Lou & Yuan's (2019, p. 59) statement

that creators who specialize in a certain area of expertise are more likely to be perceived as credible. Notably, perceived credibility can diminish when followers suspect that branded content is overly controlled by the company rather than the influencer, undermining the sense of authenticity that defines influencer marketing (Gamage & Ashill, 2023, p. 316). In sum, based on existing literature, it can be concluded that expertise and reliability are indicators of positive credibility perceptions of influencers.

Based on the aforementioned, influencer credibility can be conceptualized as a key human-driven affordance affecting TikTok's perceived credibility as a beauty product information source. Therefore, the following hypotheses are proposed:

**H1:** TikTok beauty influencers with higher perceived expertise will be associated with higher credibility of beauty product information.

**H2:** TikTok beauty influencers with higher perceived reliability will be associated with higher credibility of beauty product information.

However, as Alcántara-Pilar et al. (2024, p. 11) have argued, physical attractiveness has a weaker impact on credibility perceptions than expertise and reliability. Moreover, Lou and Yuan (2019, p. 59) and Hyan Yoo and Gretzel (2008, p. 136) also indicate that influencers who demonstrate a high level of expertise, defined as knowledge and experience, are more likely to be perceived as credible sources. Therefore, the following hypothesis in which the perceived physical attractiveness of influencers is less important for the credibility than expertise and reliability is proposed:

**H3:** The perceived physical attractiveness of TikTok beauty influencers will have a weaker effect on credibility perceptions of beauty product information than a) expertise, and b) reliability.

#### *2.4.2 Meta-voicing and social validation*

Meta-voicing is a form of social interaction that enables users to not only express their own opinions but also publicly respond to the content, presence, and activities of others within an online environment. This concept, as defined by Majchrzak et al. (2013, p. 41), refers to the practice of reacting to existing content, such as through liking, commenting, or sharing, in a way that adds metaknowledge to the ongoing conversation. In contrast to simply voicing an opinion, meta-voicing involves engaging with what has already been said or posted, thereby contributing to a collective evaluation of the information presented (Majchrzak et al., 2013, p. 41).

On TikTok, meta-voicing is primarily enacted through visible metrics such as likes, comments, and shares (Song et al., 2021, p. 2125). These forms of engagement serve as social signals, often interpreted by users as indicators of quality or value (Lin et al., 2016, p. 266). For example, beauty content that acquires thousands of likes or overwhelmingly positive comments may be perceived as more credible than content with minimal interaction. Such visible validation reinforces trust in the information and signals to other users that the content is worth their attention. As Williams et al. (2023, p. 482) note, this participatory and community-driven nature of TikTok aligns with Gen Z's preference for platforms that offer real-time feedback and collective knowledge sharing. This impact of meta-voicing on credibility perceptions can be explained through the lens of "bandwagon heuristics". According to Lin et al. (2016, p. 266), users often rely on the logic that if other people believe something, others will be inclined to do so as well when evaluating online information. Similarly, Manata and Spottswood (2021, p. 1328) emphasize that users actively interpret the evaluations of others, via likes, comments, and shares, as cues that inform their own trust in the content. This tendency is grounded in critical mass theory, which suggests that once a sufficient number of individuals engage with content, their collective attention creates a bandwagon effect that drives more users to accept or endorse that content (Oliver, 2013, pp. 2-3). As a result, feedback, whether in the form of likes, shares, or comments, can significantly influence users' perception of trustworthiness (Flanagin & Metzger, 2008, 2013).

In this context, the meta-voicing affordances operate as a key human agent: a feature of the platform that not only facilitates user interaction but also plays a critical role in the credibility assessment process. Although meta-voicing is made possible by the platform's technological design, its persuasive power lies in the social behaviors it enables, namely peer validation. When users engage with content by liking, commenting, or sharing, they signal approval or disapproval in ways that are visible to others. These social evaluations are inherently human-driven, as they reflect interpersonal influence. This study thus examines meta-voicing as one of the primary mechanisms through which peer validation influences the perceived credibility of beauty product information on TikTok. Therefore, the following hypothesis is proposed:

**H4:** Higher engagement signals (likes, comments, and shares) on beauty-related TikTok content will be associated with higher credibility of beauty product information.

#### *2.4.3 Algorithmic recommendations*

Algorithms, in the context of digital media, are automated systems designed to filter, prioritize, and recommend content based on users' behaviors, preferences, and interactions (Shin et al., 2020, p. 1). TikTok's recommendation algorithms, in particular, stands out for its ability to deliver highly tailored content to individual users via the platforms 'For You Page' (FYP) (Langlais et al, 2024, p. 3). Unlike traditional social media platforms that prioritize content from followed accounts, TikTok's FYP relies primarily on previous and continuous user engagement, such as watch time, likes, shares, and comments, as well as trending hashtags and audio cues (Klug et al., 2021, p. 85; Kumsawat et al., 2024, p. 4). What makes TikTok's algorithm unique is its intrapersonal focus: it continuously learns from the user's behavior to generate a feed that reflects their interests (Su, 2023, p. 90). This hyper-personalized feed not only increases user engagement but may also influence how credible users perceive the information they encounter. As user repeatedly see content that appears tailored to them, they may interpret it as more relevant, reliable and thus trustworthy (Song et al., 2021, p. 2128). This phenomenon aligns with the concept of surface credibility, which suggests that platform design features can positively influence perceptions of trustworthiness (Fogg, 2003, p. 722).

In the context of beauty content, this means that TikTok users may come to trust the beauty product information they receive not necessarily because of the source, but because of the algorithm's perceived ability to "know" them and deliver what seems like relevant and reliable content. In sum, these insights suggest that algorithmic recommendations serve as a powerful machine agent in shaping credibility perceptions. Therefore, the following hypothesis is proposed:

**H5:** Personalized beauty content recommendations from TikTok's algorithm will be associated with a higher credibility of beauty product information.

#### *2.4.4 Searching and information discovery*

While TikTok's algorithm passively curates content through the FYP, its search function enables users to take a more active role in navigating the platform. Increasingly, TikTok is being used not only for entertainment but also as a search engine, particularly by younger users seeking quick answers (Pérez, 2022, para. 3). In the context of beauty-related content, this means that users frequently turn to the search bar to look up product reviews, tutorials, or user experiences before making purchasing decisions (Gamage & Ashill, 2023, p. 316; Tinuiti, 2025, p. 9). The ability to search directly for content allows users to exercise



greater control over the information they consume, which can positively influence their perception of credibility (Song et al., 2021, p. 2134). When users consistently find useful and high-quality information through TikTok's search feature, they are more likely to develop what Fogg (2003, p. 722) describes as 'earned credibility', credibility that emerges from repeated, positive interactions with a system or source over time. In the context of #BeautyTok, the search affordance may play an important role in facilitating informed product discovery. Therefore, the following hypothesis is proposed:

**H6:** A well-functioning search affordance will be associated with higher credibility of beauty product information.

## **2.5 Comparison of human and machine affordances**

Previous research has indicated that human and machine agents may have certain effects on the perception on credibility (Özdemir et al., 2023; Alcántara-Pilar et al., 2024; Lou & Yuan, 2019; Song et al., 2021; Lin et al., 2016). However, there remains a notable gap in studies specifically examining the comparative influence of these agents on the perceived credibility. This comparison is particularly relevant within the context of TikTok, where (product) information is frequently disseminated through both creator-driven (human) and platform-driven (machine) affordances. Although this comparison remains largely unexplored in the context of beauty product information, existing research in other areas suggest a consistent trend: human agents tend to be perceived as more credible than machine-driven ones.

For instance, Wang and Huang (2024, p. 832) demonstrated through a meta-analysis that machine authorship negatively affected credibility perceptions when compared to human-generated news content. Similarly, Özdemir et al. (2023, p. 4) found that virtual influencers are perceived as less credible brand endorsers than their human counterparts, ultimately diminishing their ability to foster positive brand attitudes. In the financial sector, Zhang et al. (2021, p. 635) reported that robo-advisors do not elicit the same levels of trust as human advisors. Finally, in the medical sector, Edwards et al. (2018, p. 102) concluded that patients found AI and robot physicians to be less credible than human physicians. These studies collectively highlight a broader tendency for human agents to be perceived as more credible than machine agents across various contexts. However, it is unclear whether this tendency transcends to TikTok, where human and machine affordances are inherently interconnected. Therefore, the following hypothesis is proposed:

**H7:** Human agents on TikTok will be associated with higher credibility of beauty product information than machine agents.

### **3. Methodology**

To answer the research question “*How do human agents and machine agents influence Gen Z users’ perception of the credibility of beauty product information on TikTok?*”, a quantitative research method was employed. The following sections provide a detailed overview of the methodological design. Section 3.1 presents the choice and justification of the method, followed by the description of the sampling method of this study in Section 3.2. Next, in Section 3.3, the variables used for this study and how they were operationalized will be outlined. Finally, Section 3.4 addresses the validity and reliability of this research.

#### **3.1 Choice of research method**

To answer the research question, this study employed a quantitative research design in the form of an online survey. This approach was selected to systematically investigate how different types of affordances, namely human affordances (such as influencers and meta-voicing) and machine affordances (such as algorithms and search functions), impact credibility judgments among Gen Z consumers of beauty-related content on TikTok.

