

Online consumer reviews of experience goods

**< The Impact of Transparency in Ad Promotion on the  
Credibility of Influencer Online Reviews >**

**Sooah Lee**

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Supervisor: Boudewijn Steenbreker

Student name: Sooah Lee

Student ID: s2423235

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*Research question: Does the credibility of influencer online reviews in the fashion industry change depending in the transparency of ad promotion?*

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Sooah Lee – s2423235  
[S.lee-2@student.utwente.nl](mailto:S.lee-2@student.utwente.nl)

Supervisor: Boudewijn Steenbreker

University of Twente  
Bachelor of Communication Science  
M12 Bachelor thesis COM

## Abstract

**Objectives** The purpose of the study is to examine the impact of transparency in ad promotion on the credibility of influencer online reviews in the fashion industry. Prior research has contended that influencer online reviews, when perceived as advertisements by consumers, have the potential to erode the authenticity and credibility of information sharing. Furthermore, recent legislative amendments now require the labeling of all advertising posts on social media. Within these regulatory requirements, this research investigates the credibility of sponsored influencer online reviews, specifically examining whether such reviews can effectively maintain credibility. Thus, the hypothesis was formulated as “H1: The degree of credibility decreases if there has transparency of ad promotion on influencer's online reviews in the fashion industry”.

**Methods** In this study, a quantitative research approach was employed using an online survey to investigate the impact of ad transparency on credibility. The survey was distributed through various social media channels. The online questionnaire presented manipulated influencer online reviews, with one condition featuring ad presence and the other without ad presence. The credibility was assessed as the dependent variable, while ad transparency was treated as the independent variable. Over a span of 20 days, a total of 390 participants took part in the study.

**Results** The perceived credibility of influencer online reviews without ad transparency was found to be higher, whereas the perceived credibility of influencer online reviews with ad transparency decreased in comparison. The regression analysis and t-test yielded significant results, supporting the claim that influencer marketing has reached its culmination in relation to the newly revised laws.

**Conclusions** Amidst the establishment of influencer marketing as an effective digital strategy, this paper presents a forecast that envisions a demising negative future for influencer marketing. These findings suggest that the impact of ad transparency has a significant effect on the perceived credibility of influencer online reviews.

**Practical implications** The study contributes to the understanding of the social media influencer market and provides empirical evidence on the credibility variations resulting from sponsorship disclosure. Practical implications derived from the findings include targeting the younger generation, developing industry-specific strategies, and adopting a comprehensive evaluation of influencer impact. Moreover, it offers valuable insights for marketers/brands and challenges established perceptions of influencer marketing, calling for further exploration in this evolving landscape.

**Keywords:** Influencer Online Reviews; Social Media; Influencer Marketing; Transparency of Ad Promotion; Disclosure; Sponsored posts; Credibility

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Kind regards,  
Sooah Lee

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## **1. Introduction**

The influence of communication on social media is a crucial determinant that shapes consumers' behavior, perception of brand image, and attitudes towards purchasing decisions. In the 21st century, the proliferation of digital society has revolutionized the shopping experience, allowing consumers to engage in online purchases without the need for physical store visits. The inception of the first Internet-based retail transaction in 1994 marked the beginning of e-commerce's gradual integration into our daily lives (Jaller & Pahwa, 2020). E-Commerce is regarded as an international and fragmented network that involves the terms of the process of retailing products online (Macchion et al., 2017). As brands have progressively shifted their advertising strategies to digital platforms, including various portal sites, social media platforms, and brand homepages, consumers have increasingly turned to online product research and assessments to appraise the quality of products and services, diminishing the necessity for in-person store visits. The expansion of the online retail landscape has led to substantial advancements in the fashion industry, a dynamic and globally influential sector. Nash, J. (2019) affirms that social media has emerged as a popular and effective tool for communication between fashion brands and consumers in the e-commerce market, promoting meaningful interactions and fostering brand-consumer relationship.

The proliferation of the Internet has facilitated significant growth in multimodal connections, particularly through social media platforms, over the past two decades (Chan, 2018). This shift signifies a transition from one-way communication to a two-way interactive approach, wherein effective communication and the establishment of enduring relationships with target audiences are pivotal in the field of marketing. Pourazad et al. (2019) emphasize that the integration between brands and consumers profoundly influences purchasing decisions. To foster purchase

intentions, brands often seek to cultivate emotional connections with consumers. A key strategy employed by brands to strengthen their bond with consumers and enhance product quality is the acceptance and incorporation of feedback through consumer reviews. Notably, online reviews constitute valuable consumer data, and in the 21<sup>st</sup> century marketing landscape, consumer personal data has attained increasing significance (Wieringa et al., 2019).

Online reviews play a significant role in shaping the quality of products and services, as well as influencing potential customers. Fernandes et al. (2022) discovered that 70% of customers rely on online reviews when making purchase decisions, and participants in the study stated that online reviews have the convenience of solving two essential sources of information: 'review' and 'evaluation'. In the modern era, social media has become a prominent marketing channel for brands, offering opportunities for both reviewing and promoting products. Social media platforms enable brands to establish connections with their target audience and employ various functions such as message delivery, sharing, and retweeting to promote their offerings (Allen, 2019). These interactive features allow users to post online reviews, share them with others, leave comments, and engage in direct messaging to obtain more detailed product experiences. Consumers are influenced by social interactions and activities on social media platforms, which help reduce perceived risks and facilitate informed purchasing decisions (Kim et al., 2019). Consumer-driven activities, such as subjective product evaluations and the posting of online reviews, contribute to the perceived value of the product, while critical reviews present opportunities for brands to enhance their services (Huang et al., 2015).

According to Koay et al. (2022) consumers tend to trust and follow the purchase recommendations of social media influencers whom they hold in high regard. In fact, a survey conducted by Simon @ DMI & by Digital Marketing Institute (2022) revealed that 82% of

online users trust product reviews provided by social media influencers when making purchasing decisions. Influencer marketing is closely associated with electronic word-of-mouth (eWOM), which offers customers worldwide access to product reviews over an extended period (Reimer & Benkenstein, 2016). Recognizing the significant impact of online reviews, brands have adopted marketing strategies that leverage social media influencers. These influencers, often users with a substantial number of followers on social media platforms, collaborate or enter into sponsorships with brands to promote products by sharing online reviews. Influencer marketing has emerged as a powerful digital marketing approach, utilizing social media as a new avenue for brand communication with target audiences. Social media influencers are receiving a lot of attention from companies and brands for increasing potential consumers' purchasing intentions and brand awareness by spreading online reviews. The market value of the influencer marketing industry was expected to rise from \$13.8 billion in 2021 to \$16.4 billion in 2022 (Koay et al., 2022). Influencer marketing taps into the underlying psychology of social media users who admire influencers and aspire to emulate their fashion choices, tone, and consumption patterns.

However, brands need to acknowledge the potential decline in the credibility of influencer online reviews when consumers become aware of the sponsorship behind such reviews. Influencers often post and promote products in exchange for monetary compensation, a practice known as "sponsored-influencer marketing." Considering that brands hold content rights under contractual agreements, it becomes challenging to expect objective and critical product reviews from social media influencers. Furthermore, in fact, brands are facing a challenging situation as several countries propose regulations mandating the disclosure of sponsored online reviews on social media platforms. The Federal Trade Commission (FTC) guidelines require posts that involve a third party promoting a brand or product to be clearly

identified as advertisements (Truth in Advertising, 2022). Examples of disclosure language include "#ad" or "Ad," "Sponsored," "Promotion," "Paid ad," "Thanks [company name] for the free product," "Thanks [company name] for the gift [name] product," or "#[company name] Partner." Social media influencers have the responsibility to disclose their receipt of products, payment, or other incentives from brands for promotional purposes. Such forms of payment can include monetary compensation, fees, product/service loans, free products/services (gifts), or other rewards (Turner, 2023).

Gamage & Ashill (2022) assert that intentionally sponsored content carries low credibility and can negatively impact the brand image. In addition, an analysis of influencer posts considering all hashtags found that despite new social media regulations, 76% of influencers concealed ad disclosure (MacRae, 2021). This situation highlights the arguments that perceived credibility of influencer online reviews decreases when there is ad transparency. Thus, the purpose of this study is to explore how the perceived credibility of influencer online reviews is influenced by the recognition of sponsorship. Specifically, the investigation focuses on the online fashion market, with and influencer who reviews fashion-related products. The clothing industry is a substantial sector, valued at \$12 billion, and the average American household spends over \$1,700 annually on clothing (Flora, 2023). Fashion items are among the top-selling products in the online marketplace (Johnson, 2023). Referring to this, among the various industries where social media influencer marketing is carried out, this study primarily examines the credibility of sponsored influencer online reviews in the fashion industry.

Within this context, the present study aims to shed light on this issue and provide valuable insights into consumer perceptions of sponsored influencer online reviews in the fashion industry. Additionally, it seeks to shed light on the negative repercussions associated with the



explicit acknowledgment of sponsorship in influencer online reviews, while also emphasizing the importance of finding more effective digital marketing strategies for future studies. In conclusion, the primary objective of this study is to discern the variations in credibility that arise when transparency in advertising promotion is either present or absent in influencer online reviews. The overarching research question guiding this study is formulated as follows:

***RQ: Does the credibility of influencer online reviews in the fashion industry change depending in the transparency of ad promotion?***

This study contributes to the academic literature in three significant ways. Firstly, it examines the credibility of influencer online reviews in the absence of transparency regarding ad promotion. Secondly, it investigates the direct impact of ad disclosure on the credibility of social media influencer online reviews. Lastly, it explores potential future directions for the social media influencer marketing industry.

The following sections outline the structure of this paper. In the subsequent theoretical framework section, the study provides a definition of credibility, the dependent variable in this study, and explains the significance of perceived credibility in influencer marketing. The study also presents the background of the scale used to assess credibility and review previous studies that have examined how credibility is influenced by the transparency of ad. Additionally, the outline of the hypothesis was formulated based on the preceding literature. Following that, the research methodology used in this study is described, and the corresponding results are presented. A comprehensive analysis of the research findings is discussed in the subsequent section, along with the study's limitations, expectations for future research, and practical implications derived from the findings. This research evaluates the developmental aspects of influencer marketing in the context of evolving social media regulations and provides valuable

insights for both scholars and practitioners in the field of influencer marketing.

## **2. Theoretical framework**

Brands strategically exploit sponsorship with influencer by leveraging strong relationships between influencer and potential consumers. Consumers who look up to influencers and emulate their consumption patterns tend to trust influencers' recommendations and develop positive perceptions of endorsed products. In fact, influencer online reviews shows high credibility and increase consumers' purchasing intentions and impact a positive brand image. However, when consumers become aware that influencers are posting sponsored reviews, the aforementioned effects are reversed. Consumers' purchasing decisions become negative, the credibility of influencer online reviews diminishes, and brand image suffers. Therefore, this theoretical framework provides a conceptual lens that can contribute to the academic discourse on influencer marketing and consumer behavior by explaining prior studies that argue for the significant impact of ad disclosure on the credibility of influencer online reviews. In this case, the 'Credibility of influencer online reviews' serves as the dependent variable, while the 'Transparency of ad promotion' acts as the independent variable.

### **2.1. Credibility of influencer online reviews**

The credibility of the influencer online review serves as the dependent variable in this study, representing the trust relationship between the influencer and the target audience, which is a crucial element in influencer marketing. Research by D. Y. Kim and Kim (2021) indicates that 92% of social media users place more trust in influencers compared to traditional marketing channels. Social media influencers effectively convey the brand's message to their followers,

who are potential consumers, leveraging the pre-established trust within their relationships (D. Y. Kim & Kim., 2021). Similarly, Jin et al. (2019) discovered that social media influencers are preferred over traditional entertainers, and consumers perceive influencer posts as a more reliable source of information. Additionally, according to Rungruangjit & Charoenpornpanichkul (2022), social media influencers are more accessible than other celebrities, and consumers heavily rely on the information provided by influencers prior to making purchases. Hence, social media influencers are perceived as trusted experts, and the information they share about brands and products is considered highly reliable (Rungruangjit & Charoenpornpanichkul, 2022). The strong trust relationship between influencers and potential consumers enhances the promotional impact of influencer online reviews compared to traditional methods, and consumers perceive social media influencers as more trustworthy than traditional celebrities. Influencers are viewed as opinion leaders by social media users, and the content they generate can significantly influence potential consumers (Rungruangjit & Charoenpornpanichkul., 2022). In essence, influencers act as reliable guarantors, providing dependable information to their target audience.

Social media influencers possess the ability to establish direct social networks with potential consumers, thereby exerting significant influence on purchasing decisions through the high credibility of their online reviews. According to Interactive Advertising Bureau, 2018, social media influencers are defined as users who possess the potential to drive engagement and lead conversations (D. Y. Kim & Kim., 2021). Parrott et al. (2015) found that influencer online reviews are regarded by consumers as a trustworthy source of information, influencing their purchase decisions by 20-50%. Similarly, Bu et al. (2022) emphasized the substantial impact of product reviews posted by influencers on consumers' purchasing decisions, which can even manipulate consumption intentions. The presence of similarities or homogeneity between

influencers and their target audience enhances purchase intention and fosters the high credibility of influencer online reviews (Bu et al., 2022). Emotional tendencies expressed in these reviews have also been found to significantly influence actual promotions, as product reviews may encompass both positive and negative emotions (Tao et al., 2022). Positive comments tend to induce emotional trust, increase confidence, and become strong and persuasive, while negative comments can reduce the occurrence of emotional trust and hinder consumers' purchase intentions (Archak et al., 2011). As a result, the deep bonds and high credibility established by influencers with their target audience on social media ultimately impact consumers' purchasing decisions and consumption patterns. In addition, influencer online reviews with high credibility enable potential consumers to have a positive perception of the brand and a high level of brand engagement. Rungruangjit & Charoenpornpanichkul (2022) conducted a study on brand love and brand engagement in relation to social media influencers who engage in para-social interaction with consumers, and found that influencers foster heightened levels of brand engagement while even dissuading consumers from purchasing other brands. The unique, novel, and fresh experiences conveyed through influencer-generated content enhance consumer engagement with the brand (Rungruangjit & Charoenpornpanichkul., 2022).

Based on the aforementioned prior studies, it can be inferred that in order to achieve maximum effectiveness in influencer marketing, it is crucial to accurately grasp the trust relationship that exists between the influencer and potential consumers. As a result, numerous studies have been conducted to measure the perceived credibility of promotional content posted by influencers on social media accounts. In this regard, the Source-Credibility Scale has been particularly frequently utilized. The Source-Credibility Scale, introduced by Ohanian (1990), is a measurement tool that has been applied in this study to assess the perceived credibility. This

scale utilizes semantic differential items to measure the perceived attractiveness, trustworthiness, and expertise of celebrity. The three factors, namely attractiveness, trustworthiness, and expertise, which are included in the evaluation of credibility, have been measured as characteristics that stimulate and provoke positive attitudes and purchasing behavior towards the content (Appelbaum & Anatol, 1972). Patzer (1983) defined attractiveness as "the degree to which the physical features of a stimulating person are pleasing to observe," referring to the superficial attractiveness of the influencer as an individual. Trustworthiness is considered in order to address the content of whether influencers are objectively evaluating the brand or if their judgments are biased due to financial/material rewards provided by the brand in exchange for positive endorsement. Moreover, influencers serve as a domain of expertise, possessing a high level of knowledge that only a few individuals can attain. In the Source-Credibility Scale, expertise acts as a factor that verifies the influencers' competence as authoritative sources.

The concept of source credibility has employed various studies on how positive characteristics of celebrities, public figures, or endorsers effectively influence recipients' perceptions, attitudes, and relevant behavioral intentions (DeSarbo & Harsman, 1985; Stewart, 2010). Garland and Ferkins (2012) utilized the scale to evaluate the credibility of celebrities and professionals, measuring attractiveness, trustworthiness, expertise, attitudes towards brands/products, and purchase intentions. Furthermore Van Der Waldt et al. (2011) conducted a survey using Ohanian's (1990) Source-Credibility Scale to examine how the credibility of celebrity advertising influences respondents' purchasing attitudes. In line with these studies, this research also incorporates items pertaining to trustworthiness, as part of the three-dimensional model (attractiveness, trustworthiness, and expertise) of credibility proposed by Ohanian (1990), in the quantitative research analysis. The items corresponding to the Source-Credibility Scale are

necessary to assess the credibility of influencer online reviews as they represent distinct aspects and dimensions of trustworthiness. Each item captures a specific quality or characteristic that contributes to the overall perception of credibility. By evaluating these aspects, a comprehensive understanding of the extent to which influencer online reviews can be considered trustworthy and credible is obtained. The items cover a range of factors such as sincerity, honesty, dependability, trustworthiness, credibility, bias, believability, reputation, reliability, truthfulness, convincingness, expertise, and truth. Evaluating these qualities helps to ensure a thorough evaluation of the credibility of influencer online reviews and provides insights into the reliability and trustworthiness of the information shared by influencers. A description of items can be found in part 3.3.4 below.

## **2.2. Transparency of ad promotion**

Influencer online reviews of fashion products serve to promote and facilitate consumers' consumption through the creation of compelling content and communication within the unique social media network. In the 21st century, modern consumers have become increasingly fashion-conscious and rely on social media influencers for inspiration. In the highly competitive fashion industry, maintaining a brand's image and identity poses significant challenges. As the Web 2.0 era has emerged, fashion brands are adopting online business models as an effective marketing strategy to establish their image, identity, and connect with the public. Consequently, social media has emerged as the dominant marketing medium in the fashion industry, with influencer-based marketing gaining prominence. Furthermore, social media influencers, capable of establishing para-social interaction with potential customers, significantly contribute to consumers' brand engagement. A study investigating brand engagement and brand love in the fashion domain revealed that influencer online reviews have

a positive impact on consumers' engagement with brands and even deter them from purchasing other brands (Rungruangjit & Charoenpornpanichkul., 2022). Influencer marketing is a promotional strategy that utilizes social media platforms to engage potential customers through sponsored content, such as product reviews, in order to promote brands or products. This form of marketing has proven to be highly effective in generating sales, capturing customer interest, and generating electronic word-of-mouth (eWOM) effects (D. Y. Kim & Kim., 2021). The influencer marketing industry has experienced remarkable growth, with a market size of \$500,000 in 2015 and reaching \$9.7 billion in 2020, exhibiting an annual growth rate of over 50% (Statista, 2021). These figures indicate the accelerated growth and integral role of influencer marketing as a key component of 21<sup>st</sup> century digital marketing strategies to reach target audiences.

Influencers foster a sense of reliance on their online reviews compared to traditional advertising methods, leveraging the trust-based relationships they have built with their followers. According to D. Y. Kim & Kim (2021), the trust relationship between influencers and potential customers plays a crucial role in influencer marketing, with 92% of social media users trusting influencers more than traditional marketing channels. Conversely, a global consumer survey found that 46% of respondents expressed low confidence in traditional channels such as newspapers, magazines, TV, or radio (Ipsos, 2019). Bu et al. (2022) support the exponential growth of influencer marketing and explain that brands can organically and authentically reach their target customers through this approach. Notably, 94% of marketers perceive influencer marketing activities as effective (Lou et al., 2019), and 89% acknowledge higher returns from influencer marketing compared to traditional strategies (Martínez-López et al., 2020). Consequently, the digital marketing landscape has undergone significant changes, and consumers exhibit high confidence in social media influencers. Jin et al. (2019) discovered that

social media influencers enjoy greater preference and popularity than traditional entertainers. In fact, in a study comparing product reviews posted by traditional celebrities and social media influencers, users (i.e., potential customers) displayed higher trust in the influencer's review (Jin et al., 2019). This suggests that online reviews from social media influencers are perceived as more reliable than those from traditional celebrities. The goal of influencer marketing is to leverage an influencer's unique social network to reach consumers, enhance brand awareness, and guide them towards positive purchasing decisions. Bu et al. (2022) found that influencer online reviews not only influence customers' purchase intentions but also enable influencers to manipulate those intentions. The alignment between the target audience and the influencer is closely associated with credibility, which, in turn, influences consumers' purchase intentions (Bu et al., 2022).

Despite the positive impact of influencer online reviews based on trust relationships with potential customers, the findings reveal significant negative outcomes when consumers become aware that the content is sponsored. Influencer marketing includes activities in which brands directly sponsor products to social media influencers and encourage them to post positive comments about the products (Kay et al., 2020). Hudders and Lou (2022) argue that consumer perceptions of sponsored content have a detrimental effect on influencer marketing. In particular, Hudders and Lou (2022) discovered that concealing sponsored messages in influencer online reviews resulted in higher perceived authenticity and credibility. This supports the notion that if advertising banners are prominently displayed in influencer online reviews, it becomes challenging to achieve a successful promotional effect (Evans et al., 2019). An identifiable path for consumers to determine if influencer online reviews are sponsored is through the inclusion of advertising disclosure labels within the posts. When consumers come across an ad banner and recognize an influencer online review as sponsored content, it

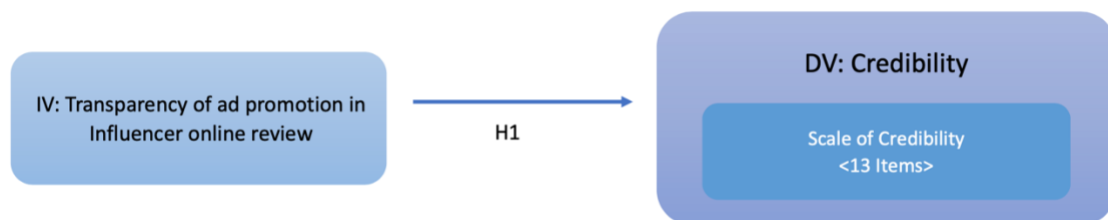


negatively impacts the brand's reputation (Evans et al., 2019). Diminishing credibility and negative perceptions towards the influencer online review and brand can undermine the effectiveness of influencer marketing and hinder consumers' purchase intentions. In response to these findings, advertisers are striving to develop methods to minimize consumers' ability to perceive ads. However, the covert format employed by advertisers to minimize ad perception can be seen as deceptive to consumers and has been shown to reduce the promotional effect (Evans et al., 2019). Half of U.S. Internet users mentioned they were deceived when they found out the content was being sponsored, and their positive views of the brand declined, referring to negative feelings of 'confusion' and 'disappointment' (Evans et al., 2019). De Cicco et al. (2021) support the findings of Evans et al. (2019) and highlight that social media users rate influencer online reviews positively only when they are unaware of the advertising intent behind such reviews. As the negative perception of influencer-sponsored online reviews spreads, a trend has emerged where posts explicitly state that the review is not sponsored, often using hashtags like "non-sponsored". Stubb and Colliander (2019) provide an example of Instagram influencer Erica Tenggara, who has 150,000 followers, posting an online review recommending yoga pants on her social media with the 'unsponsored' hashtag. This phenomenon directly demonstrates that a majority of potential consumers on social media hold a negative stance toward influencer-sponsored online reviews. Based on the previous literature, the following hypothesis is proposed:

***H1: The degree of credibility decreases if there has transparency of ad promotion on influencer's online reviews in the fashion industry***

### 2.3. Conceptual research model

The conceptual model (Figure 1) has been developed based on the literature review and the derived hypotheses. The model focuses on the relationship between the independent variable, Transparency of ad in influencer online review, and the dependent variable, Credibility of influencer online review. This study adopts a Confirmation Data Analysis (CDA) approach, wherein hypotheses were formulated prior to data collection. CDA involves collecting and analyzing data with pre-established hypotheses, followed by hypothesis verification. The goal is to examine the correlation between the two variables and validate the hypothesis that the credibility of influencer online reviews decreases when the transparency of ad promotion is disclosed. Please refer to Figure 1 for a visual representation of the conceptual model illustrating the relationship between the independent and dependent variables in this study.



**Figure 1.** Conceptual research model

## 3. Methods and instruments

### 3.1. Research design

The primary objective of this study is to investigate the disparity in the credibility of influencer online reviews based on the presence or absence of transparency in advertising disclosure. The independent variable in this research is defined as the "Transparency of ad promotion," while

the dependent variable is the "Credibility of influencer online review." In order to assess the credibility of influencer online reviews, 13 items are designed as a Scales. The results were derived from a large amount of research data by accessing random consumer samples. Random samples of consumers were accessed through the online survey platform (the quantitative research). The survey consists of a total of 34 questions, requiring less than 15 minutes to complete. The study specifically targets the younger generation, characterized by their high usage of social media and keen interest in fashion trends. The target audience for this research (i.e., online survey) comprises potential customers who actively use social media platforms. More specifically, the sample consists of younger consumers who are directly influenced by influencer posts. By statistically analyzing the extensive dataset obtained through the online survey, this study aims to identify the correlation between the transparency of ads and credibility. The online survey was distributed through various social media channels to ensure a diverse participant pool.

### **3.2. Procedures**

Prior to the main survey, a pretest was conducted to assess the effectiveness and validity of the influencer online review manipulation employed. The pretest involved 10 participants who selected from the researcher's close social network and they were asked to identify the difference in the presence or absence of hashtag 'ad' between two identical influencer online reviews within a 2 minutes timeframe. The results of the pretest were successful, as all participants were able to correctly recognize the sponsorship distinctions. Once the pretest confirmed the desired outcome, the online survey was distributed. The survey links were shared across various network groups through the researcher's social media account, and the snowball effect led to increased participation from additional network groups. In order to accommodate

a diverse range of participants from different races and countries, the survey was written in English. The survey interface allowed participants to modify their responses using the "Previous" button at the bottom of the page and proceed to the next section using the "Next" button. This feature facilitated a user-friendly and efficient survey experience for participants.

The informed consent form provided to participants includes comprehensive information regarding the study's overall purpose, participant rights, and the anonymization of collected data. The researcher's email address is also provided to address any potential side effects or participant inquiries that may arise following the survey. In many jurisdictions, obtaining informed consent is a legal requirement for conducting research involving human participants. Informed consent ensures ethical compliance, safeguards participant welfare, and prevents potential harm or exploitation. Ultimately, incorporating informed consent establishes trust, accountability, and ethical conduct between researcher and participants. Prior to commencing the survey, participants are required to acknowledge their understanding and agreement by clicking the "I agree to participate in this study" button. Once consent is obtained, participants are asked to provide personal information such as age, gender, nationality, and educational level. However, to accommodate participants who may have reservations about disclosing personal information, an option is provided where they can select "Prefer not to say".

Following the demographic information section, participants proceed to evaluate the credibility of influencer online reviews using a scale based on Ryan Clark's fashion product reviews posted on Instagram. The evaluation consists of 13 items designed to assess the credibility of influencer online reviews. All 13 items in the assessment are interdependent in the evaluation of credibility, with each item consisting of two opposing polar terms. A 5-point measurement scale is employed, allowing participants to select one option that best represents their opinion.

The 5 selectable boxes are arranged in a progressive manner from left to right, indicating ascending scores. The questionnaire includes fabricated examples of influencer online reviews in the evaluation process. The first section presents a review where the transparency of ad promotion is not disclosed, while the second section presents a review explicitly disclosing the transparency of ad promotion. Participants are asked to provide their assessments based on these scenarios.