A quantitative survey was deemed appropriate for multiple reasons. Firstly, the goal of this research was to identify potential relationships between specific variables, namely types of affordances and perceived credibility. In order to determine such relationships, particularly the influence of an independent variable on a dependent variable, a quantitative approach is necessary, as it allows for the measurement and statistical analysis of variable interactions (Brennen, 2017, p. 5; Privitera, 2014, p. 13). Secondly, as the population of this study, namely Gen Z users of TikTok who consume beauty content, is relatively large, a survey format enables the collection of standardized responses from a sample of this population, which enhances the consistency of the data and allows for generalizations within the Gen Z population (Babbie, 2015, p. 256). By using closed-ended questions with predefined response options, the survey ensures that all participants respond to questions in a uniform way, increasing the ability to draw meaningful conclusions about the influence of human and machine agents on credibility (Babbie, 2015, p. 256). Finally, this research is built on complex, multidimensional variables, such as credibility, which can be broken down into components such as trustworthiness and expertise. In this study, these dimensions were measured using items such as ‘I find the beauty product information on TikTok to be trustworthy’. Quantitative measures, such as the 5-point Likert scale used in this study,

allows for such complex and multidimensional constructs to be translated into measurable variables, making them suitable for statistical analysis (Vogt, 2011, p. 219).

## **3.2 Sampling**

### *3.2.1 Sampling design*

To research how human agents and machine agents influence Gen Z users' perception of the credibility of beauty product information on TikTok, at least 150 respondents were needed to conduct the analysis. Gen Z constitutes the majority of TikTok's user base (Doyle, 2023, para. 12) and is particularly inclined to use the platform as a search engine for beauty-related content (Williams et al., 2023, p. 482). Therefore, the sampling frame for this research is Gen Z users of TikTok who have engaged with beauty content on the platform. An important consideration is that minors were excluded for this research, as obtaining parental consent is not only ethically required (Babbie, 2015, p. 64), but also a complex and time-consuming process, which was beyond the practical scope of this research.

To reach the target population, a non-probability convenience sampling method was used. The survey was distributed via social media platforms such as Reddit, Facebook, and Instagram, with the goal of reaching Gen Z users who are active on TikTok and engage with beauty-related content. These platforms were chosen due to the significant presence of Gen Z users (Smith, 2024, para. 9; Opena, 2025, para. 2) and the ease with which the content can be shared across relevant communities and interest groups. For instance, the survey was shared on subreddits such as 'r/TikTok' and 'r/SurveyExchange', the Dutch Facebook groups 'Keeping up with us' and 'Respondenten gezocht (onderzoek, enquête, vragenlijst, scriptie, afstudeer)', as well as the researcher's personal Instagram account. This approach allowed for efficient data collection from individuals who align with the study's target population.

### *3.2.2 Sampling description*

After closing the online survey, a total of 238 responses ( $N = 238$ ) were collected. After screening the data for completeness, such as ensuring participants were within the Gen Z age range, had engaged with beauty content on TikTok, and completely filled out the survey, ( $N =$ ) 160 valid responses remained and were included in the final analysis. Among these participants, 86.1% ( $N = 143$ ) identified as female, 13.3% ( $N = 22$ ) identified as male, and 0.6% ( $N = 1$ ) identified as something other than female or male. Moreover, in the final

sample, the respondents' age ranged from 18 to 29 years ( $M = 23.77$ ,  $SD = 2.54$ ). Lastly, the most commonly reported level of completed education was a bachelor's degree (51.9%), followed by a master's degree (29.4%), a high school diploma or equivalent (15.6%), and a small number of respondents who reported another form of education (3.1%). The responses listed under 'other' were specified as secondary vocational education or no diploma obtained yet.

### **3.3 Procedure**

To collect data, an online survey was designed through the software Qualtrics. To test the clarity and functionality of the survey design, a pilot version was shared with five colleagues. Following feedback from the pilot respondents who reported an ambiguity in one survey item (the physical attractiveness scale of influencers), the survey was revised before official distribution. The survey was published on April 23, 2015, and closed on May 14, 2025, resulting in a data collection period of 3 weeks. Before being directed to the actual questionnaire, the respondents were first informed on the nature of the survey and their rights as a respondent. This included information such as the subject of the research and that their participation was voluntary, confidential, anonymous, and that the research was conducted for academic purposes only. Furthermore, they were informed that they could withdraw their participation at any time, and that they could contact the researcher using the provided contact details if they had any questions, comments, or concerns. Lastly, participants were informed that this research was intended for adults only. After given their consent to participate in the survey by agreeing to the aforementioned terms, they were directed to the questionnaire. If they did not agree to the aforementioned terms, they were directed to the end of the survey.

To make sure the participants met the sampling criteria, a few screening questions were asked. These screening questions included whether they were born between 1995 and 2006, to make sure all participants belonged to Gen Z and were above 18 years old. All participants who indicated that they were not born between these years, thus not part of Gen Z or not old enough to participate in this research, were directed to the end of the survey. Next, participants were asked whether they had ever consumed beauty product content on TikTok. All participants who indicated that they had never consumed beauty product content on TikTok were also directed to the end of the survey.

After the screening questions, the participants were first asked some general

questions about their TikTok use, such as how often they use the platform. They could indicate this using a 7-point Likert scale, where 1 represented “Almost never (less than once a month)” and 7 represented “A large part of every day”. Next, participants were asked to indicate their interest in consuming beauty content, using a slider scale ranging from 1 (Not interested at all) to 7 (Very interested). Following the initial questions on their TikTok behavior, respondents were presented with statements related to the TikTok affordances examined in this study, including influencer presence, meta-voicing, algorithmic recommendations, and the platform’s search function. Participants indicated their level of agreements with each statement using a 5-point Likert scale, ranging from ‘Strongly disagree’ to ‘Strongly agree’. Subsequently, participants responded to a series of statements assessing their perception of credibility of beauty product information on TikTok, also measured using a 5-point Likert scale.

The final section of the survey gathered basic demographic information, including participants’ gender identity, educational level, and exact age. Upon completion, participants were thanked for their time and received confirmation that their responses had been successfully recorded. The survey took approximately five minutes to complete.

### **3.4 Operationalization**

To measure the key variables in this study, previous validated scales were used and occasionally adapted to fit the specific context of this research. Thus, the main constructs of interest such as influencers, searching affordance, algorithmic recommendations, and credibility, were all measured using items from existing scales, with minor modifications to ensure relevance and alignment with the research question.

*Searching affordance.* To measure how Gen Z users engage with and perceive TikTok’s searching affordance, this study employed the search affordance scale ( $M = 3.92$ ,  $SD = 0.71$ ) developed by Song et al. (2021, p. 2142) (Cronbach’s  $\alpha = .75$ ). This scale consists of three statements related to TikTok’s search functionality. Respondents rated their agreement with each statement using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). An example item is: ‘*TikTok allows me to retrieve videos of a user.*’

*Meta-voicing.* The evaluability scale ( $M = 3.95$ ,  $SD = 0.77$ ) by Manata and Spottswood (2021, p. 1327) has been employed for this study (Cronbach’s  $\alpha = .64$ ). This original scale includes four items, that could be ranked with a 5-point Likert scale, ranging from ‘strongly disagree’ (1) to ‘strongly agree’ (5). For this research, the decision has been made to adapt this scale to fit the context of this study, and to delete irrelevant measures.

Therefore, the adapted scale consists of three items that reflect how users view the engagement metrics on TikTok (likes, comments and sharing) as social evaluation cues. An example item is: “The ‘like’ function on TikTok allows me to see other people’s evaluation of the content.” Respondents rated their agreement with each statement using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree).

*Algorithmic recommendations.* To measure how Gen Z users engage with and perceive the algorithmic recommendations of TikTok, this study employed the algorithm scale ( $M = 4.03$ ,  $SD = 0.59$ ) by Song et al. (2021, p. 2142) (Cronbach’s  $\alpha = .78$ ). This scale consists of three statements related to TikTok’s algorithm. An example item is: ‘*TikTok provides personalized content for me.*’ Respondents rated their agreement with each statement using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree).

*Credibility perception of TikTok.* To measure how Gen Z users assess the overall credibility of beauty product information on TikTok, the credibility scale by Song et al. (2021, p. 2142) was adapted ( $M = 3.05$ ,  $SD = 0.58$ ) (Cronbach’s  $\alpha = .72$ ). While the original scale was designed to evaluate the credibility of health-related content, the wording of the items was modified to align with the context of beauty product information. Additionally, prior research highlights that perceived credibility is often rooted in two key dimensions: trustworthiness and expertise (O’Keefe, 2002, p. 191). Therefore, the decision was made to expand the original scale by Song et al. (2021, p. 2142) with items that capture trustworthiness and expertise. An example of an item of the adapted scale is: ‘*I find the beauty product information on TikTok to be trustworthy.*’ Respondents rated their agreement with each statement using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree).