In order to ensure participants' clear awareness of the sponsorship difference between the two examples, a manipulation check was conducted after the questionnaires of two sections. In other words, participants were explicitly asked if they could recognize the difference in sponsorship. In addition, participants were queried about their familiarity with Ryan Clark to control for potential confounding variables associated with prior knowledge of the influencer. Furthermore, it is important to note that all influencer online reviews used as examples in the survey were slightly fabricated. To mitigate potential ethical risks, participants were informed of the manipulation, providing them with the facts of manipulation. This disclosure aimed to minimize any negative perceptions participants might develop towards the specific influencer as a result of the study. Upon completion of the questionnaire, participants were able to review a summary of their responses on the final page.

### **3.3. Contents of the quantitative research and Measures - Survey**

The survey is organized into eight distinct blocks: Informed Consent, Demographics, Two Examples of Manipulations, Measures of Credibility, Manipulation Checks, Influencer Check, Preventing Potential Ethical Risks, and End of Survey. Each block serves a specific purpose and contains multiple-choice questions, with participants not being able to provide subjective

responses. For a comprehensive view of the survey questions and measurement scales, please refer to Appendix A.

### **3.3.1. Informed consent**

At the commencement of the online survey, participants were provided with an informed consent. The form detailed the study's purpose, participants' rights to anonymity, potential risks or benefits of participation, and the option to withdraw from the survey at any time. Confidentiality of responses and the researcher's contact information were also provided to address any unexpected consequences or side effects. The inclusion of contact information aimed to offer necessary support and uphold ethical standards. The prior consent process covered the study's purpose, potential risks or benefits, confidentiality assurance, voluntary participation, and researcher contact information. The form emphasized the collection of only essential research-related information. Ensuring participants' understanding and agreement, those who did not comprehend or disagree with the consent form were excluded from data analysis. To mitigate this, the informed consent form was placed on the first page of the survey.

### **3.3.2. Demographics**

The Demographics block comprises four factors: age, gender, nationality, and educational level. Collecting demographic information is crucial as it helps determine the degree to which the sample is representative of the target population of interest. In this study, the target population consists of potential customers in the fashion industry who use social media. The characteristics of the participants can influence the possibility of introducing new variables or biasing the research outcomes. Participants who have negative feelings about providing personal information have an opportunity to select “prefer not to say”.

Given that the study focuses on the younger generation with a particular interest in fashion-related products and social media, the age range is limited from 18 to 38. The age groups are classified as 18-24, 25-31, and 32-38 to capture the diversity within this range. In order to ensure gender diversity, participants are categorized as male, female, or non-binary/third gender. Similarly, for nationality diversity, participants are grouped as Dutch, German, or Other to accommodate individuals from various nationalities. The educational level question ranges from high school to master's degrees, encompassing a broad spectrum of educational backgrounds.

### **3.3.3. 2 examples of manipulations**

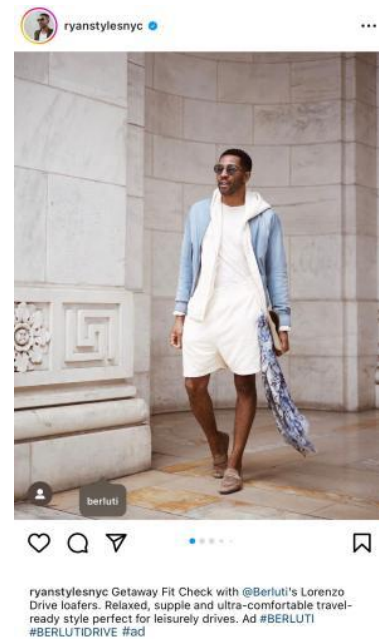
The study employed a manipulation technique to assess the impact of transparency of ad promotion on the credibility of influencer online reviews. In the first section, participants evaluated the credibility of an influencer online review example where no sponsorship disclosure. In contrast, the second section presented the same influencer online review with the addition of the hashtag #ad to indicate transparency of ad promotion. Through these manipulations, participants were influenced to recognize that influencer online reviews are sponsored content. In order to provide a realistic context, a fashion-related online review from a real Instagram influencer was used as an example. The influencer chosen for this study is Ryan Clark, whose Instagram account name is @ryanstylesnyc. Ryan Clark has a follower count of 191K (last check: 2023.05.10) on Instagram, making him a suitable candidate for the study. The rationale behind selecting this particular influencer is further explained in Part 3.3.6.

The actual influencer online review from Instagram was utilized, but manipulations were introduced for the purposes of the study. The manipulated online review consists of a photo and accompanying comments, intentionally lacking any hashtags or marks indicating that the

post is sponsored. Figure 2 presents the manipulated influencer online review without ad presence, while Figure 3 displays the same online review with ad presence.



**Figure 2.** No transparency of ad promotion



**Figure 3.** Add hashtag of #ad for sponsored post

A pretest survey was conducted with a small group of 10 participants to assess the distinction between Figure 2 and Figure 3 presented above. The participants in the pretest were recruited from the social networks of researcher. They were presented with two images (Figure 2 & Figure 3) and given a time limit of 2 minutes to identify the differences between the two images. The purpose of the pretest was to ensure that the fabricated examples used in the study were effective and valid. The results of the pretest revealed that all 10 participants successfully distinguished the difference between Figure 2 and Figure 3, indicating that the manipulations were perceived as intended. This validated the suitability of the examples for the main survey.

### 3.3.4. Measures of Credibility

13 items were utilized to assess the credibility of influencer online reviews, drawing from the Source-Credibility Scale developed by Ohanian (1990). The 13 items originally proposed by



Ohanian (1990) have been widely employed in various studies to assess the credibility of content, demonstrating a history of adoption within the research literature. As previously elucidated within the theoretical framework section, this scale is deemed one of the most suitable evolution methods for assessing perceived attractiveness, trustworthiness, and expertise. Its effectiveness in this regard has been widely acknowledge. These items encompass various aspects of credibility and serve as foundational elements for evaluating the credibility of influencer online reviews. Each item presents a pair of contrasting words, and participants are asked to select the word that best reflects the emotions they experienced after viewing the influencer's post. The items were arranged in a bipolar matrix format, as illustrated in Figure 4.

Here is the list of the 13 items for the credibility scale:

0. Insincere/ Sincere
1. Dishonest/ Honest
2. Not dependable/ Dependable
3. Not trustworthy/ Trustworthy
4. Not credible/ Credible
5. Biased/ Not biased
6. Not believable/ Believable
7. Disreputable/ Reputable
8. Unreliable/ Reliable
9. Untruthful/ Truthful
10. Unconvincing/ Convincing
11. Not at all expert/ Expert
12. Not true/ True

Participants were required to select the word that they believed best captured their emotional

response to the influencer's post for each item. The bipolar matrix format allowed for a comprehensive assessment of credibility across these dimensions.

I think this influencer online review is...

Insincere	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Sincere
Dishonest	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Honest
Not dependable	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Dependable
Not trustworthy	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Trustworthy
Not credible	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Credible
Biased	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Not biased
Not believable	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Believable
Disreputable	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Reputable
Unreliable	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Reliable
Untruthful	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Truthful
Unconvincing	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Convincing
Not at all expert	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Expert
Not true	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	True

**Figure 4.** Picture of Bipolar matrix type that applied to the survey

Within the bipolar matrix format, there are five checkboxes positioned between the two poles representing contrasting words. The two checkboxes located on the left side correspond to negative emotions, indicating a perception of low credibility for influencer online reviews. Conversely, the two checkboxes on the right side correspond to positive emotions, indicating a perception of high credibility. The middle checkbox, positioned third from the left, represents a neutral stance regarding the credibility of influencer online reviews, indicating neither negative nor positive emotions. In order to assign scores to the responses, a 5-point scale was implemented. The scale progresses from left to right, with scores of 1, 2, 3, 4, and 5. The words positioned on the left side of the scale are associated with low scores (1, 2), reflecting lower credibility perceptions. On the other hand, the words positioned on the right side of the scale are associated with high scores (4, 5), reflecting higher credibility perceptions. Participants selected the checkbox that aligned with their emotions and assigned the corresponding score

based on the position of the selected checkbox along the scale.

### **3.3.5. Manipulation check**

In order to further validate the manipulation of the transparency of ad promotion in the main survey, a manipulation check was conducted. Participants were asked a specific question to assess their recognition of the hashtag "#ad" indicating sponsorship in the influencer online review presented to them. The question posed to participants was: "Did you recognize the hashtag of the advertising sign indicating sponsorship in the above influencer online review?" Participants were given two response options: "Yes" or "No." To score the responses for analysis purposes, a scoring system was established. A response of "Yes" was assigned a score of 2 points, indicating that the participant recognized the hashtag and understood the influencer online review to be sponsored. Conversely, a response of "No" was assigned a score of 1 point, indicating that the participant did not recognize the hashtag and therefore did not perceive the influencer online review as sponsored.

### **3.3.6. Type of influencer & Influencer check part**

The selected influencer for this survey is Ryan Clark, known as @ryanstylesnyc on Instagram. Ryan was chosen as the example of an influencer online review for several reasons. Firstly, Ryan has limited background knowledge and history that could potentially influence the research as moderating variables. This helps minimize the impact of external factors on the results. Secondly, Ryan actively engages with a diverse group of social media users through English-language content, facilitating smooth interaction with individuals from various nationalities and ensuring inclusivity of participants from diverse backgrounds. Lastly, Ryan exclusively focuses on fashion-related content. According to Dumas and Stough (2022), consumers are less likely to trust influencer posts when the advertised products or brands do

not align with the influencer's identity. Therefore, to evaluate the credibility of influencer online reviews specifically in the fashion industry, Ryan Clark was considered a suitable example. By selecting an influencer who exclusively produces fashion-related content, the study maintains alignment with its objective of assessing the credibility of influencer online reviews in the fashion industry.

A familiarity assessment of the influencer was conducted to minimize the potential impact of participants' existing background knowledge of Ryan Clark. Participants were asked the following question: "Are you familiar with the influencer Ryan Clark presented above?" Participants were given two response options: "Yes" or "No." A response of "Yes" was assigned a score of 2 points and response "No" was assigned a score of 1. This question aimed to determine whether participants had prior knowledge of Ryan Clark and whether it could act as a variable in the study. By directly addressing participants' familiarity with Ryan Clark, the research sought to ensure that the results were not biased by participants' preconceived notions or previous experiences related to the influencer.

### **3.3.7. Prevent potential ethical risk**

Considering the possibility that participants may develop a negative perception of a specific influencer after the research, it is crucial to address the ethical risks associated with the study. To mitigate these risks, participants were explicitly informed that all examples of influencer online reviews used in the survey were fabricated and not reflective of real-life scenarios. The following statement was included in the survey to clarify this: "You should remind yourself that the examples of influencer online reviews used in this survey are not relevant to reality and the above examples were manipulated by referring to the actual post." This disclosure aimed to ensure that participants understood the artificial nature of the examples and minimized

any potential negative impact on their perception of specific influencers.

### **3.3.8. End of survey**

At the end of the survey, participants were presented with a comprehensive summary of their responses on the final page. This summary served as a means for participants to review and validate their answers, allowing them to reaffirm their understanding of the study's purpose and objectives. By providing this opportunity for individual reflection and confirmation, participants could further grasp the intended direction and significance of the research.

### **3.4. Participants**

A total of 390 responses were obtained for this study, with data collection taking place over a period of 20 days, specifically from May 22 to June 10, 2023. The survey was made accessible to social media users across various platforms, ensuring the participation of individuals from diverse backgrounds, including different nationalities, genders, ages, and educational levels. This diverse sample was intended to provide a representative representation of the population, aligning with the study's focus on the fashion industry in the context of social media consumption, which predominantly appeals to the younger generation. Participants between the ages of 18 and 38 were targeted, as this demographic is most engaged with fashion-related content on social media. Individuals ages above were excluded from participating in the survey. The educational background of participants varied, ranging from high school diplomas to master's degrees. In accordance with ethical guidelines governing data collection, the study exclusively involves individuals who have reached the age of 18 or above, possess the cognitive ability to make informed decisions regarding the proposed course of action, exhibit an awareness of the potential risks and benefits associated with participation, demonstrate

comprehension that their consent is entirely voluntary, and retain the right to withdraw their involvement in the research at any point.

### **3.4.1. Results of demographics**

Despite obtaining informed consent and an initial participation count of 390 individuals, the final number of participants who provided complete responses to all the questions was lower. The initial sample of 390 participants was reduced to 198 after excluding individuals who provided incomplete responses or did not fully participate in the study and those who exceeded or fell short of the time limit. The study employed a time limit during the analysis, restricting participant response durations to a range between 2 minutes and 2 hours. Only data from participants who successfully completed the survey within this specified time limit were included in the analysis. This approach ensured that the analysis was based on data from participants who provided complete responses within a reasonable timeframe, enhancing the reliability and validity of the findings. The final sample of 198 participants consisted of individuals who agreed informed consent and answered the survey questionnaire entirety. Demographic data were analyzed using the "Qualtrics" platform, and the results were integrated within the participants section because they did not act as new variables or interventions. The overview of the demographics results is shown in the Table 1.

The results revealed that the largest proportion of participants, accounting for 59.00% of the total sample, belonged to the 18-24 age group. This finding indicates a significant representation of individuals within this age range in the study. The subsequent age group, consisting of individuals aged 25-31, comprised 26.04% of the participants, while the 32-38 age group accounted for 11.63% of the sample. A small portion, approximately 3.32%, chose not to disclose their age ("prefer not to say"). The age range of 18-24 comprised the majority

of participants, representing 59.00% of the total sample. This substantial proportion suggests that a significant segment of the study's sample belonged to this age range. These findings demonstrate a notable concentration of participants in the 18-24 age range, highlighting the importance of considering this specific age group in the study's conclusions.

In terms of gender composition, the study observed nearly equal participation between women and men, with women accounting for 56.51% of the participants and men comprising 39.34%. The non-binary/third gender group and the 'prefer not to say' group each represented 1.94% and 3.15% of the total sample, demonstrating an distribution across these categories. Overall, the study demonstrated an inclusive approach by ensuring diverse participation across gender identities.

The nationality composition of the participants revealed that individuals from nationalities Other than the Netherlands and Germany constituted the majority, representing 67.31% of the total sample. Specifically, the Dutch group accounted for 20.78%, while the German group comprised 9.14% of the participants. Additionally, the "prefer not to say" group constituted 2.77% of the total sample. This distribution showcases the diversity of nationalities represented in the study, with a significant portion of participants originating from backgrounds Other than the host countries. Given the widespread adoption of online surveys by researcher and the snowball effect generate, coupled with the fact that researcher's social media networks are predominantly centered around South Korea, it can be expected that the "other" group may exhibit a higher proportion of South Koreans.

Regarding the distribution of the highest education levels, the study found that the largest proportion of participants had completed high school, representing 52.63% of the total sample.

The second largest group accounted for 32.41% of participants in bachelor’s degree group, while the group of master’s degree comprised 10.53%. The "prefer not to say" group constituted 4.43% of the total sample. These findings illustrate the distribution of education levels among the participants, with a significant portion having completed high school, followed by the other specified categories.

**Table 1.** Overview of the Demographics

Age			Gender				Nationality			Education level					
18-24	25-31	32-38	Prefer not to say	Male	Female	Non binary	Prefer not to say	Dutch	German	Other	Prefer not to say	Completed high school	Bachelor's degree	Master's degree	Prefer not to say
59.00	26.04	11.63	3.32%	39.34	56.51	1.94%	2.22%	20.78	9.14%	67.31	2.77%	52.63	32.41	10.53	4.43%
%	%	%		%				%		%		%	%	%	

### 3.5. Analyses

The analysis of the online survey data in this study was performed using both the automated results analysis system provided by 'Qualtrics' and the coding system within 'R-Studio'. The results analysis system in 'Qualtrics' automatically computed the figures as percentages based on the collected data. Additionally, to explore more detailed correlations between variables, the data was directly inputted and coded using 'R-Studio' to obtain the results. This dual approach enabled a comprehensive analysis of the data, leveraging the strengths of both automated analysis and manual coding for a robust examination of the research variables. Automated percentage coding through Qualtrics was utilized for the demographic information of the participants as described above, as well as for the subsequent sections involving ‘hashtag recognition’ and ‘influencer check’. The participants' responses regarding the main aspect of



the study, which pertained to the assessment of credibility, were analyzed using R-Studio. Detailed results of this analysis can be found in section 4.3.

## **4. Results**

Manipulation check and Influencer check sections of the survey were analyzed using the 'Qualtrics' platform as they constituted relatively minor components in terms of their contribution to the overall research findings. In contrast, the two main sections (influencer online review one with no ad presence and one with ad presence) that significantly influence the research results were analyzed using 'R-studio', employing a more active and rigorous approach. To evaluate the credibility corresponding to each condition, both regression analysis and t-tests were conducted. The derived results serve as crucial elements that support the overall implications of the paper. In the discussion section, a more detailed explanation is provided regarding these implications. Furthermore, the study emphasizes the encountered limitations and expresses expectations for future follow-up research. By incorporating these aspects, it is aimed to foster ongoing exploration of additional research related to the topic.

### **4.1. Hashtag recognition**

The results obtained from the section on hashtag recognition, which followed after the inquiry sections concerning the credibility of influencer online reviews, indicated that a significant majority of participants (88.52%) demonstrated awareness of the specific hashtag being investigated. This suggests that a considerable portion of the participants recognized with the hashtag in the second example of influencer online reviews. On the other hand, a minority of participants (11.48%) reported a lack of awareness regarding the specific hashtag. These results

not only validate the study but also highlight the diversity of participant knowledge and understanding in relation to this specific aspect of influencer marketing.

#### **4.2. Influencer check**

In the influencer check section, which was implemented to prevent new variable intervention due to the prior familiarity with the influencer on the study variables, the findings indicated that 96.39% of participants reported not being acquainted with Ryan Clark, the influencer utilized in the study. Conversely, the remaining 3.61% of participants acknowledged having knowledge of Ryan. The finding that a significant majority of participants (over 96%) indicated a lack of prior knowledge about Ryan provide confidence in the study's ability to minimize the influence of pre-existing knowledge and ensure the validity of the research outcomes.

#### **4.3.Credibility of Influencer online review**

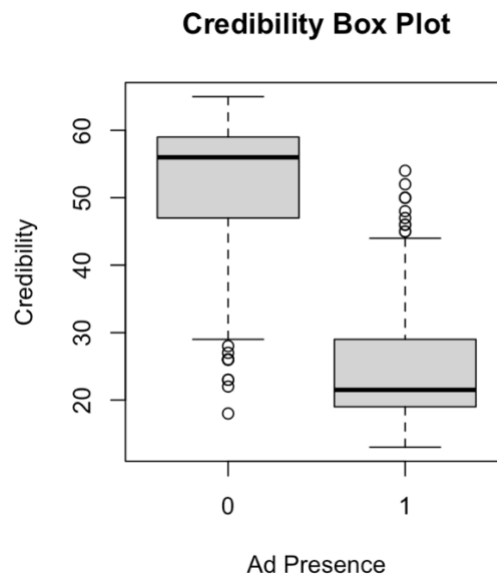
The dependent variable set in the study is ‘Credibility’, and the independent variable is ‘Transparency of ad (=marked as ‘Ad Presence’ in the boxplot)’. The regression analysis and t statistic was performed in this research. The regression analysis allows the study to assess the relationship between predictor variable (‘Dummy’:0 or 1) and the outcome variable (‘Credibility’), while the t-test allows the study to assumes that the data follow a normal distribution and the hypothesis testing. The analysis was conducted using the R-studio, and several columns (‘Start date’, ‘End date’, ‘Status’, ‘Progress’, ‘Finished’, ‘Recorded date’, ‘Response Id’, ‘Distribution channel’, ‘User language’, ‘Informed consent’, ‘Q1.0: Did you recognize the hashtag indicating sponsorship in the influencer online review above?’, ‘Q1.1: Are you familiar with the influencer Ryan Clark presented above?’) which were not necessary for the results were removed before starting a full-fledged investigation. Therefore, only 26 columns were selected from 44 columns. In other words, in each of the two conditions (no ad

presence & yes ad presence), only the columns containing the answers to the credibility of influencer online reviews were left. In addition, handling missing value is an important step in data analysis to ensure the validity and reliability of the results. Thus, observations with missing values (recorded as NA) were all deleted and only complete cases were used in the analysis. In addition, the survey limited the participants' time spent to a range of 2 minutes to 2 hours. This process can help minimize the potential bias that may arise and improve the reliability of findings. The dummy variables were added for each of the different conditions (no ad presence & yes ad presence). The dummy values of 0 indicates no ad presence and the dummy values of 1 indicates yes ad presence. Thus, the final dataset contains a total of 198 observations and 2 variables (Credibility & Dummy).

**X: Transparency of ad**  $\begin{cases} 0 = \text{No ad presence} \\ 1 = \text{Yes ad presence} \end{cases}$

Figure 5 presents a box plot that allows for a visual comparisons of the distribution of a dataset, specifically in relation to two conditions: “no ad presence” and “yes ad presence”. The vertical axis of the box plot represents the ‘Credibility’ scores, while the ‘Ad presence’ variable is a binary variable with values of 0 and 1, representing the two groups being compared based on their credibility scores. The median credibility score for each group is depicted by the line inside each box, providing an indication of the central tendency of the data within each presence category. Notably, the group with no ad presence exhibits a higher median credibility score compared to the group with ad presence. This difference in medians suggests a potential disparity in credibility scores between the two presence categories. Furthermore, the whiskers of the box plot extend to different ranges, indicating variations in the minimum and maximum credibility scores between the two presence categories. This disparity further supports the notion of differences in the minimum and maximum scores based on the presence or absence

of an ad. By visually comparing the overall distribution of credibility scores between the two presence categories before the regression analysis, as depicted by the box plot, insights can be gained regarding the potential relationship between "Ad presence" and "Credibility."



**Figure 5.** Box plot

The regression analysis was performed to investigate the relationship between the dependent variable, 'Credibility,' and the independent variable, 'Ad Presence,' which was represented as a set of dummy variables. This analysis aimed to identify any statistically significant associations between the variables and examine how the presence of an ad impacts credibility. The regression model enabled the prediction and forecasting of credibility values based on the presence or absence of an ad, as indicated by the dummy variables. By establishing this model, it became possible to estimate the expected credibility scores given specific ad presence conditions. This predictive capability is valuable for making informed decisions and planning for future directions, as it allows for an assessment of how credibility may be influenced by the presence or absence of an ad. Furthermore, the regression analysis facilitated hypothesis testing,

which was formulated at the outset of the study. The statistical significance of the coefficients associated with the ad presence dummy variables was assessed, allowing for an evaluation of the hypotheses. These statistical measurements will be used for model evaluation and interpretation, aiding in the understanding of the relationship between the variables. The coefficients, such as the slope and intercept, derived from the regression analysis, will be instrumental in interpreting the relationship between the ad presence and credibility. They provide insights into the direction and magnitude of the effect of the presence or absence of an ad on credibility. Additionally, measures such as R-squared and adjusted R-squared will provide information on the proportion of variability in credibility that can be explained by the ad presence. Thus, through regression analysis, the study examines the relationship between the dependent variable (credibility) and the independent variable (ad presence represented as dummy variables). It allows for prediction, hypothesis testing, and model evaluation, providing insights into the impact of ad presence on credibility. The coefficients and statistical measures obtained from the analysis contribute to the interpretation and understanding of this relationship. The summary of the regression model is shown in the Table 2.

**Table 2.** Summary of regression model

```

Call:
lm(formula = Credibility ~ dummy, data = CombinedDataset)

Residuals:
    Min       1Q   Median       3Q      Max
-33.561  -6.485  -0.439   6.515  28.515

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
Intercept    51.5606     0.7104   72.58  <2e-16 ***
Dummy       -26.0758     1.0047  -25.95  <2e-16 ***

Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 9.996 on 394 degrees of freedom
Multiple R-squared:  0.631,    Adjusted R-squared:  0.63
F-statistic: 673.7 on 1 and 394 DF,  p-value: < 2.2e-16

```

For the coefficients of intercept, the estimated intercept is 51.5606 and the p-value is  $<2e-16$ . The p-value ( $<2e-16$ ) indicates that it is statistically significant. The estimated coefficients for the predictor variable “Dummy” is -26.0758 and the p-value is  $<2e-16$ . The p-value ( $<2e-16$ ) suggests that this variable is also highly statistically significant. In other words, both the intercept and the “Dummy” variable have p-values less than 0.001 and this results indicating very high significance. For the residual standard error, the value of 9.996 is the estimated standard deviation of the residuals, which measures the average distance between the observed and predicted values of the dependent variable. In addition, the multiple R-squared is 0.631 and it indicates that approximately 63.1% of the variance in the dependent variable is explained by the predictors. The F-statistic ( $F(1,394) = 673.7, p < 0.001$ ) tests the overall significance of the model, while the associated p-value ( $<2.2e-16$ ) indicates strong evidence against the null hypothesis (the model has no predictive power).

In order to conduct a more accurate and detailed investigation, the data obtained from the regression analysis was further analyzed using a t-test. The small sample size of 198 observations in the study makes the t-test particularly useful, as it is well-suited for analyzing data with limited sample sizes. The t-test assumes that the data follow a normal distribution, and if this assumption holds, reliable results can be obtained from the test. The t-test allows for the testing of specific hypotheses regarding the means of two groups. By comparing the observed sample means to the expected population means, it becomes possible to determine whether there is sufficient evidence to support or reject the hypothesis. Furthermore, the t-test helps control the probability of making a Type 1 error, which involves rejecting the null hypothesis when it is actually true. Researchers can establish a predetermined significance level (denoted as  $\alpha$ ) to make decisions based on the strength of evidence against the null hypothesis. In the context of a t-test, the null hypothesis typically represents the absence of a

statistically significant difference between two conditions. In this specific situation, where the independent variable is the presence of an ad (represented by a dummy variable) and the dependent variable is credibility, the null hypothesis can be formulated as follows:

*Null Hypothesis: There is no significant difference in the mean credibility scores between the group with ad presence and the group without ad presence.*

Symbolically, it can be written as:

$$H_0: \mu_1 = \mu_2$$

Where:

*H<sub>0</sub> represents the null hypothesis.*

*$\mu_1$  represents the population mean credibility score for the group with ad presence.*

*$\mu_2$  represents the population mean credibility score for the group without ad presence.*

The null hypothesis assumes that any observed differences in the mean credibility scores between the two groups are due to random chance and do not reflect a true underlying difference in the population. The alternative hypothesis, which represents the research hypothesis or possibility of a significant difference, would be formulated as:

*Alternative Hypothesis: There is a significant difference in the mean credibility scores between the group with ad presence and the group without ad presence.*

Symbolically:

$$H_1: \mu_1 \neq \mu_2 \text{ (two-tailed t-test)}$$

The t-test was conducted as a complementary analysis to the regression analysis, aiming to examine the relationship between the predictor variable (represented by the 'Dummy') and the outcome variable (represented by 'Credibility') from different perspectives. During the t-test,

the null hypothesis was tested against the alternative hypothesis to determine if there is sufficient evidence to reject the null hypothesis and conclude that a significant difference exists between the groups based on the credibility scores. By performing both the regression analysis and the t-test, the study aimed to cross-validate the findings. If the regression analysis indicated a significant relationship between the predictor variable ('Dummy') and the outcome variable ('Credibility'), and the t-test also revealed a significant difference in means between the groups, it would provide stronger evidence and increase confidence in the results. In summary, conducting both the regression analysis and the t-test allowed for a comprehensive examination of the relationship between the predictor variable and the outcome variable. It served to cross-validate the findings and strengthen the evidence supporting any observed relationships or differences between the groups.