*Influencers.* To measure how Gen Z TikTok users perceive influencers, the scale by Alcántara-Pilar et al. (2024, p. 8), originally developed by Sokolova and Kefi (2020), has been employed for this research. Their scale consists of multiple dimensions such as physical attractiveness, word-of-mouth, and purchase intention. As this research only focuses on the perceived credibility of influencers, only the relevant dimensions have been used for this study. As discussed in Section 2.4.1, these dimensions include physical attractiveness, expertise, and reliability. To ensure that the selected items for the influencer construct functioned cohesively in this study and to confirm they loaded on the underlying dimensions, an Exploratory Factor Analysis (EFA) was performed using principal component analysis with direct oblimin rotation, as the underlying factors were expected to be correlated. The Kaiser-Meyer-Olkin value of .81 verified the sampling adequacy for the analysis, as the acceptable minimum value is .60 (Kaiser & Rice, 1974, p. 112).

Additionally, Bartlett's Test of Sphericity was significant  $\chi^2(91) = 785.41, p < .001$ , thereby confirming sufficient correlation of the data. The model confirmed three factors, which together explained 58.7% of the variance in the attitude towards influencers. The first factor included five items about reliability of the influencer, which explained 29.4% of the variance. Four items about the physical attractiveness loaded onto the second factor, which explained 17.6% of the variance. Lastly, five items about expertise of the influencer loaded onto the third factor, explaining 11.7% of the variance. The factor loadings and Cronbach's alpha of each factor can be found in Table 1. Additional information such as the means and standard deviations found in this study will be discussed in the sections below.

*Physical attractiveness of influencers.* Perceived physical attractiveness of influencers was measured using four items, that could be ranked with a 5-point Likert scale, ranging from 'strongly disagree' (1) to 'strongly agree' (5) (Cronbach's  $\alpha = .77$ ). For this research, the decision has been made to adapt this scale based on the feedback received from pilot respondents of the survey. The original scale by Alcántara-Pilar et al. (2024, p. 8) includes the descriptor 'classic' as part of the physical attractiveness scale, but this descriptor was removed due to its ambiguity and difficulty of interpretation. The items were averaged to form a single index ( $M = 3.53, SD = 0.65$ ).

*Expertise of influencers.* Perceived expertise of influencers was measured using five items that could be ranked with a 5-point Likert scale, ranging from 'strongly disagree' (1) to 'strongly agree' (5) (Cronbach's  $\alpha = .72$ ). The items were averaged to form a single index ( $M = 3.37, SD = 0.64$ ).

*Reliability of influencers.* Perceived reliability of influencers was measured using five items that could be ranked with a 5-point Likert scale, ranging from 'strongly disagree' (1) to 'strongly agree' (5) (Cronbach's  $\alpha = .87$ ). The items were averaged to form a single index ( $M = 3.26, SD = 0.76$ ).



**Table 1.** *Factor loadings, explained variance, and Cronbach's alpha for the three dimensions of attitudes towards influencers.*

<i>Items</i>	<i>Reliability</i>	<i>Physical Attractiveness</i>	<i>Expertise</i>
I find the influencers whose content I consume to be sincere	.843		
I find the influencers whose content I consume to be faithful	.817		
I find the influencers whose content I consume to be honest	.812		
I find the influencers whose content I consume to be loyal	.767		
I find the influencers whose content I consume to be reliable	.727		
I find the influencers whose content I consume to be handsome		.799	
I find the influencers whose content I consume to be sexy		.783	
I find the influencers whose content I consume to be elegant		.770	
I find the influencers whose content I consume to be physically attractive		.727	
I consider these influencers specialists in the field			.752
I consider these influencers experienced in the field			.719
I consider these influencers entrepreneurial			.651
I consider these influencers qualified			.616
I consider these influencers talented			.578
Cronbach's $\alpha$	.87	.77	.72

*Note.* N = 160.

### 3.5 Data analysis

To test the study's hypotheses, several Ordinary Least Squares (OLS) regressions were performed using the statistical software IBM SPSS Statistics (Version 29.0.1.0), including simple linear regressions, multiple regression and hierarchical regression

approaches. OLS regression is widely used in social science research for its ability to test predictive and explanatory relationships between variables (Hair et al., 2018, p. 259). Given that this study aimed not only to explore correlations but also to determine how well specific predictors (human and machine agents) explain variance in credibility perceptions, the use of OLS regression is justified for this aim. The decision to use regression analysis was also grounded in its strong precedent across both consumer behavior and media research. As outlined by Hair et al. (2018, p. 259), regression models are commonly used to explain how consumers form impressions and attitudes, which aligns closely with the aim of this study. Finally, an Exploratory Factor Analysis was performed for the influencer variable, as this construct was theorized to consist of three distinct dimensions: perceived expertise, reliability, and physical attractiveness. Although these dimensions were based on an established scale, it was necessary to verify whether the same factor structure would hold within the context of this study's sample.

To test hypotheses H1 and H2, two separate simple linear regressions were performed to examine the association between influencer characteristics (expertise, reliability, and physical attractiveness) and the perceived credibility of beauty product information. H3, which proposed that physical attractiveness has a weaker effect than expertise and reliability, was tested using a multiple regression. For H4, a simple linear regression was used with meta-voicing affordances (likes, comments, and shares) as the predictor and credibility as the outcome. Hypotheses H5 and H6, concerning machine-based affordances (search and algorithm), were also tested using separate simple linear regressions. Finally, H7 compared the influence of human agents (influencers and meta-voicing) versus machine agents (algorithm and search). A hierarchical regression was used, with machine agents entered in Block 1 and human agents in Block 2, to assess whether the inclusion of human agents significantly improved model fit.

### **3.6 Validity and reliability**

#### **3.6.1 Validity**

To ensure that the study measured the intended constructs, several steps were taken to establish the validity of the research. Firstly, the key concepts, such as attitudes towards influencers and perceived credibility of beauty product information, are inherently complex and multidimensional. For instance, guided by existing literature, attitude towards influencers was broken down into distinct subdimensions such as expertise, reliability, and physical attractiveness. Similarly, credibility perceptions included aspects such as

trustworthiness and expertise. To measure these dimensions correctly, this study adopted existing validated scales developed in prior peer-reviewed research. For example, items measuring attitudes towards influencers were adapted from Alcántara-Pilar et al. (2024), while the credibility and technological affordance-related constructs were informed by scales developed by Song et al. (2021) and Manata and Spottswood (2021). These instruments have undergone empirical validation in previous studies and were only slightly adapted to fit the specific context of TikTok and beauty-related content. This approach helped to preserve the construct validity by ensuring that the scales aligned closely with the theoretical definitions of the concepts they aimed to measure. Secondly, content validity was strengthened by piloting the survey with five pilot respondents, allowing for refinement of item phrasing and clarity before the official publication of the survey.

However, it is important to note that all data were collected via self-reported responses, which introduces potential limitations. Self-reporting may impact the validity due to several factors: respondents may misinterpret questions, over- or under-report behaviors or attitudes, or lack introspective accuracy when evaluating constructs like trust or expertise. While the survey was designed to be anonymous and clearly worded to mitigate these risks, the inherent subjectivity of self-reported data remains a limitation in terms of measurement precision. Despite this, the use of established scales, piloting, and clear item phrasing collectively contribute to the overall validity of the study's measurement instruments.

### **3.6.2 Reliability**

To assess the internal consistency of the multidimensional constructs used in this study, and therefore determine the reliability of this study, a reliability analysis was conducted for each scale. Given that several key variables were measured using multiple items, it was essential to confirm that these items were sufficiently correlated and measured the same underlying concept. Therefore, Cronbach's alpha was calculated for each scale using SPSS. The results indicated that all but one of the scales achieved an alpha value above the commonly accepted threshold of .70, suggesting strong internal consistency (Cortina, 1993, p. 101). One scale, more specifically the scale that was used to measure the perception of meta-voicing affordances, yielded a Cronbach's alpha of .64, which is slightly below the .70 benchmark. However, given that scales with a small number of items are still considered acceptable in exploratory research when Cronbach's alpha  $\geq$  .60 (Griethuijsen et al., 2014, p. 588), and the meta-voicing scale only contains three items, the reliability of this scale was also deemed acceptable. Additionally, several methodological studies have noted

that alpha values above .60 may be considered sufficient in social science research, especially when constructs are measured with fewer items (Hair et al., 2018, p. 775; Taber, 2017, pp. 1279, 1287). Based on this reasoning, the decision was made to retain the meta-voicing scale in the analysis, despite the lower Cronbach's alpha.

By confirming the internal consistency of the scales used, this study increases the likelihood that similar results would be obtained if the same measurements were applied in a different sample or by another researcher, thereby strengthening the overall reliability of the findings.

## 4. Results

In this chapter, the results of the analyses will be presented. First, the output of the OLS regressions will be analyzed in order to accept or reject hypotheses H1, H2, and H4 to H6. To determine whether to accept or reject H3, the output of the multiple linear regression will be analyzed. Finally, the output for the hierarchical regression test will be analyzed to answer hypothesis H7.

### 4.1 The impact of influencers on credibility perceptions

To examine the effect influencers have on the credibility perceptions of beauty product information on TikTok among Gen Z users, three hypotheses were posed. Hypothesis H1 states that TikTok beauty influencers with higher perceived expertise will be associated with higher credibility of beauty product information. To test this, an Ordinary Least Squares (OLS) regression was conducted to examine whether higher perceived expertise of TikTok beauty influencers is associated with increased credibility of beauty product information on the platform. Thus, in this model, credibility of beauty product information served as the dependent variable, whilst perceived expertise of beauty influencers acted as the predictor. The model was found to be significant  $F(1, 158) = 8.82, p = .003, R^2 = .053$ , indicating that the perceived expertise of beauty influencers explains 5.3% of the variance in credibility perception. Perceived expertise of beauty influencers was found to be a significant positive predictor of credibility of beauty product information, as the standardized regression coefficient ( $\beta = .230, t = 2.97, p = .003$ ) shows a significant positive relationship. Therefore, H1 is accepted.