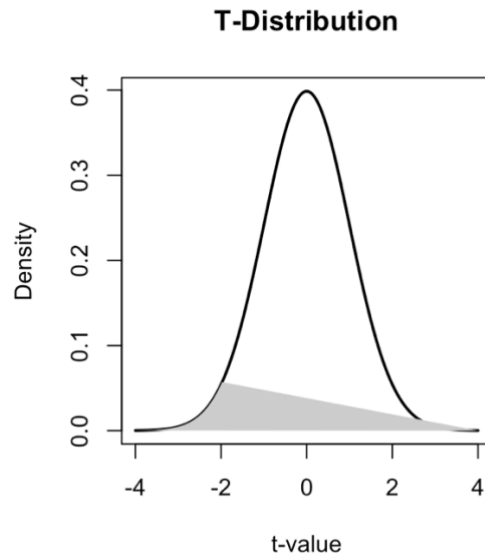
**Table 3.** Overview of the t-test result

Name	Type	Value
t-test result	list [10] (S3: htest)	list of length 10
statistic	double [1]	25.95486
t	double [1]	25.95486
parameter	double [1]	388.831
df	double [1]	388.831
p.value	double [1]	6.770503e-87
conf.int	double [2]	24.1 28.1
estimate	double [2]	51.6 25.5
mean of x	double [1]	51.56061
mean of y	double [1]	25.48485
null.value	double [1]	0
difference in means	double [1]	0
stderr	double [1]	1.004658
alternative	character [1]	'two.sided'
method	character [1]	'Welch Two Sample t-test'
data.name	character [1]	'no_ad_group and ad_group'

The t-test was conducted using a dataset consisting of two groups, namely the “no\_ad\_group” and “ad\_group”. Table 3 shows the overview of the individual values in t-statistic. A two-



sample t-test was performed to examine the difference in means between the "no\_ad\_group" and "ad\_group" in terms of the variable of interest. The test yielded a statistic of 25.95486, which corresponds to a t-value of the same magnitude. The degrees of freedom were estimated to be 388.831, resulting in a p-value of 6.770503e-87, indicating an extremely significant result. (If the p-value is smaller than the predetermined significance level (e.g., 0.05), it indicates that the difference between the means is statistically significant.) The 95% confidence interval for the difference in means ranged from 24.1 to 28.1. This interval provides a range within which the true difference in means between the two groups is likely to fall. In simpler terms, if researchers were to repeat the sampling and analysis process multiple times, capturing new samples, researchers would expect that in approximately 95% of those cases, the true population value would fall within this range. The estimated means for the "no\_ad\_group" and "ad\_group" were found to be 51.6 and 25.5, respectively. The mean of the "no\_ad\_group" was 51.56061, while the mean of the "ad\_group" was 25.48485. The null hypothesis, which assumes no significant difference between the means of the two groups, was rejected based on the observed data. The difference in means was found to be statistically significant, with a value of 0. The standard error of the difference in means was calculated as 1.004658, providing an indication of the precision of the estimated difference. The alternative hypothesis was specified as two-sided, suggesting the possibility of a difference in means in either direction. The test was conducted using the Welch two-sample t-test method, which accounts for the unequal variances between the two groups. Overall, the results of the t-test provide strong evidence of a significant difference in means between the "no\_ad\_group" and "ad\_group," supporting the conclusion that the presence of an ad has a substantial impact on the variable of interest.



**Figure 6.** Plot of t-distribution

Figure 6 presents the t-distribution plot generated based on the provided values, with the region corresponding to the confidence interval highlighted. The degrees of freedom (df) were calculated based on the sample sizes of the "no\_ad\_groups" and "ad\_groups" data. A sequence of values (x) ranging from -4 to 4 was used to plot the t-distribution, with t-values (x) displayed on the x-axis and the density (y) on the y-axis. The plot visualizes the t-distribution as a line graph. For the analysis, a significance level (alpha) of 0.05 was chosen, indicating a 95% confidence level. The critical t-values for the two-tailed test were computed using the qt() function with probabilities of alpha/2 and 1 - alpha/2, along with the degrees of freedom (df). The gray shaded area on the plot represents the confidence interval, encompassing the region between the lower and upper critical t-values. Overall, Figure 6 serves as a visual representation of the t-distribution and supports the conclusion of statistical significance regarding the observed difference between the groups.

## 5. Discussion

The utilization of social media influencer marketing has witnessed a significant increase as a prominent digital marketing strategy. Influencers establish sponsorship relationships with brands and leverage the trust they have built with their audience to promote and review products. However, consumers have become more discerning when it comes to advertised content. They are less likely to be deceived when influencers disclose the transparency of ad promotion through the use of hashtags or ad banners in their online reviews. Moreover, with the emergence of new revisions to social media regulations, which mandate the disclosure of sponsored content's intent, the positive effects of influencer marketing have come under scrutiny. Thus, the objective of this study was to quantitatively examine the impact of transparency in ad promotion on the credibility of influencer online reviews in fashion industry. In addition, the research aimed to investigate the disparities between influencer online reviews with revealed transparency of ad promotion and those without it. This discussion section will provide further explanations of the previously presented findings.

This research contributes to the understanding of the current landscape of the social media influencer market and provides empirical evidence on the credibility variations resulting from sponsorship disclosure. It challenges the notion prevalent in previous studies that highlight the strong promotional impact of influencer marketing and instead argues that the era of influencer marketing is reaching its culmination. This argument stems from the examination of the negative aspects associated with sponsored social media influencer online reviews. Notably, D. Y. Kim and Kim (1988) emphasize the significance of trust in the influencer-consumer relationship, considering it a crucial element in influencer marketing. Bu et al. (2022) and Lou et al. (2019) also mention that brands utilize influencers to engage potential consumers in an authentic and credible manner. Furthermore, Jin et al. (2019) reveal that consumers perceive

influencer online reviews as reliable sources and that these reviews significantly influence their purchasing behavior. However, it is important to note that the aforementioned studies focused on influencer online reviews that did not explicitly disclose the sponsorship message.

The quantitative research conducted in this study provides empirical support for the hypothesis that the credibility of influencer online reviews decreases when the transparency of ad promotion is disclosed. The analysis of the data revealed a significant finding regarding the credibility of influencer online reviews. Specifically, it was observed that influencer online reviews without ad presence displayed higher levels of credibility compared to those with ad presence. Conversely, influencer online reviews that explicitly disclosed their ad promotion demonstrated lower levels of credibility. This finding highlights the critical role of transparency in ad promotion when evaluating the perceived credibility of influencer online reviews. The hypothesis, “*H1: The degree of credibility decreases if there is transparency of ad promotion on influencer online reviews in the fashion industry*”, can be accepted based on the findings of this study. In other words, the null hypothesis of “*There is no significant difference in the mean credibility scores between the group with ad presence and the group without ad presence*” can be rejected. These results emphasize the substantial impact of ad promotion transparency on the perceived credibility of influencer online reviews, particularly within the context of the fashion industry. As a result, this study holds significant importance for both the marketing industry and academia, as it challenges the previously established positive perception of influencer marketing as reflected in consumer attitudes towards influencers and sponsored brands. By uncovering the influence of ad promotion transparency on the credibility of influencer online reviews, this research contributes to a deeper understanding of the intricate dynamics within influencer marketing and provides valuable insights for marketers and scholars in the field.

The interpretation of the findings in this study is rooted in a theoretical framework that incorporates insights from previous research. By examining the relationship between advertisement transparency and the credibility of influencer online reviews, this study builds upon and extends the existing knowledge in the field. Social media platforms, such as Instagram, provide influencers with a platform to cultivate their reputation and establish credibility, authenticity, and relatability with potential consumers (Evans et al., 2019). The use of social media influencers, particularly in the fashion industry, has become a prevalent marketing strategy (Pedroni, 2016). However, Kay et al. (2020) argue that online reviews that consistently receive payments from brands or organizations may not be highly persuasive to consumers. The perceived authenticity and high credibility of influencers are instrumental in attracting a large audience. However, the revelation that influencers are motivated by financial gain can undermine the perceived authenticity and erode the trust relationship (Kay et al., 2020).

The findings in this research align with the arguments put forth by Kay et al. (2020) by demonstrating the negative responses and diminished reliability experienced by consumers when they discover that influencer online reviews are sponsored. Hudders and Lou (2022) also support Kay et al. (2020)'s findings by highlighting the high credibility associated with the non-disclosure of sponsorship messages. They found that the inclusion of sponsorship messages in social media influencer content reduces credibility, perceived product quality, and brand preferences. De Cicco et al. (1988) echo the sentiments of Hudders and Lou (2022) and emphasize that social media users positively evaluate influencer online reviews when they are unaware of the underlying advertising context. The results of this study, which indicate a decrease in credibility due to transparency in advertising promotion, align with the findings of Kay et al. (2020) and are supported by the research conducted by Hudders and Lou (2022) and

De Cicco et al. (1988). However, considering the characteristics of the social network where the online survey was distributed, there is a strong possibility that the majority of participants were Koreans rather than individuals of Dutch or German nationality. This outcome demonstrates a significant deviation from the theoretical framework's emphasis on research centered around Western regions, thereby hindering the complete validation of the aforementioned previous studies. In light of this, further investigation is needed to examine the perspectives of individuals from the Western region regarding influencer online reviews. This would provide a more comprehensive understanding of the topic.

The influencer marketing industry is currently facing a controversial issue surrounding the legal requirement to disclose paid content in social media influencer posts. The advertising disclosure policy in social media, which is repeatedly mentioned in this paper, presents a significant challenge to the growth of influencer online reviews. According to the Federal Trade Commission (FTC, 2015), disclosures should be prominently displayed, well-positioned, and clearly understandable. Influencer may publish product promotions by attaching the words 'Paid Partnership with (Business Name)' to the post or by using hashtags such as '#brand name' or '#ad' (Stewart, 2017). The newly revised social media advertising labeling policy has become a factor that undermines the credibility of influencer-sponsored online reviews. On the other hands, one of the social media influencers, Kim Kardashian, has been accused of failing to disclose advertisements in more than 100 Instagram posts featuring paid products (Roettgers, 2016). This behavior blurs the distinction between native advertising (i.e., sponsored content) and non-advertising content (Campbell & Grimm, 2019). In order to establish authenticity and innocence, influencers sometimes add the phrase "non-sponsored" to their posts that are not advertisements. However, it is noteworthy that consumers can still harbor doubts about sponsorship even when influencers do not disclose the advertisement and promote a brand

(Stubb & Colliander, 2019). These findings reflect consumers' negative perceptions of sponsored reviews. Considering these factors, the prospects for marketing strategies based on social media influencer online reviews may not be promising. It is necessary to explore new marketing strategies that align with revised policies and consumer responses in order to navigate this evolving landscape.

Overall, this study provides evidence of the decline in credibility that occurs when influencer online reviews clearly indicate advertising disclosures, as the legal requirement for such disclosures has been established. This finding strengthens the argument that the effectiveness of influencer marketing decreases and fails to significantly impact consumer purchasing behavior as the established trust relationship between influencers and potential customers crumbles. However, it is somewhat challenging to conclude that influencer online reviews, or influencer marketing as a whole, have completely lost their reputation as the most popular marketing strategy in digital marketing. In order to assess the effectiveness of influencer marketing, it is essential to take into account a range of factors. These factors encompass the perceived credibility of influencer online reviews as well as additional supplementary elements. These include metrics related to engagement, such as likes, comments, shares, and views, which indicate the level of audience interaction and involvement. The reach and exposure of influencer content should also be considered, including the size of the influencer's following, the number of impressions generated, and the extent of content distribution across various platforms. Evaluating brand perception involves examining changes in brand awareness, brand image, brand sentiment, and brand associations among consumers as influenced by the marketing efforts of influencers. The impact on purchase intent can be assessed by analyzing changes in consumer behavior, purchase likelihood, and the intention to recommend the brand to others. The suitability of the influencer for the target audience and the brand is a crucial

factor to evaluate, as it ensures authenticity and relevance in the influencer-brand partnership. Additionally, the potential for influencer marketing to build long-term relationships with consumers, resulting in brand loyalty, repeat purchases, and advocacy, should be considered. By considering these factors collectively, a comprehensive and detailed evaluation of the effectiveness of influencer marketing can be conducted.

## **6. Limitations and practical implications**

The "Limitations and Practical Implications" section of this paper discusses the shortcomings and constraints of the study as well as the practical implications and applications of the research findings. This section aims to provide a critical analysis of the study's limitations and highlight areas where further research is needed. It also explores the real-world implications of the research findings and suggests how they can be applied in practical settings. Overall, this section helps contextualize the research findings by acknowledging the study's limitations and providing actionable insights for practitioners and policymakers in the relevant field.

### **6.1. Limitations and future direction**

This study has several limitations that should be acknowledged. First, the sample characteristics of the study focused exclusively on a specific age group, namely the younger generation aged 18 to 38. While this age group is important in understanding consumer behavior and influencer marketing, it may not represent the views and preferences of older age groups. Therefore, caution should be exercised when generalizing the findings to other age groups or populations, as the outcomes may not be applicable to a broader consumer base.



Furthermore, considering the analyzed participants' nationalities, there is a possibility that the results may be skewed towards the Eastern region. The majority of participants in the study were of Eastern nationalities, specifically Korean participants, which may limit the generalizability of the findings to Western regions or other cultural contexts. It is important to acknowledge this potential bias and consider the need for additional research that includes a more diverse sample of participants from different regions.

Moreover, the analysis revealed a considerable proportion of participants who either completed the survey rapidly or took an extensive amount of time. Consequently, a subsequent recruitment phase was conducted to enlist additional participants and selected only individuals who completed the survey within the timeframe of 2 minutes to 2 hours for the purpose of deriving meaningful results. However, the process of recruiting additional participants can be time consuming and resource-intensive, potentially leading to overlapping participants or delays in the study schedule.

Another limitation is that the investigation was conducted within the confines of the fashion industry. The dynamics of influencer marketing and consumer perceptions can vary significantly across different industries or sectors. Therefore, the applicability of the findings to other industries may be limited, and further research is needed to explore influencer marketing dynamics in various contexts.

Furthermore, although the majority of participants were unfamiliar with the specific influencer used in this study, it is worth considering that the credibility of online reviews posted by influencers who are recognized by consumers may vary. This variable intervention could potentially impact the credibility and perceptions of influencer online reviews. Future research

should take into account the familiarity of participants with the influencers being studied and its potential influence on consumer attitudes and behaviors.

Lastly, while the study primarily focused on examining the influence of credibility on influencer marketing, other factors such as authenticity, engagement, and social influence can also significantly shape consumers' attitudes and behaviors towards influencer-generated content. Future research should consider a more comprehensive examination of these additional dimensions to gain a deeper understanding of the complex dynamics of influencer marketing.

In conclusion, while this study provides valuable insights into the influence of credibility on influencer marketing, it is essential to acknowledge and address the aforementioned limitations in order to enhance the validity and generalizability of the findings. To enhance the understanding of influencer marketing and address the identified limitations, future research should consider several avenues. Firstly, conducting studies with a diverse sample that includes participants from different age groups, nationalities, and cultural backgrounds would provide a broader perspective and increase generalizability. Additionally, comparing the perceptions and attitudes of participants from different regions, such as Western and Eastern cultures, would shed light on cross-cultural differences in influencer marketing effectiveness. Furthermore, exploring influencer marketing dynamics in various industries or sectors would provide insights into industry-specific factors and consumer perceptions. Investigating the impact of participants' familiarity with specific influencers on their perceptions and attitudes towards influencer-generated content would help understand the role of recognition and credibility. Additionally, exploring factors beyond credibility, such as authenticity, engagement, and social influence, would provide a more comprehensive understanding of consumer

responses to influencer marketing. Longitudinal studies tracking changes in consumer attitudes and behaviors towards influencer marketing over time would capture evolving trends and assess the impact of changing influencer marketing strategies. Complementing quantitative studies with qualitative research methods, such as interviews or focus groups, would allow for a deeper exploration of consumer motivations, experiences, and decision-making processes. By pursuing these avenues of research, scholars can address the limitations of previous studies and provide actionable insights for practitioners and marketers in the field of influencer marketing.

## **6.2. Practical implications**

This study challenges the positive perception of influencer marketing and emphasizes and suggests that marketers and practitioners in the fashion industry need to be aware of the potential negative impact on consumer attitudes towards influencers and sponsored brands when transparency of ad is present. The findings of this study align with previous research that has explored various factors impacting the influencer marketing market. Specifically, it supports the arguments put forth in existing papers that have highlighted the diminished credibility of influencer content when sponsorship is exposed.

The primary objective of influencer marketing is to induce consumer purchasing behavior. In this regard, the research conducted in this study stands out from other papers by specifically focusing on the fashion industry, which holds the highest sales among the various industries in the e-commerce market. By targeting the fashion industry this research recognizes the significance of understanding influencer marketing within a sector that commands substantial sales and consumer engagement. Moreover, the selection of the fashion industry as the research focal point allows for a more targeted and industry-specific analysis of the factors affecting

consumer behavior. While the findings of this research may have direct applicability primarily only to the fashion industry, it is important to note that the fashion industry holds significant growth potential and is known for its dynamic nature. Therefore, conducting research within this industry carries substantial academic value. Despite the focus on the fashion industry, the results of the credibility of sponsored influencer online reviews can serve as a research foundation and contribute to understanding the effects in other industries as well. Furthermore, the study can provide a basis for comparing commonalities and differences in the results obtained across various industries. Thus, the research's focus on the fashion industry distinguishes it from other studies conducted in a wide range, showcasing its unique and valuable contributions to the field.

The text underscores the need for exploring new marketing strategies that align with revised policies and consumer responses in the evolving landscape of influencer marketing. Given the emergence of new regulations and changing consumer behaviors, digital marketing approaches relying solely on influencer online reviews may not yield promising results. Therefore, marketers and practitioners should adapt their strategies to navigate these changes effectively. They should consider alternative approaches or other innovative marketing techniques that resonate with consumers in light of revised policies and evolving preferences. However, the results from this study limit the possibility of generalization due to the small amounts of data and a narrow range of nationalities/ages. Thus, acknowledging these inherent limitations and devising a methodology that effectively addresses the constraints in sample size and other factors would lead to the anticipation of future research providing more robust and reliable insights into the influencer marketing market. Consequently, this can foster better-informed decision-making processes and the implementation of more effective marketing strategies.

Overall, the findings from the text provide valuable insights to the influencer marketing industry and scholars across various industries. From a theoretical perspective, it challenges the prevalent positive perception of influencer marketing and calls for the expansion and improvement of theories and frameworks that adapt to the evolving social landscape. Moreover, it emphasizes the need for innovative marketing strategies to effectively adapt to evolving regulations and consumer preferences. This contributes to helping marketers/practitioners make informed decisions based on information and maximize their impact.

## **7. Conclusion**

In conclusion, the findings of this quantitative study provide evidence to support the hypothesis that the presence of ad disclosures in influencer online reviews leads to a decrease in credibility. The analysis of 390 participants suggests that when influencer content includes clear indications of advertising, such as ad labels or disclosures, the perceived trustworthiness of the reviews is diminished. These results have significant implications for both the marketing industry and academia. They challenge the previously established positive perception of influencer marketing. Marketers and practitioners in the influencer marketing industry should be aware of the potential negative impact on consumer attitudes towards influencers and sponsored brands when ad disclosures are present. Furthermore, the study highlights the necessity for exploring new marketing strategies that align with revised policies and consumer responses. Given the evolving landscape of influencer marketing and the potential decline in credibility associated with ad disclosures, marketers should adapt their strategies to navigate these changes effectively. It is important to acknowledge that this study has certain limitations that should be addressed in future research. The sample size of 390 participants may not fully

represent the diverse range of consumer attitudes and behaviors towards influencer marketing. Additionally, the study focused solely on the impact of ad promotion transparency on credibility, while other factors such as content quality and authenticity may also influence consumer perceptions. Future research should consider these limitations and explore additional dimensions beyond credibility to gain a comprehensive understanding of influencer marketing dynamics.

In summary, this research contributes to a deeper understanding of influencer marketing by highlighting the influence of ad promotion transparency on the credibility of influencer online reviews. It offers valuable insights for marketers and practitioners to make informed decisions regarding influencer marketing strategies, emphasizing the importance of transparency, adaptation to evolving regulations, and addressing limitations to enhance the validity and generalizability of findings in this rapidly evolving field.

## 8. References

Allen, M. E. (2019). Social Media Marketing of Qualitative Research: Blurring Commerce and Community. *Qualitative Inquiry*, 25(6), 591–598. <https://doi.org/10.1177/1077800418806594>

Appelbaum, R. L., & Anatol, K. W. E. (1972). The factor structure of source credibility as a function of the speaking situation. *Speech Monographs*, 39, 219–222. <https://doi.org/10.1080/03637757209375760>

Archak, N., Ghose, A., & Ipeirotis, P. G. (2011). Deriving the Pricing Power of Product Features by Mining Consumer Reviews. *Management Science*, 57(8), 1485–1509. <https://doi.org/10.1287/mnsc.1110.1370>

Bu, Y., Parkinson, J., & Thaichon, P. (2022). Influencer marketing: Homophily, customer value co-creation behaviour and purchase intention. *Journal of Retailing and Consumer Services*, 66, 102904. <https://doi.org/10.1016/j.jretconser.2021.102904>

Campbell, C., & Grimm, P. E. (2019). The Challenges Native Advertising Poses: Exploring Potential Federal Trade Commission Responses and Identifying Research Needs. *Journal of Marketing & Public Policy*, 38(1), 110–123. <https://doi.org/10.1177/0743915618818576>

Chan, M. (2018). Digital communications and psychological well-being across the life span: examining the intervening roles of social capital and civic engagement. *Telematics and Informatics*, 35(6), 1744–1754. <https://doi.org/10.1016/j.tele.2018.05.003>

De Cicco, R., Iacobucci, S., & Pagliaro, S. (2021). The effect of influencer–product fit on advertising recognition and the role of an enhanced disclosure in increasing sponsorship transparency. *International Journal of Advertising*, 40(5), 733–759.

<https://doi.org/10.1080/02650487.2020.1801198>

DeSarbo, W. S., & Harshman, R. A. (2012). Celebrity-Brand Congruence Analysis. *Current Issues and Research in Advertising*, 8(1), 17–52.

<https://doi.org/10.1080/01633392.1985.10505371>

Dumas, J. E., & Stough, R. (2022). When influencers are not very influential: The negative effects of social media verification. *Journal of Consumer Behaviour*, 21(3), 614–624.

<https://doi.org/10.1002/cb.2039>

Evans, N. R., Wojdowski, B. W., & Hoy, M. G. (2019). How sponsorship transparency mitigates negative effects of advertising recognition. *International Journal of Advertising*, 38(3), 364–382. <https://doi.org/10.1080/02650487.2018.1474998>

Federal Trade Commission (2015). *Native Advertising: A Guide for Businesses*. Available at: <https://www.ftc.gov/tips-advice/business-center/guidance/native-advertising-guide-businesses>

Fernandes, S., Panda, R., Venkatesh, V., Swar, B. N., & Shi, Y. (2022). Measuring the impact of online reviews on consumer purchase decisions – A scale development study. *Journal of Retailing and Consumer Services*, 68,



103066. <https://doi.org/10.1016/j.jretconser.2022.103066>

Flora, M. (2023). 13 High-Demand Products You Should Sell Online in 2023. ShipBob.

<https://www.shipbob.com/blog/high-demand-products/>

Gamage, T. C., & Ashill, N. J. (2022b). # 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>

Garland, R., & Ferkins, L. (2012). EVALUATING NEW ZEALAND SPORTS STARS AS CELEBRITY ENDORSERS: INTRIGUING RESULTS. ResearchGate.

[https://www.researchgate.net/publication/252545865\\_EVALUATING\\_NEW\\_ZEALAND\\_SPORTS\\_STARS\\_AS\\_CELEBRITY\\_ENDORSERS\\_INTRIGUING\\_RESULTS](https://www.researchgate.net/publication/252545865_EVALUATING_NEW_ZEALAND_SPORTS_STARS_AS_CELEBRITY_ENDORSERS_INTRIGUING_RESULTS)

Huang, A. S., Chen, K., Yen, D. C., & Tran, T. P. (2015). A study of factors that contribute to online review helpfulness. *Computers in Human Behavior*, 48, 17–

27. <https://doi.org/10.1016/j.chb.2015.01.010>

Hudders, L., & Lou, C. (2022). A new era of influencer marketing: Lessons from Recent Inquires and Thoughts on Future Directions. *International Journal of Advertising*, 41(1), 1–

5. <https://doi.org/10.1080/02650487.2022.2031729>

Ipsos. (2019). Trust in the media. Ipsos.

<https://www.ipsos.com/sites/default/files/ct/news/documents/2019-06/global-advisor-trust-in->

[media-2019.pdf](#).

International e-commerce for fashion products: what is the relationship with performance?  
International Journal of Retail & Distribution Management, 45(9), 1011–1031.  
<https://doi.org/10.1108/IJRDM-11-2015-0171>

Jaller, M., & Pahwa, A. (2020). Evaluating the environmental impacts of online shopping: a behavioral and transportation approach. *Transportation Research Part D*, 80.  
<https://doi.org/10.1016/j.trd.2020.102223>

Jin, S. A., Muqaddam, A., & Ryu, E. (2019). Instafamous and social media influencer marketing. *Marketing Intelligence & Planning*, 37(5), 567–579. <https://doi.org/10.1108/mip-09-2018-0375>

Johnson, B. (2023). The 23 Best High Demand Products to Sell In  
<https://www.bluecart.com/blog/high-demand-products>

Kay, S., Mulcahy, R., & Parkinson, J. (2020). When less is more: the impact of macro and micro social media influencers' disclosure. *Journal of Marketing Management*, 36(3–4), 248–278. <https://doi.org/10.1080/0267257x.2020.1718740>

Kim, D. Y., & Kim, H. S. (2021). Trust me, trust me not: A nuanced view of influencer marketing on social media. *Journal of Business Research*, 134, 223–232. <https://doi.org/10.1016/j.jbusres.2021.05.024>

Kim, J., Kim, M., Choi, J., & Trivedi, M. (2019). Offline social interactions and online shopping demand: does the degree of social interactions matter? *Journal of Business Research*, 99, 373–381. <https://doi.org/10.1016/j.jbusres.2017.09.022>

Lou, C., Tan, S., & Chen, X. (2019). Investigating Consumer Engagement with Influencer- vs. Brand-Promoted Ads: The Roles of Source and Disclosure. *Journal of Interactive Advertising*, 19(3), 169–186. <https://doi.org/10.1080/15252019.2019.1667928>

Macchion, L., Da Giau, A., Caniato, F., Caridi, M., Danese, P., Rinaldi, R., & Vinelli, A. (2017). Strategic approaches to sustainability in fashion supply chain management. *Production Planning & Control*, 29(1), 9–28. <https://doi.org/10.1080/09537287.2017.137448>