Hypothesis H2 states that TikTok beauty influencers with higher perceived reliability will be associated with higher credibility of beauty product information. To test this, an OLS regression was conducted to examine whether higher perceived reliability of the influencer is associated with increased credibility of beauty product information on the platform. Thus, in this model, credibility of beauty product information served as the dependent variable, whilst perceived reliability of beauty influencers acted as the predictor. The model was found to be significant  $F(1, 158) = 26.6, p < .001, R^2 = .14$ , indicating that the perceived expertise of beauty influencers explains 14% of the variance in credibility perception. Perceived reliability of beauty influencers was found to be a significant positive predictor of credibility of beauty product information, as the standardized regression coefficient ( $\beta = .380, t = 5.16, p < .001$ ) shows a significant positive relationship. Therefore, H2 is accepted.

Hypothesis H3a and H3b state that the perceived physical attractiveness of TikTok beauty influencers will have a weaker effect on credibility perceptions of beauty product information than the perceived expertise of the influencer and the perceived reliability of the influencer. To test this, a multiple regression was run in which credibility of beauty product information served as the dependent variable, whilst perceived physical attractiveness, perceived expertise of the influencer, and perceived reliability acted as the independent variables. The model was found to be significant  $F(3, 159) = 10.3, p < .001, R^2 = .17$ , indicating that this model explains 17% of the variation in credibility perception. Among the three predictors, only perceived reliability of the influencer significantly predicted credibility of beauty product information ( $\beta = .347, t = 4.37, p = .001$ ), while both expertise of the influencer ( $\beta = .083, t = 1.04, p = .302$ ) and physical attractiveness ( $\beta = .118, t = 1.60, p = .112$ ) were non-significant. These results support hypothesis H3b, as reliability shows to be a stronger predictor of credibility than physical attractiveness, accepting H3b. However, as the model shows a non-significant effect for perceived expertise, H3a is rejected.

In sum, the OLS regressions and the multiple linear regression have proven for perceived expertise of the influencer and perceived reliability of the influencers to be significant positive predictors of credibility of beauty product information on TikTok among Gen Z users. Furthermore, the multiple linear regression has indicated that perceived reliability is a stronger predictor of beauty product information than the perceived physical attractiveness of the beauty influencer.

#### **4.2 The impact of the meta-voicing affordance on credibility perceptions**

To examine the effect of meta-voicing affordances on the credibility perception of beauty product information on TikTok among Gen Z users, one hypothesis was posed. Hypothesis H4 states that higher engagement signals, such as likes, comments, and shares, on beauty-related TikTok content will be associated with higher credibility of beauty product information. To test this, an OLS regression was conducted to examine whether higher engagement signals is associated with increased credibility of beauty product information on the platform. Thus, in this model, credibility of beauty product information served as the dependent variable, whilst the centered mean of the meta-voicing variable acted as the predictor. The model was found to be significant  $F(1, 158) = 8.12, p = .005, R^2 = .049$ , indicating that the meta-voicing affordances explain 4.9% of the variance in credibility perception. TikTok's meta-voicing affordances were found to be a significant positive predictor of credibility of beauty product information on the platform, as the

standardized regression coefficient ( $\beta = .221, t = 2.85, p = .005$ ) shows a significant positive relationship. This supports the hypothesis that higher levels of visible engagement are associated with greater credibility of beauty product information. Therefore, H4 is accepted.

#### **4.3 The impact of the algorithm affordance on credibility perceptions**

To assess the influence of TikTok's algorithm affordance on the credibility perception of beauty product information on TikTok among Gen Z users, one hypothesis was posed. Hypothesis H5 states that personalized beauty content recommendations from TikTok's algorithm will be associated with higher credibility of beauty product information. To test this, another OLS regression was conducted to examine whether TikTok's algorithm is associated with increased credibility of beauty product information on the platform. Thus, in this model, credibility of beauty product information served as the dependent variable, whilst the centered mean of the algorithm variable acted as the predictor. The model was found to be significant  $F(1, 158) = 14.76, p < .001, R^2 = .085$ , indicating that the algorithm affordance explain 8.5% of the variance in credibility perception. TikTok's algorithm affordance was found to be a significant positive predictor of credibility of beauty product information on the platform, as the standardized regression coefficient ( $\beta = .292, t = 3.84, p < .001$ ) shows a significant positive relationship. This supports the hypothesis that the algorithm affordance is associated with greater credibility of beauty product information. Therefore, H5 is accepted.

#### **4.4 The impact of the search affordance on credibility perceptions**

To assess the influence of TikTok's search affordance on the credibility perception of beauty product information on TikTok among Gen Z users, one hypothesis was posed. Hypothesis H6 states that a well-functioning search affordance will be associated with a higher perception credibility of beauty product information on TikTok. To test this, another OLS regression was conducted to examine whether TikTok's search affordance is associated with increased credibility of beauty product information. Thus, in this model, credibility of beauty product information served as the dependent variable, whilst the centered mean of the search affordance variable acted as the predictor. The model was found to be significant  $F(1, 149) = 13.98, p < .001, R^2 = .086$ , indicating that the algorithm affordance explains 8.6% of the variance in credibility perception. TikTok's search affordance was found to be a significant positive predictor of credibility of beauty product information on the platform, as the standardized regression coefficient ( $\beta = .064, t = 3.74, p < .001$ ) shows a significant

positive relationship. This supports the hypothesis that the search affordance is associated with greater credibility of beauty product information. Therefore, H6 is accepted.

#### 4.5 Comparative effects of human and machine agent on credibility perceptions

In order to test hypothesis H7 which states that human agents (influencers and meta-voicing) contribute more to credibility perceptions than machine agents (algorithmic recommendations and search affordance), a hierarchical regression was conducted. In Model 1, which included machine agents, the model was found to be significant  $F(2,148) = 11.06, p < .001, R^2 = .130$ . Both search affordance ( $\beta = .234, t = 2.94, p = .004$ ) and algorithm affordance ( $\beta = .218, t = 2.75, p = .007$ ) significantly predicted credibility. Model 2 was also found to be significant  $F(4, 144)$ . In this model, human agents were added, resulting in a significant increase in explained variance ( $R^2 = .256; \Delta R^2 = .126, p = <.001$ ). Within this expanded model, algorithmic recommendation ( $\beta = .196, t = 2.47, p = .015$ ) and influencer reliability ( $\beta = .081, t = 4.01, p = <.001$ ) remained significant. Other predictors, including perceived expertise of influencers ( $\beta = .065, t = .81, p = .421$ ), perceived physical attractiveness of influencer ( $\beta = .015, t = .20, p = .844$ ), and search affordance ( $\beta = .143, t = 1.77, p = .078$ ), were non-significant. The regression coefficients in Table 2 show how both human and machine agents contribute to credibility judgments, with varying levels of significance across predictors. These findings indicate that while human agents do enhance the model, their predictive strength is not consistently greater than that of machine agents. In fact, algorithmic recommendation remained one of the strongest predictors overall, even after the human agents were added. Therefore, while adding human agents improves the model fit, the hypothesis that they contribute more to credibility than machine agents is not fully supported. The evidence points toward an interplay of both human and machine agents shaping positive credibility perceptions. Thus, H7 is rejected.

**Table 2.** Regression model for predicting the perception of credibility of beauty product information on TikTok.

<i>Perception of credibility of beauty product information on TikTok</i>		
	Model 1 $\beta$	Model 2 $\beta$
Search affordance	.234**	.143
Algorithm affordance	.218**	.196*



Perceived expertise influencers		.065
Perceived reliability influencers		.320***
Perceived physical attractiveness influencers		.015
Meta-voicing affordances		.081
$R^2$	.130***	.256***
$F$	2,148***	4,144***
$\Delta R^2$		.126***
$\Delta F$		6,118***

Note. Significance levels: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .  $N = 160$ .

Table 3 presents an overview of the hypotheses examined in this study, indicating whether each hypothesis was supported (accepted) or not supported (rejected) based on the analysis.

**Table 3.** *Overview hypothesis acceptations.*

<i>Hypothesis</i>		<i>Accepted or rejected</i>
H1	TikTok beauty influencers with higher perceived expertise will be associated with higher credibility of beauty product information.	Accepted
H2	TikTok beauty influencers with higher perceived reliability will be associated with higher credibility of beauty product information.	Accepted
H3a	The perceived physical attractiveness of TikTok beauty influencers will have a weaker effect on credibility perceptions of beauty product information than expertise	Rejected
H3b	The perceived physical attractiveness of TikTok beauty influencers will have a weaker effect on credibility perceptions of beauty product information than b) reliability	Accepted
H4	Higher engagement signals (likes, comments, and shares) on beauty-related TikTok content	Accepted

	will be associated with higher credibility of beauty product information.	
H5	Personalized beauty content recommendations from TikTok's algorithm will be associated with a higher credibility of beauty product information.	Accepted
H6	A well-functioning search affordance will be associated with higher credibility of beauty product information.	Accepted
H7	The human agents on TikTok will be associated with higher credibility of beauty product information than the machine agents.	Rejected

---

## 5. Conclusion

In this chapter, a short summary of the conducted research will be presented, along with the answer to the central research question. Furthermore, the findings of the study will be discussed in relation to previous academic literature. Next, the practical implications of this research will be presented. Finally, the limitations and directions for future research will be discussed.