MacRae, D. (2021). 76% of Instagram influencers hide advertisement disclosure in their posts. *Marketing Tech News*. <https://www.marketingtechnews.net/news/2021/oct/04/76-of-instagram-influencers-hide-advertisement-disclosure-in-their-posts/>

Martínez-López, F. J., Anaya-Sánchez, R., Esteban-Millat, I., Torrez-Meruvia, H., D'Alessandro, S., & Miles, M. P. (2020). Influencer marketing: brand control, commercial orientation and post credibility. *Journal of Marketing Management*, 36(17–18), 1805–1831. <https://doi.org/10.1080/0267257x.2020.1806906>

Nash, J. (2019). Exploring how social media platforms influence fashion consumer decisions in the uk retail sector. *Journal of Fashion Marketing and Management: An International Journal*, 23(1), 82–103. <https://doi.org/10.1108/JFMM-01-2018-0012>

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>

Parrott, G., Danbury, A. H., & Kanthavanich, P. (2015). Online behaviour of luxury fashion brand advocates. *Journal of Fashion Marketing and Management*, 19(4), 360–383. <https://doi.org/10.1108/jfmm-09-2014-0069>

Pedroni, M. (2016). Meso-celebrities, fashion and the media: How digital influencers struggle for visibility. *Film, Fashion & Consumption*, 5(1), 103–121. [https://doi.org/10.1386/ffc.5.1.103\\_1](https://doi.org/10.1386/ffc.5.1.103_1)

Pourazad, N., Stocchi, L., & Pare, V. (2019). Brand attribute associations, emotional consumer-brand relationship and evaluation of brand extensions. *Australasian Marketing Journal (Amj)*, 27(4), 249–260. <https://doi.org/10.1016/j.ausmj.2019.07.004>

Patzer, G. L. (1983). Source credibility as a function of communicator physical attractiveness. *Journal of Business Research*, 11(2), 229–241. [https://doi.org/10.1016/0148-2963\(83\)90030-9](https://doi.org/10.1016/0148-2963(83)90030-9)

Reimer, T., & Benkenstein, M. (2016). When good WOM hurts and bad WOM gains: The effect of untrustworthy online reviews. *Journal of Business Research*, 69(12), 5993–6001. <https://doi.org/10.1016/j.jbusres.2016.05.014>

Roettgers, J. (2016, August 24). Variety. Variety.

<https://variety.com/2016/digital/news/kardashians-instagram-paid-ads-product-placements-1201842072/>

Rungruangjit, W., & Charoenpornpanichkul, K. (2022). Building Stronger Brand Evangelism for Sustainable Marketing through Micro-Influencer-Generated Content on Instagram in the Fashion Industry. *Sustainability*, *14*(23), 15770. <https://doi.org/10.3390/su142315770>

Simon @ DMI & by Digital Marketing Institute. (2022b, september 1). 20 Surprising Influencer Marketing Statistics. *Digital Marketing Institute*. <https://digitalmarketinginstitute.com/blog/20-influencer-marketing-statistics-that-will-surprise-you>

Statista. (2021). Influencer marketing market size worldwide from 2016 to 2021. <https://www-statista-com.ezproxy2.utwente.nl/statistics/1092819/global-influencer-market-size/>.

Stewart, L. M. (2010, September 20). Effect of consumers' perceptions of political figures on source credibility and attitude toward apparel. ScholarsArchive@OSU. [https://ir.library.oregonstate.edu/concern/graduate\\_thesis\\_or\\_dissertations/cj82kb03d](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/cj82kb03d)

Stewart R. (2017). *UK ad Regulator Singles out Instagram for Failing to Label Paid-for Content*. Available at: <http://www.thedrum.com/news/2017/09/21/uk-ad-regulator-singles-out-instagram-failing-label-paid-content>

Stubb, C., & Colliander, J. (2019). "This is not sponsored content" – The effects of

impartiality disclosure and e-commerce landing pages on consumer responses to social media influencer posts. *Computers in Human Behavior*, 98, 210–

222. <https://doi.org/10.1016/j.chb.2019.04.024>

Tao, C., Premaratne, S., XiongYing, C., Meng, Q., & Yi-Chen, L. (2022). The impact of online reviews on consumers' purchasing decisions: evidence from an eye-tracking study, 13.

<https://doi.org/10.3389/fpsyg.2022.865702>

Turner, L. (2023). Consequences of Not Disclosing Promotions on Social Media. *Logic Design*. <https://www.logicdesign.co.uk/blog/consequences-not-disclosing-promotions-social-media/>

Van Der Waldt, D., Van Loggerenberg, M. M., & Wehmeyer, L. (2011). Celebrity endorsements versus created spokespersons in advertising: a survey among students. *South African Journal of Economic and Management Sciences*, 12(1), 100–114.

<https://doi.org/10.4102/sajems.v12i1.263>

Wieringa, J., Kannan, P. K., Ma, X., Reutterer, T., Risselada, H., & Skiera, B. (2019). Data analytics in a privacy-concerned world. *Journal of Business Research*, 122, 915–925.

<https://doi.org/10.1016/j.jbusres.2019.05.005>.

## 9. Appendix

### 9.1. Appendix A – Survey

Informed Consent,

Hello,

Thank you for your time on this survey!  
This study aims at a bachelor's degree thesis and to derive high-quality results with your valuable answers.  
My name is Sooah Lee and I'm a student in the Communication Science at the University of Twente.

The purpose of the study is to measure the changes in perception of confidence in influencer online review in the fashion industry.  
Participation is voluntary. If you choose to participate in the study, it will take approximately less than 15 minutes of your time. You will be asked multiple questions about the credibility on online reviews of influencers in social media.  
**\*\* Only groups aged 18 - 38 can participate in this survey \*\***  
There is no penalty for not participating or for withdrawing from the study. If you want to withdraw, you should close your browser.


All your responses will be kept confidential within reasonable limits. Only those directly involved with this project will have access to the data.  
I will take all reasonable steps to protect your identity. In other words, all your responses will be progress anonymously.  
If you have any questions about the study, please contact me or my study advisor.

Researcher: Sooah Lee, s.lee-2@student.utwente.nl  
First supervisor: Boudewijn Steenbreker, b.j.steenbreker@utwente.nl

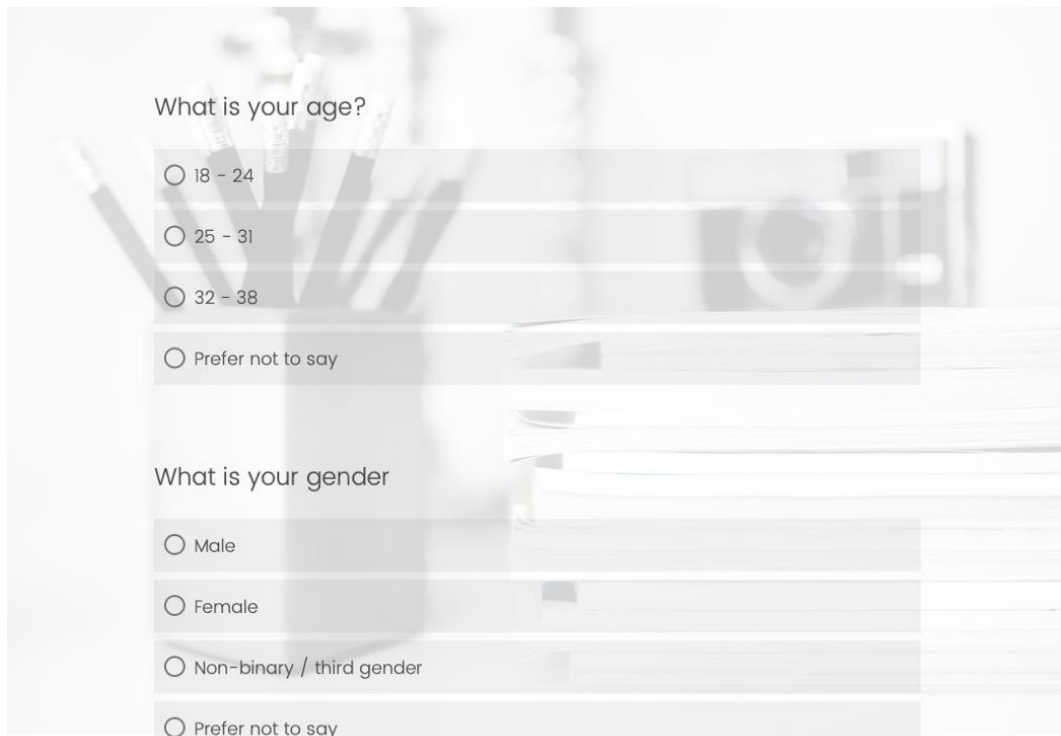
Thank you for taking the time to assist me with this research.

I agree to participate in this study

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**Figure 7.** Informed Consent



What is your age?

- 18 - 24
- 25 - 31
- 32 - 38
- Prefer not to say

What is your gender

- Male
- Female
- Non-binary / third gender
- Prefer not to say


What is your nationality?

- Dutch
- German
- Other
- Prefer not to say

What is your highest educational level?

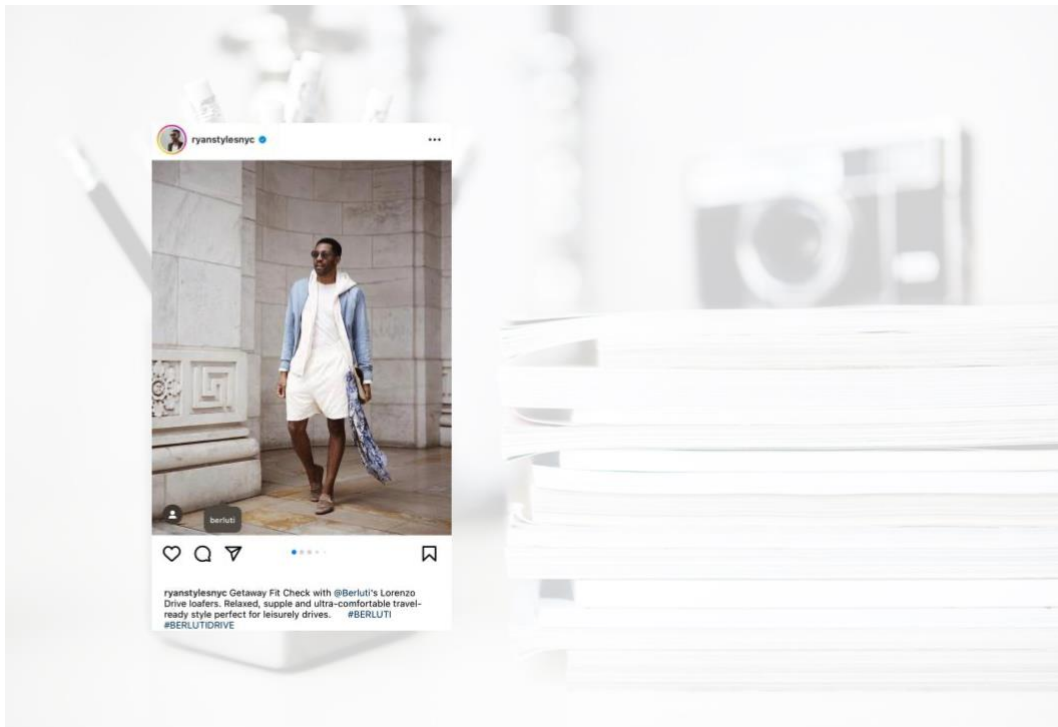
- Completed high school
- Bachelor's degree
- Master's degree
- Prefer not to say

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**Figure 8.** Demographics





I think this influencer online review is...

Insincere	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Sincere
Dishonest	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Honest
Not dependable	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Dependable
Not trustworthy	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Trustworthy
Not credible	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Credible
Biased	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Not biased
Not believable	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Believable
Disreputable	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Reputable
Unreliable	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Reliable
Untruthful	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Truthful
Unconvincing	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Convincing
Not at all expert	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Expert
Not true	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	True

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**Figure 9.** No Transparency of ad promotion on influencer online review

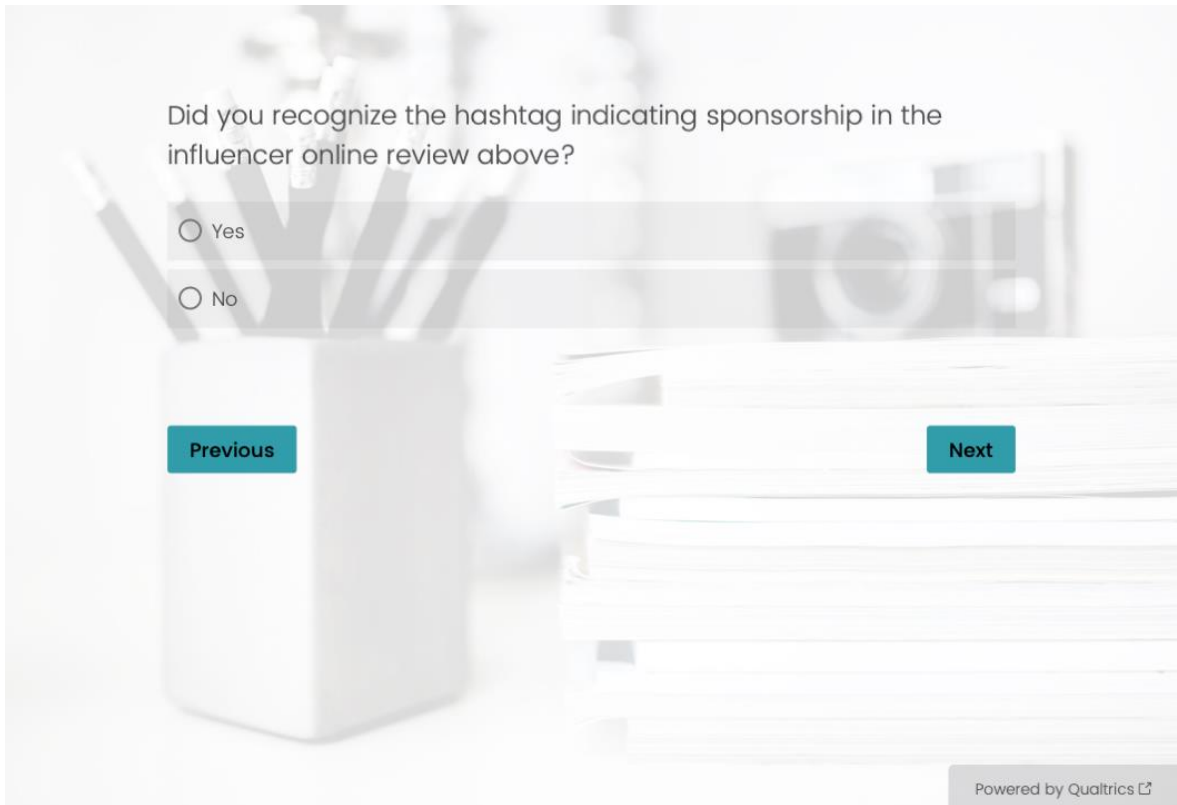
I think this influencer online review is... (Please take a closer look at the post)

Insincere	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sincere
Dishonest	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Honest
Not dependable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Dependable
Not trustworthy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Trustworthy
Not credible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Credible
Biased	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Not biased
Not believable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Believable
Disreputable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Reputable
Unreliable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Reliable
Untruthful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Truthful
Unconvincing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Convincing
Not at all expert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Expert
Not true	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	True

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**Figure 10.** Yes Transparency of ad promotion on influencer online review



Did you recognize the hashtag indicating sponsorship in the influencer online review above?