### 5.1 Summary of findings

This thesis set out to answer the central research question: *How do human agents and machine agents influence Gen Z users' perception of the credibility of beauty product information on TikTok?* Through a quantitative approach, the study examined the relative impact of human agents (influencers and meta-voicing) and machine agents (recommendation by algorithm and search function) on Gen Z's credibility assessments within the #BeautyTok sub-community by distributing an online survey.

The findings show that both types of agents significantly shape credibility perceptions, but in nuanced ways. Among the human agents, perceived reliability of the influencer emerged as the strongest predictor of credibility. Therefore, it can be concluded that Gen Z users are more likely to trust beauty product information when it comes from influencers they perceive as reliable. Expertise also showed a positive association, though in the final model its effect diminished. Physical attractiveness, while still often emphasized in influencer culture, had no significant impact on credibility perception. Meta-voicing, the affordance that allows users to evaluate content based on engagement cues (likes, comments, shares), also significantly influenced credibility perceptions. This shows that credibility on TikTok is not just shaped by who speaks, but also by how others respond. This underscores the notion that Gen Z assesses peer validation as an indicator of credibility.

Regarding the machine agents, both the algorithm and search affordances significantly predicted credibility perceptions. The fact that personalized algorithmic recommendations lead to greater perceived credibility highlights how much Gen Z users internalize the platform's mechanics. TikTok's ability to "know what you want" creates a psychological sense of relevance and trust. Similarly, the search affordance proved important: users who experienced TikTok's search affordance as functional and efficient, were more likely to view beauty product information on TikTok as credible.

However, when comparing human and machine agents directly, the study found no definitive evidence that human agents are always more influential. The findings demonstrate

that while human agents contribute to the model's predictive accuracy, their influence on credibility perceptions does not consistently outweigh that of machine agents. Notably, algorithmic recommendations retained strong predictive power even in the presence of human input. This suggests that the hypothesized dominance of human agents in shaping credibility lacks full empirical support. Instead, credibility appears to be a product of synergistic effects between human and machine agents.

In sum, this study finds that Gen Z's perception of credibility in #BeautyTok is shaped by both human and machine agents in distinct yet interconnected ways. Human agents, particularly influencers' perceived reliability and meta-voicing affordances, signal trustworthiness, while machine agents such as algorithmic recommendations and the search affordance enhance credibility through perceived personalization and efficiency. Crucially, neither human nor machine agents dominate; instead, credibility emerges from their synergy. Thus, TikTok's credibility dynamics reflect a hybrid model where human and machine agents jointly guide Gen Z's trust.

## **5.2 Discussion**

This study examined how both human agents and machine agents influence Gen Z users' perception of TikTok beauty product information credibility. The following discussion unpacks these findings, situates them within existing theory, and reflects on their broader implications in Section 5.3.

Existing literature on influencer credibility consistently conceptualizes it as a composite of trustworthiness, expertise, and physical attractiveness (Djafarova & Rushworth, 2017, p. 3; Alcántara-Pilar et al., 2024, p. 5). However, the findings from this study diverge from this widely accepted model. Among Gen Z users on TikTok, only trustworthiness (operationalized as reliability) significantly predicted perceptions of beauty content credibility. Neither expertise nor physical attractiveness showed consistent significance, with expertise losing predictive power in the full regression model and physical attractiveness being non-significant throughout. This challenges the traditional assumption that all three dimensions equally contribute to credibility in influencer marketing. One possible interpretation is that Gen Z audiences prioritize authenticity over surface-level signals or even professional competence. However, it should be noted that this finding may indicate that the importance of credibility dimensions is context dependent. For instance, on a platform like TikTok, where content is mostly informal (Su, 2023, pp. 91-92), expertise

might be less visible or less valued compared to platforms like YouTube, where production value signals authority (Michalovich & HersHKovitz, 2020, p. 385).

The positive association between engagement signals (likes, comments, and shares) and credibility echoes existing research on critical mass theory (Oliver, 2013, pp. 2-3), which argues that individuals tend to perceive something as more credible when they see others approving of it (Manata and Spottswood, 2021, p. 1328). However, this finding gains deeper significance when viewed through the lens of Gen Z's media use. Gen Z is characterized to place an especially high value on peer validation in digital spaces (Williams et al., 2023, p. 482). On platforms like TikTok, visible public metrics act as an affordance to determine the public opinion. In this sense, the finding doesn't just support the hypothesis; it highlights the logic of Gen Z's perception of credibility, in which validation from peers matters more than validation from experts or attractive influencers (Garg, 2025, p. 2).

The finding that algorithmic recommendation significantly predicts credibility is aligned with previous research that indicates that content which appears tailored to users, may be perceived as more credible (Song et al., 2021, p. 2128). It also proves that TikTok's uniquely tailored content delivery (Langlais et al, 2024, p. 3) plays a central role in shaping user perceptions of credibility. Unlike follower-based platforms like Instagram or X, where content primarily appears from people users already follow, TikTok's interface is designed to push hyper-personalized content based on behavioral data (Klug et al., 2021, p. 85; Kumsawat et al., 2024, p. 4). This shift marks a fundamental change in user engagement with digital content: trust is no longer only rooted in deliberate choices, such as following an influencer, but rather in the algorithm's curation, which determines what users see and, consequently, what they deem credible. Such dynamics reflect what scholars call algorithmic authority (Beer, 2017, p. 5), wherein algorithms are not neutral tools but active participants in shaping trust and perception.

The positive effect of the search affordance on credibility perceptions reinforces the idea that agency plays a significant role in how Gen Z assesses credibility (Song et al., 2021, p. 2134). This is consistent with research by Metzger and Flanagin (2013, p. 213), who argued that transparency in digital environments enhance trust. However, given the findings of this research, it is important to consider that the search affordance may compensate for skepticism towards other affordances such as influencers or the algorithmic feed. For example, if a user is unsure about a product recommendation in a video, they might search for other videos about it. This can validate or reject initial impressions, reinforcing the idea that credibility is not shaped by one single factor, but is instead shaped through the interplay

of multiple agents. Another important point to consider is that TikTok's search function operates within the platform's algorithmic framework rather than as a neutral tool. Even when users actively search for content, they encounter algorithmically prioritized results, such as videos using trending audios or popular hashtags (Klug et al., 2021, p. 85). This indicates that the credibility based on the search affordance may not be as transparent as users perceive it to be.

Lastly, the final hypothesis proposed that human agents would contribute more to credibility perceptions than machine agents. While the model improved significantly when human agents were added, suggesting they do enhance predictive power, the only significant human predictor in the final model was influencer reliability. In contrast, algorithmic recommendation remained a significant predictor throughout. This finding complicates the assumption that human agents are inherently more influential. Instead, the findings suggest that the credibility of beauty product information on TikTok is shaped by a hybrid dynamic, in which both human and machine agents interact to construct credibility perceptions. Rather than one type of agent dominating the credibility equation, users appear to draw on multiple agents to assess whether content is credible. This challenges the dominant narrative in existing literature, where human agents are often found to be inherently more credible than machine agents, particularly in domains like finance (Zhang et al., 2021, p. 635), journalism (Wang and Huang, 2024, p. 832), and in the medical sector (Edwards et al., 2018, p. 102). Ultimately, Gen Z TikTok users do not necessarily see human and machine agents as separate forces competing for trust. Instead, they interpret credibility based on how each one shapes and reinforces the other.

### **5.3 Practical implications**

The findings of this study offer several practical insights for marketers, influencers, and app developers. First, the significant effect of influencer reliability on credibility perceptions highlights the importance of authenticity and trustworthiness in influencer marketing. Beauty brands should therefore prioritize partnerships with content creators who are not only aesthetically aligned, but also perceived as reliable sources by their audience. This could mean prioritizing creators with a track record of honest product reviews and transparent brand collaboration over those who merely offer high reach or visual appeal. Campaigns that center on genuine storytelling and long-term relationships between influencers and products are likely to foster stronger consumer trust. Furthermore, the results also show that algorithmic recommendations significantly influence credibility perceptions.

Beauty brands should therefore invest in algorithm-friendly strategies, such as leveraging trending sounds, using relevant hashtag to boost the credibility indirectly.

Secondly, for social media developers and platform designers, this study contributes to a deeper understanding of how interface design choices shape user trust. Since credibility is significantly influenced by machine agents like TikTok's algorithmic recommendations and search features, platforms themselves play an active role in constructing what users perceive as reliable. This places some responsibility on developers to consider how their design decisions affect not only content exposure, but also informational credibility. Based on these findings, platforms that wish to be seen as credible spaces for product information might consider increasing transparency in their recommendation systems and offering clearer signals of trustworthiness, such as verified expertise badges or labeling paid partnerships more clearly.

Finally, this research can inform consumer education efforts. As young consumers, such as Gen Z, increasingly rely on social platforms for information, educators and media literacy advocates should engage with how machine agents and influencer personas shape trust online. Awareness of these dynamics empowers users to make more informed decisions about the content they consume and the products they purchase.

#### **5.4 Limitations and recommendations for future research**

While this study provides valuable insights into the factors influencing credibility perceptions on TikTok, several limitations must be acknowledged to contextualize the findings and guide future research. Firstly, one primary limitation lies in the use of convenience sampling. The survey relied on participants recruited through personal networks and social media platforms, which may have introduced selection bias. As such, the sample, though composed of Gen Z users, may not fully represent the broader Gen Z population. Future research should aim for more representative sampling methods, potentially using stratified random sampling to ensure a wider cross-section of Gen Z users. Moreover, the sample for this research ( $N = 160$ ) was relatively small, thereby presenting another limitation for the generalizability of this research.

Secondly, the study employed a quantitative design with self-reported measures, which are subject to social desirability bias. Respondents may, consciously or unconsciously, give answers on what they believe is expected or socially acceptable. Even though the survey was designed to diminish this risk, self-reporting remains a limitation in terms of measurement. Incorporating qualitative methods, such as interviews or focus

groups, could therefore offer richer and deeper insights into how users interpret and experience credibility on TikTok, thereby revealing their underlying motivations for perceiving the platform as a credible source.

Thirdly, while the study found that algorithmic recommendations and influencer reliability are significant predictors of credibility, the causal direction of these relationships remains unclear due to the cross-sectional design. It is possible, for instance, that users already inclined to trust an influencer are more likely to perceive their content as recommended or visible. An experimental design could help dissect the potential causal relationships between these agents and the perceived credibility.

Another area for further exploration is the intersection of human and machine agents. This study treated these agents as separate categories, but the findings show that credibility is often shaped by the interaction between the two. Future research could explore the synergistic effects of these agents, potentially through moderated or mediated regression models.

Lastly, this study focused solely on beauty-related content. While this category has proven to be highly relevant because of the popularity of this domain, future research should investigate whether these findings generalize to other informational domains, such as finance or lifestyle information.



## 6. References

- Abbasi, A. Z., Ayaz, N., Kanwal, S., Albashrawi, M., & Khair, N. (2023). TikTok app usage behavior: The role of hedonic consumption experiences. *Data Technologies and Applications*, 57(3), 344-365. <https://doi.org/10.1108/dta-03-2022-0107>
- Adornato, A. (2016). Forces at the gate. *Electronic News*, 10(2), 87-104. <https://doi.org/10.1177/1931243116647768>
- Alcántara-Pilar, J. M., Rodríguez-López, M. E., Kalinić, Z., & Liébana-Cabanillas, F. (2024). From likes to loyalty: Exploring the impact of influencer credibility on purchase intentions in TikTok. *Journal of Retailing and Consumer Services*, 78, 103709. <https://doi.org/10.1016/j.jretconser.2024.103709>
- Ali, F. [@fyzasworld]. (2025, January 19). *Public story* [Snapchat story]. Snapchat. Retrieved January 19, 2025, from <https://snapchat.com/t/a5QggEBr>
- Athaya, N. S., & Wandebori, H. (2024). Analyzing factors that affect purchasing decisions for beauty products through TikTok review videos. *Journal Integration of Social Studies and Business Development*, 2(1), 43-50. <https://doi.org/10.58229/jissbd.v2i1.223>
- Babbie, E. R. (2015). *The basics of social research* (7th ed.). Cengage Learning.
- Beer, D. (2017). The social power of algorithms. *Information, communication & society*, 20(1), 1-13. <http://doi.org/10.1080/1369118X.2016.1216147>
- Bhatnagar, D., Kakkar, A., Kukreja, A., & Bhagrot, J. S. (2024). Effectiveness of influencer marketing in the beauty and wellness industry. *International Journal of Scientific Research in Engineering and Management*, 08(01), 1-13. <https://doi.org/10.55041/ijssrem27948>
- Brennen, B. S. (2017). *Qualitative research methods for media studies* (2nd ed.). Taylor & Francis.
- Ceci, L. (2025, April 9). *Number of TikTok users worldwide from 2017 to 2029*. Statista. Retrieved June 18, 2025, from <https://www.statista.com/forecasts/1142687/tiktok-users-worldwide>
- Cortina, J. M. (1993). What is coefficient Alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78(1), 98-104. <https://doi.org/10.1037//0021-9010.78.1.98>
- Dalziel, R. C., & De Klerk, N. (2021). Media and group influence on Generation Y consumers' attitudes towards beauty products. *Spanish Journal of Marketing - ESIC*, 25(1), 115-136. <https://doi.org/10.1108/sjme-12-2019-0104>

- Djafarova, E., & Rushworth, C. (2017). Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users. *Computers in Human Behavior*, 68, 1-7. <https://doi.org/10.1016/j.chb.2016.11.009>
- Doyle, B. (2023, September 8). *TikTok statistics - Updated May 2024*. Wallaroo Media. Retrieved March 30, 2025, from <https://wallaroomedia.com/blog/social-media/tiktok-statistics/>
- Edwards, C., Edwards, A., & Omilion-Hodges, L. (2018). Receiving medical treatment plans from a robot. *Companion of the 2018 ACM/IEEE International Conference on Human-Robot Interaction*, 101-102. <https://doi.org/10.1145/3173386.3177050>
- Evans, S. K., Pearce, K. E., Vitak, J., & Treem, J. W. (2017). Explicating Affordances: A conceptual framework for understanding Affordances in communication research. *Journal of Computer-Mediated Communication*, 22(1), 35-52. <https://doi.org/10.1111/jcc4.12180>
- Fitri, S. D., & Ananta, Y. (2025). TikTok algorithm in fast beauty product marketing: Influencing consumer behavior of the digital generation. *Greenation International Journal of Engineering Science*, 2(4), 192-199. <https://doi.org/10.38035/gijes.v2i4.358>
- Fogg, B. J. (2003). Prominence-interpretation theory: explaining how people assess credibility online. In *CHI 2003: New horizons* (pp. 722-723). <https://doi.org/10.1145/765891.765951>
- Freberg, K., Graham, K., McGaughey, K., & Freberg, L. A. (2011). Who are the social media influencers? A study of public perceptions of personality. *Public Relations Review*, 37(1), 90-92. <https://doi.org/10.1016/j.pubrev.2010.11.001>
- Gamage, T. C., & Ashill, N. J. (2022). # sponsored-influencer marketing: Effects of the commercial orientation of influencer-created content on followers' willingness to search for information. *Journal of Product & Brand Management*, 32(2), 316-329. <https://doi.org/10.1108/jpbm-10-2021-3681>
- Garg, S. (2025). Social shopping in Gen Z: The moderating role of peer communication. *International Journal of Information Technology and Management*, 20(1), 1-10. <https://doi.org/10.29070/sqq6k026>
- Geyser, W. (2022, December 30). *What is TikTok? – Everything you need to know in 2023*. Influencer Marketing Hub. Retrieved June 18, 2025, from <https://influencermarketinghub.com/what-is-tiktok/>

- Gibson, J. J. (2014). *The ecological approach to visual perception: classic edition*. Psychology Press. <https://doi.org/10.4324/9781315740218>
- Hair, J., Black, W., Babin, B., & Anderson, R. (2018). *Multivariate data analysis* (8th ed.). Cengage.
- Hassan, S. H., Teo, S. Z., Ramayah, T., & Al-Kumaim, N. H. (2021). The credibility of social media beauty gurus in young millennials' cosmetic product choice. *PLoS ONE*, 16(3), 1-17. <https://doi.org/10.1371/journal.pone.0249286>
- Hyan Yoo, K., & Gretzel, U. (2008). The influence of perceived credibility on preferences for recommender systems as sources of advice. *Information Technology & Tourism*, 10(2), 133-146. <https://doi.org/10.3727/109830508784913059>
- Isaac, S., Acero, N., Kolesnikova, K., & Howell, E. (2024). Endometriosis on TikTok: Evaluating social media misinformation and the role of healthcare professionals. *Journal of Endometriosis and Pelvic Pain Disorders*, 16(1), 3-9. <https://doi.org/10.1177/22840265231220089>
- Kaiser, H. F., & Rice, J. (1974). Little jiffy, Mark IV. *Educational and Psychological Measurement*, 34(1), 111-117. <https://doi.org/10.1177/001316447403400115>
- Klug, D., Qin, Y., Evans, M., & Kaufman, G. (2021). Trick and please. A mixed-method study on user assumptions about the TikTok algorithm. *13th ACM Web Science Conference 2021*, 84-92. <https://doi.org/10.1145/3447535.3462512>
- Kong, W., Song, S., Zhao, Y. C., Zhu, Q., & Sha, L. (2021). TikTok as a health information source: Assessment of the quality of information in diabetes-related videos. *Journal of Medical Internet Research*, 23(9), e30409. <https://doi.org/10.2196/30409>
- Kumsawat, P., Suttikun, C., & Mahasuweerachai, P. (2024). Does credibility matter on TikTok: The influence of food content creator types on restaurants' social media engagement and purchasing intentions. *Journal of Global Marketing*, 1-18. <https://doi.org/10.1080/08911762.2024.2440093>
- Lachlan, K. A., Spence, P. R., Lin, X., Najarian, K., & Del Greco, M. (2016). Social media and crisis management: CERC, search strategies, and Twitter content. *Computers in Human Behavior*, 54, 647-652. <https://doi.org/10.1016/j.chb.2015.05.027>
- Langlais, M. R., Thaler, A., & West, E. (2024). TikTok too much? A qualitative investigation of adolescent TikTok use, motivation, and consequences. *Youth & Society*, 0(00), 1-22. <https://doi.org/10.1177/0044118x241282347>

- Lin, X., Spence, P. R., & Lachlan, K. A. (2016). Social media and credibility indicators: The effect of influence cues. *Computers in Human Behavior*, 63, 264-271.  
<https://doi.org/10.1016/j.chb.2016.05.002>
- Lou, C., & Yuan, S. (2019). Influencer marketing: How message value and credibility affect consumer trust of branded content on social media. *Journal of Interactive Advertising*, 19(1), 58-73. <https://doi.org/10.1080/15252019.2018.1533501>
- Majchrzak, A., Faraj, S., Kane, G. C., & Azad, B. (2013). The contradictory influence of social media Affordances on online communal knowledge sharing. *Journal of Computer-Mediated Communication*, 19(1), 38-55.  
<https://doi.org/10.1111/jcc4.12030>
- Manata, B., & Spottswood, E. (2021). Extending rice et al. (2017): The measurement of social media affordances. *Behaviour & Information Technology*, 41(6), 1323-1336.  
<https://doi.org/10.1080/0144929x.2021.1875264>
- Metzger, M. J. (2007). Making sense of credibility on the web: Models for evaluating online information and recommendations for future research. *Journal of the American Society for Information Science and Technology*, 58(13), 2078-2091.  
<https://doi.org/10.1002/asi.20672>
- Metzger, M. J., & Flanagin, A. J. (2015). Psychological approaches to credibility assessment online. In S. S. Sundar (Ed.), *The handbook of the psychology of communication technology* (pp. 445-466). John Wiley & Sons, Inc.  
<https://doi.org/10.1002/9781118426456.ch20>
- Metzger, M. J., & Flanagin, A. J. (2013). Credibility and trust of information in online environments: The use of cognitive heuristics. *Journal of Pragmatics*, 59, 210-220.  
<https://doi.org/10.1016/j.pragma.2013.07.012>
- Michalovich, A., & HersHKovitz, A. (2020). Assessing YouTube science news' credibility: The impact of web-search on the role of video, source, and user attributes. *Public Understanding of Science*, 29(4), 376-391.  
<https://doi.org/10.1177/0963662520905466>
- Montgomery, B. (2025, January 19). *TikTok goes dark in the US ahead of ban*. The Guardian. Retrieved April 4, 2025, from  
<https://www.theguardian.com/technology/2025/jan/19/tiktok-us-ban>
- Natalie, K., & Siregar, B. (2024). Analyzing the influence of various factors on Generation Z's beauty product purchase behavior. *Jurnal Lebesgue : Jurnal Ilmiah Pendidikan*

- Matematika, Matematika dan Statistika*, 5(3), 1618-1636.  
<https://doi.org/10.46306/lb.v5i3.743>
- Nigam, A. (2022). Online gaming and OTT consumption: An exploratory study of Generation Z. *Journal of Promotion Management*, 28(4), 420-442.  
<https://doi.org/10.1080/10496491.2021.2008576>
- Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, 19(3), 39-52. <https://doi.org/10.1080/00913367.1990.10673191>
- O'Keefe, D. J. (2002). *Persuasion: Theory & research* (2nd ed.). Sage Publications.
- Oliver, P. (2013). Critical mass theory. In D. A. Snow, D. D. Porta, B. Klandermans, & D. McAdam (Eds.), *The Wiley Blackwell encyclopedia of social and political movements* (pp. 1-4). Wiley-Blackwell.  
<https://doi.org/10.1002/9780470674871.wbespm059.pub2>
- Opena, A. (2025, March 31). 65+ Gen Z social media usage statistics [2025] that can't ignore. Cropink. Retrieved May 19, 2025, from <https://cropink.com/gen-z-social-media-usage-statistics>
- Özdemir, O., Kolfal, B., Messinger, P. R., & Rizvi, S. (2023). Human or virtual: How influencer type shapes brand attitudes. *Computers in Human Behavior*, 145, 1-17.  
<https://doi.org/10.1016/j.chb.2023.107771>
- Perez, S. (2022, July 12). Google exec suggests Instagram and TikTok are eating into Google's core products, search and maps. TechCrunch. Retrieved January 29, 2025, from <https://techcrunch.com/2022/07/12/google-exec-suggests-instagram-and-tiktok-are-eating-into-googles-core-products-search-and-maps/>
- Privitera, G. J. (2014). *Statistics for the behavioral sciences* (2nd ed.). SAGE Publications.
- Scharlach, R., & Hallinan, B. (2023). The value affordances of social media engagement features. *AoIR Selected Papers of Internet Research*, 1-5.  
<https://doi.org/10.5210/spir.v2023i0.13491>
- Schellewald, A. (2023). Understanding the popularity and affordances of TikTok through user experiences. *Media, Culture & Society*, 45(8), 1568-1582.  
<https://doi.org/10.1177/01634437221144562>
- Schneid, R. (2025, January 19). How TikTok's U.S. influencers reacted to the app going dark. TIME. Retrieved April 4, 2025, from <https://time.com/7208185/how-tiktoks-most-followed-us-influencers-reacted-to-the-app-going-dark-amid-ban/>

- Seekis, V., & Kennedy, R. (2023). The impact of #beauty and #self-compassion TikTok videos on young women's appearance shame and anxiety, self-compassion, mood, and comparison processes. *Body Image*, 45, 117-125.  
<https://doi.org/10.1016/j.bodyim.2023.02.006>
- Seemiller, C., & Grace, M. (2024). *Gen Z around the world: Understanding the global cohort culture of Generation Z*. Emerald Group Publishing.  
<https://doi.org/10.1108/9781837970926>
- Shariff, S. M. (2020). A review on credibility perception of online information. *2020 14th International Conference on Ubiquitous Information Management and Communication (IMCOM)*, 1-7. <https://doi.org/10.1109/imcom48794.2020.9001724>
- Shin, D., Zhong, B., & Biocca, F. A. (2020). Beyond user experience: What constitutes algorithmic experiences? *International Journal of Information Management*, 52, 102061. <https://doi.org/10.1016/j.ijinfomgt.2019.102061>
- Shin, D., Zhong, B., & Biocca, F. A. (2020). Beyond user experience: What constitutes algorithmic experiences? *International Journal of Information Management*, 52, 1-11. <https://doi.org/10.1016/j.ijinfomgt.2019.102061>
- Smith, A. (2024, October 22). *How Gen Z uses social media and what that means for brands*. Sprout Social. Retrieved May 19, 2025, from <https://sproutsocial.com/insights/gen-z-social-media/>
- Sokolova, K., & Kefi, H. (2020). Instagram and YouTube bloggers promote it, why should I buy? How credibility and parasocial interaction influence purchase intentions. *Journal of Retailing and Consumer Services*, 53, 101742.  
<https://doi.org/10.1016/j.jretconser.2019.01.011>
- Song, S., Zhao, Y. C., Yao, X., Ba, Z., & Zhu, Q. (2021). Short video apps as a health information source: An investigation of affordances, user experience and users' intention to continue the use of TikTok. *Internet Research*, 31(6), 2120-2142.  
<https://doi.org/10.1108/intr-10-2020-0593>
- Su, C. (2023). Two souls in one shell. In *Douyin, TikTok, and China's online screen industry: The rise of short-video platforms* (pp. 86-106).  
<https://doi.org/10.4324/9781003261056-8>
- Taber, K. S. (2017). The use of Cronbach's Alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48(6), 1273-1296.  
<https://doi.org/10.1007/s11165-016-9602-2>

- Tinuiti. (2025). *2025 Beauty Marketing Study*. <https://tinuiti.com/research-insights/research/2025-beauty-marketing-study/>
- Tseng, S., & Fogg, B. J. (1999). Credibility and computing technology. *Communications of the ACM*, 42(5), 39-44. <https://doi.org/10.1145/301353.301402>
- Van Griethuijsen, R. A., Van Eijck, M. W., Haste, H., Den Brok, P. J., Skinner, N. C., Mansour, N., Savran Gencer, A., & BouJaoude, S. (2014). Global patterns in students' views of science and interest in science. *Research in Science Education*, 45(4), 581-603. <https://doi.org/10.1007/s11165-014-9438-6>
- Vogt, W. P. (2011). On quantitizing. In *SAGE quantitative research methods* (pp. 209-219). SAGE. <https://doi.org/10.1177/1558689809334210>
- Wang, S., & Huang, G. (2024). The impact of machine authorship on news audience perceptions: A meta-analysis of experimental studies. *Communication Research*, 51(7), 815-842. <https://doi.org/10.1177/00936502241229794>
- Williams, D. E., Pochipinski, B., MacDonald, M., & Caulfield, J. (2023). The depiction of beauty-by-beauty influencers on Instagram and generations Z's perception of them. *Journal of Promotion Management*, 30(3), 473-512. <https://doi.org/10.1080/10496491.2023.2279765>
- Zhang, L., Pentina, I., & Fan, Y. (2021). Who do you choose? Comparing perceptions of human vs robo-advisor in the context of financial services. *Journal of Services Marketing*, 35(5), 634-646. <https://doi.org/10.1108/jsm-05-2020-0162>
- Zhao, Y. C., Zhang, Y., Tang, J., & Song, S. (2020). Affordances for information practices: Theorizing engagement among people, technology, and sociocultural environments. *Journal of Documentation*, 77(1), 229-250. <https://doi.org/10.1108/jd-05-2020-0078>

## 7. Appendices

### 7.1 Appendix A: Survey

Start of Block: Introduction

#### Welcome

Dear respondent,

Thank you for your interest in this research! As part of my Master's Thesis, I am conducting a study to explore how Gen Z assesses credibility of beauty product information on the social media platform 'TikTok'. Therefore, I am inviting you to fill in this questionnaire, in which I will ask you questions about your TikTok using habits. The questionnaire will take approximately 5 minutes to fill in. Please answer each question carefully and honestly, I am sincerely interested in your personal opinions. There are no right or wrong answers. Note: this research is intended for adults only, therefore, you can only take this survey if you are older than 18 years old.

#### CONFIDENTIALITY OF DATA

All research data remain completely confidential and are collected in anonymous form. Your participation in this survey is completely anonymous. I will not be able to identify you based on your responses. There are no foreseeable risks or discomforts associated with participating in this research.

**VOLUNTARY** Your participation in this research is completely voluntary. If you decide to cease your cooperation while filling in the questionnaire, this will in no way affect you. You can cease your cooperation at all times without giving reasons.

#### FURTHER INFORMATION

If you have questions about this research, in advance or afterwards, you can contact me via email: 697738as@eur.nl.

---

#### Consent

If you understand the information above and freely consent to participate in this study, click on the "I agree" button below to start the questionnaire.

☐ I agree (1)

☐ I disagree (2)

*Skip To: End of Survey If Consent = I disagree*

End of Block: Introduction

---

Start of Block: Gen Z



### Gen Z

**As this research is specifically focused on Generation Z who are older than 18 years, only responses from people born between 1995 and 2006 are requested.**

Are you born between 1995 and 2006?

☐ Yes (1)

☐ No (2)

*Skip To: End of Survey If Gen Z = No*

End of Block: Gen Z

---

Start of Block: Beauty Content

### Beauty Content

**As this research is specifically focused on beauty product information, only responses from people who consume beauty content on TikTok are requested.** Have you ever consumed beauty content on TikTok? This refers to content featuring products applied to the face, hair, or body to enhance appearance — including, but not limited to, makeup, skincare, haircare, bodycare, deodorants, nail polish, and perfumes.

☐ Yes (1)

☐ No (2)

*Skip To: End of Survey If Beauty Content = No*

End of Block: Beauty Content

---


Start of Block: TikTok usage

Q1 How often do you use TikTok?

- ☐ Almost never (less than once a month) (1)
- ☐ Rarely (once or twice a month) (2)
- ☐ Occasionally (a few times a month) (3)
- ☐ Moderately (a few times a week) (4)
- ☐ Often (almost every day) (5)
- ☐ Very often (every day, but not for long periods) (6)
- ☐ A large part of every day (7)

---

Q2 On a scale of 1 to 7, how interested are you in beauty content? 1 = not interested at all, 7 = very interested.

	1	2	3	4	5	6	7
Interested in beauty content ()							

---

End of Block: TikTok usage

---

Start of Block: Influencers

Q3 In the following questions, I would like to know how you perceive beauty influencers on TikTok. Please think about TikTok creators whose beauty content you watch, such as videos

about makeup, skincare, or haircare products. Please indicate on the below scale if you find the influencers whose content you consume to be:

	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
Physically attractive (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Handsome (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Elegant (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sexy (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4 I find the influencers whose content I consume to be...

	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
Reliable (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Honest (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Loyal (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sincere (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Faithful (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q5 I consider these influencers:

	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
Specialists in the field (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experienced in the field (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Entrepreneurial (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Qualified (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Talented (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Influencers

Start of Block: Meta-voicing

Q6 In this section, I would like to know how you perceive the meta-voicing functions on TikTok such as the like, comment, and share functions. Please indicate how much you agree with the following statements about these functions on TikTok. The comment function on TikTok...

	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
Allows me to see other people's evaluation of the content (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7 The 'like' function on TikTok...

	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
Allows me to see other people's evaluation of the content. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8 The 'share' function on TikTok...:

	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
Allows me to see other people's evaluation of the content. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Meta-voicing

Start of Block: Algorithmic recommendations

Q9 For this question, I am interested in how you experience beauty product information on TikTok when the platform recommends personalized content to you. These are videos that appear on your "For You Page" because they match your interests or previous activity. Please indicate how much you agree or disagree with the following statements:

	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
TikTok provides personalized content for me. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
TikTok pushes content that suits me. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
TikTok recommends accounts that attract me. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

**End of Block: Algorithmic recommendations**

---

**Start of Block: Search affordance**

Q10 For this question, I would like to know how you perceive beauty product information when you actively search for it on TikTok using the search function. Please think about moments when you type in keywords or product names to look for beauty-related content. Please indicate how much you agree with the following statements. If you haven't used the search function for beauty product related content, please choose 'not applicable':

	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)	Not applicable (6)
TikTok allows me to retrieve the videos of a user (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
TikTok allows me to get up-to-date videos of a user (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
TikTok allows me to obtain information from a user (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

**End of Block: Search affordance**

---

**Start of Block: Overall credibility**

Q11 To finish this part of the survey, I would like to know how you generally perceive the credibility of beauty product information on TikTok. Please indicate how much you agree

with the following statements about the beauty-related content you consume on the platform.  
I find the beauty product information on TikTok:

	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
Believable (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trustworthy (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unbiased (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To show expertise (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowledgeable (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Overall credibility

Start of Block: Background information

Q12 What do you identify as?

- ☐ Female (1)
- ☐ Male (2)
- ☐ Other (3)
- ☐ Prefer not to say (4)

Q13 What is your age? (Please indicate in numbers, e.g. 25)

\_\_\_\_\_

Q14 What is your highest level of education completed?

- ☐ High school diploma or equivalent (1)
- ☐ Bachelor's degree (2)
- ☐ Master's degree (3)
- ☐ Doctorate or equivalent (4)
- ☐ Other (please specify) (5) \_\_\_\_\_

End of Block: Background information

---



## 7.1 Appendix B: Declaration of AI use

### Declaration Page: Use of Generative AI Tools in Thesis

#### Student Information

Name: Alysia Sewdin

Student ID: 697738

Course Name: Master Thesis CM5000

Supervisor Name: Prof. Dr. M. Verboord

Date: June 26<sup>th</sup>, 2025

Declaration:

#### Acknowledgment of Generative AI Tools

I acknowledge that I am aware of the existence and functionality of generative artificial intelligence (AI) tools, which are capable of producing content such as text, images, and other creative works autonomously.

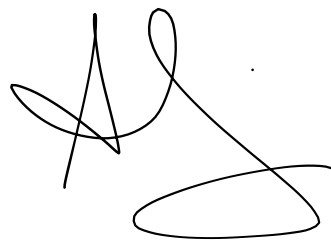
GenAI use would include, but not limited to:

- Generated content (e.g., ChatGPT, Quillbot) limited strictly to content that is not assessed (e.g., thesis title).
- Writing improvements, including grammar and spelling corrections (e.g., Grammarly)
- Language translation (e.g., DeepL), without generative AI alterations/improvements.
- Research task assistance (e.g., finding survey scales, qualitative coding verification, debugging code)
- Using GenAI as a search engine tool to find academic articles or books (e.g.,

☐ I declare that I have used generative AI tools, specifically [Name of the AI Tool(s) or Framework(s) Used], in the process of creating parts or components of my thesis. The purpose of using these tools was to aid in generating content or assisting with specific aspects of thesis work.

☒ I declare that I have NOT used any generative AI tools, and that the assignment concerned is my original work.

Signature:



#### Extent of AI Usage

☐ I confirm that while I utilized generative AI tools to aid in content creation, the majority of the intellectual effort, creative input, and decision-making involved in completing the thesis were undertaken by me. I have enclosed the prompts/logging of the GenAI tool use in an appendix.

Date of Signature: June 26<sup>th</sup>, 2025

#### Ethical and Academic Integrity

☐ I understand the ethical implications and academic integrity concerns related to the use of AI tools in coursework. I assure that the AI-generated content was used responsibly, and any content derived from these tools has been

appropriately cited and attributed according to the guidelines provided by the instructor and the course. I have taken necessary steps to distinguish between my original work and the AI-generated contributions. Any direct quotations, paraphrased content, or other forms of AI-generated material have been properly referenced in accordance with academic conventions.

By signing this declaration, I affirm that this declaration is accurate and truthful. I take full responsibility for the integrity of my assignment and am prepared to discuss and explain the role of generative AI tools in my creative process if required by the instructor or the Examination Board. I further affirm that I have used generative AI tools in accordance with ethical standards and academic integrity expectations.

Signature: [digital signature]

Date of Signature: [Date of Submission]