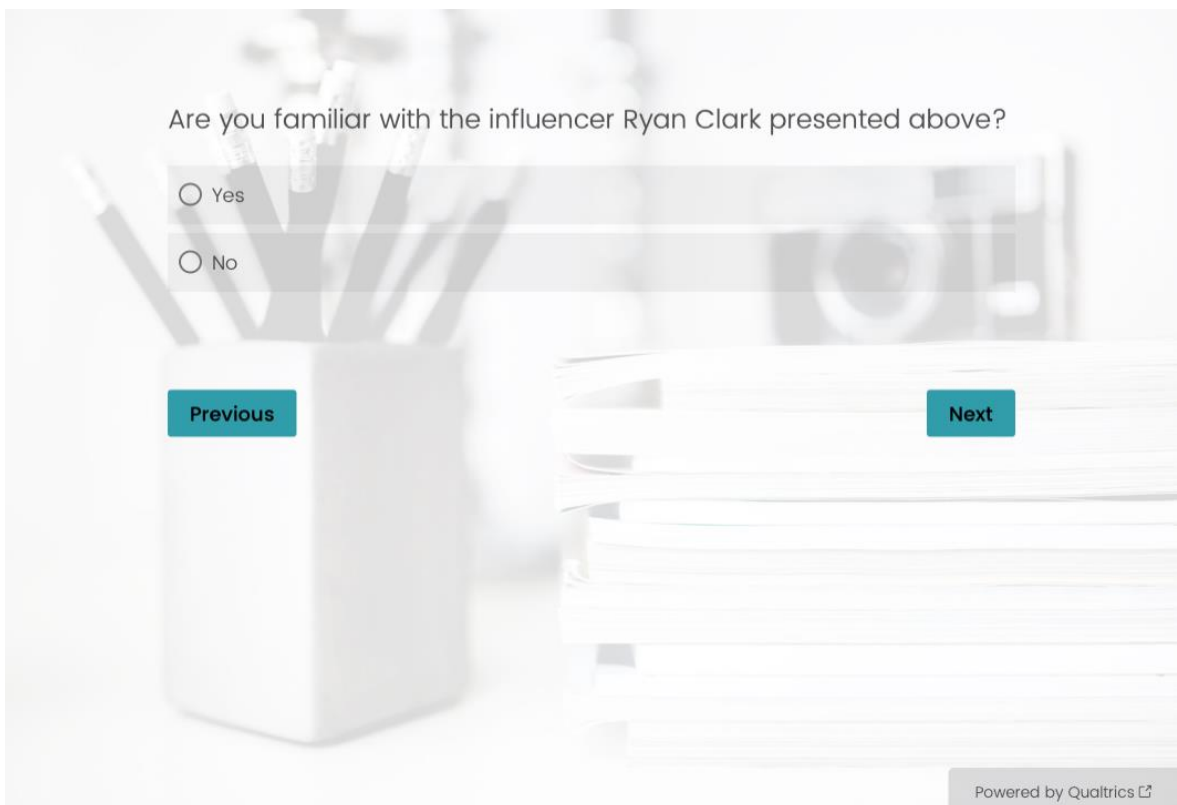
Yes

No

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**Figure 11.** Recognition Check of Hashtag #ad



Are you familiar with the influencer Ryan Clark presented above?

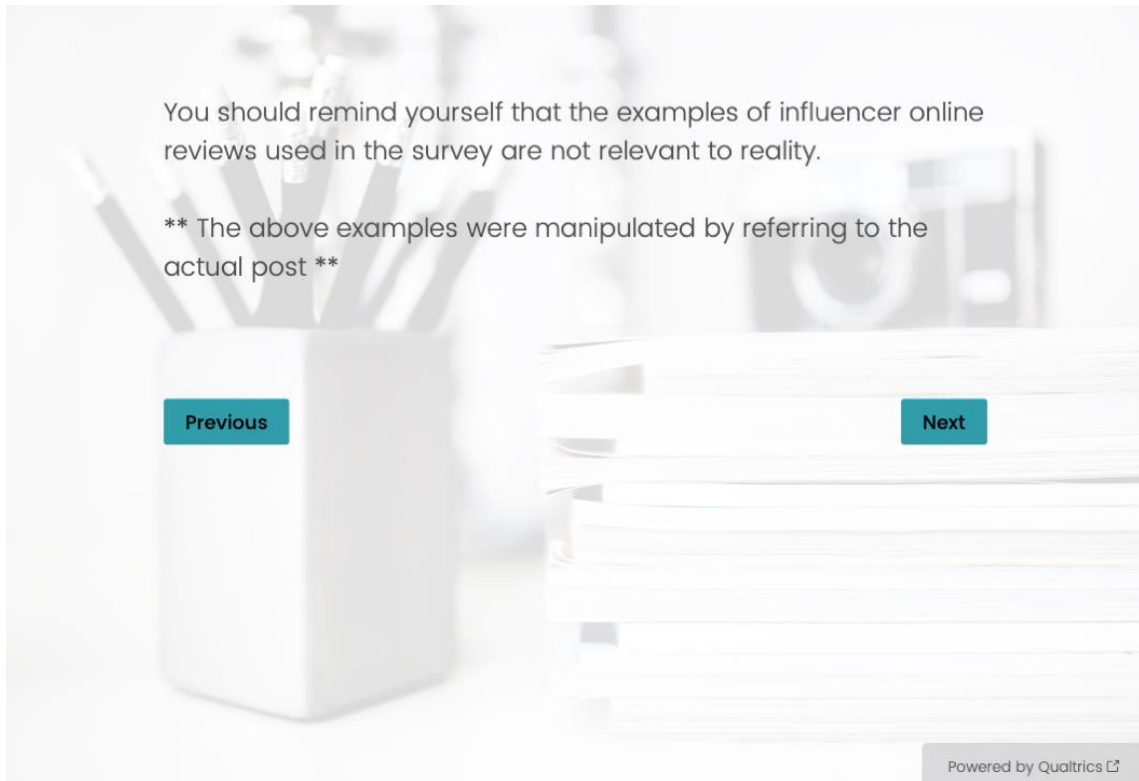
Yes

No

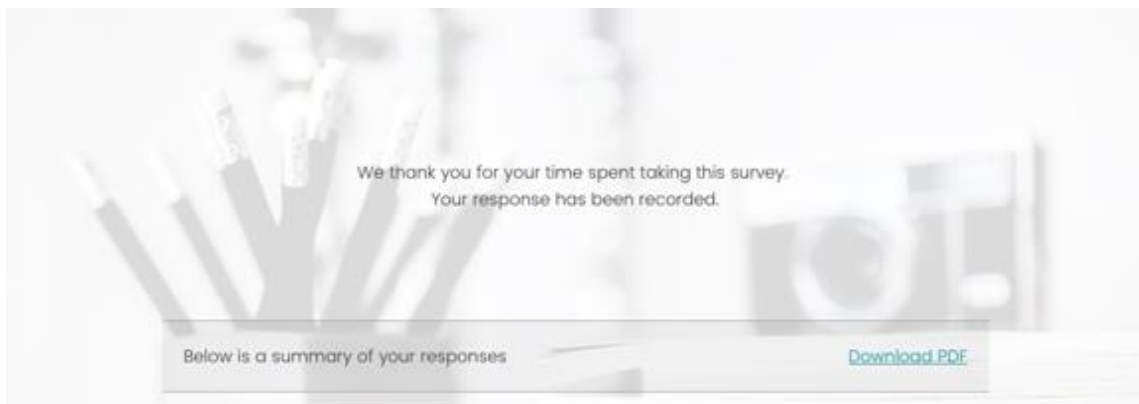
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**Figure 12.** Influencer Check



**Figure 13.** Prevent potential ethical risk



**Figure 14.** End of the survey

## 9.2. Appendix B – Search log

**Table 4. Search log**

Date	Where did I search?	Search string	Number of hits/relevancy
20-04-2023	UT Library	("Social Media Marketing" OR "Digital Marketing") AND ("Social Media Influencer" OR "Influencer Marketing")	116 results, in order to describe the definitions of social media marketing and how influencer marketing became a common digital marketing strategy, I used those terms for searching. I've found some useful sentences in various studies and most of the studies have similar views and findings in social media marketing explanation.
21-04-2023	Google scholar	("Social Media Marketing" OR "Digital Marketing") AND ("Social Media Influencer*" OR "Influencer Marketing")	13,200 results, there were more researches than UT Library. Also, those search strings were used for knowing the definitions of social media marketing and influencer marketing.
22-04-2023	UT Library	("Online review" OR "Influencer online review" OR "Online product review" OR "Social Media online review")	116 results, in order to describe the definition and advent of the online reviews, I used those terms for searching. Especially, most of the researches were discussing about the convenience of online reviews and why does types of reviews are popular in these days.
23-04-2023	Google scholar	("Online review" OR "Influencer online review" OR "Online product review" OR "Social Media online review")	22,600 results, the results was similar with the results in UT Library. However, Google scholar has more researches that including the perceived sentiments of potential customers on online reviews.
24-04-2023	UT Library	("Sponsored review" OR "Sponsored online review" OR Influencer sponsorship" OR "Sponsored content") AND (Sponsorship* OR Sponsored)	354 results, in this research page, there were many studies that suggesting the influencer online marketing has a bright side. However, I've also found a lot of researches that argue when consumer recognize the contents as a sponsored, the effect of influencer marketing will decline.
24-04-2023	Google scholar	("Sponsored review" OR "Sponsored online review" OR Influencer sponsorship" OR "Sponsored content") AND (Sponsorship* OR Sponsored)	17,300 results, similarly to the UT Library results page, there were many studies that suggesting positive/negative aspect of influencer marketing market.

26-04-2023	UT Library	(Credibility* OR "Credibility of online review" OR "Credibility of influencer online review" OR "Credibility of sponsored content" OR "Credibility of influencer online review" OR "Credibility of influencer content")	82,000 results, there were massive amounts of researches with those search strings. Therefore, it was hard to take a best fit studies for my study which focusing on the credibility of influencer online review. Actually, the first page didn't includes the researches that discussing about the influencer online reviews, so I had to scroll down many times to find the researches. I think those search strings were not a good choice to find the results for perceived credibility of influencer online reviews.
26-04-2023	Google scholar	(Credibility* OR "Credibility of online review" OR "Credibility of influencer online review" OR "Credibility of sponsored content" OR "Credibility of influencer online review" OR "Credibility of influencer content")	2,420,000 results, most of the results in the first page describes the theory and definitions of credibility. Including the word of 'credibility' was not a good choice in this searching process. However, Google scholar involved the method of the credibility measurement. Thus, Google scholar gave me a more useful researches than UT Library.
10-05-2023	UT Library	("Credibility scale" OR Credibility evaluation" OR "Source credibility")	1,700 results, in order to design the measurement of credibility which can be employed in the survey, I search it with those words. Most of the results was including the scale that used for the credibility on news.
10-05-2023	Google scholar	("Credibility scale" OR Credibility evaluation" OR "Source credibility")	17,900 results, there were many researches that evaluating the dependent variable how trustfulness and expertise.
11-05-2023	UT Library	("Ad disclosure" OR "Ad disclosure of content" OR "Sponsorship transparency" OR "Native advertising" OR Sponsored influencer marketing")	3,100 results, in order to find the perceived credibility and impact of sponsored influencer online reviews, those search strings were employing in searching process. Most of the studies were suggesting the ad disclosure give a negative influence on influencer marketing.
11-05-2023	Google scholar	("Ad disclosure" OR "Ad disclosure of content" OR "Sponsorship transparency" OR "Native advertising" OR Sponsored influencer marketing")	34,000 results, Tian et al. (2001) gave me a grateful directions for my thesis and I formulated my hypothesis as ad disclosure in online review can influence the perceived credibility negatively.
12-05-2023	Google scholar	("Social Media guidelines" OR "Social Media regulation")	968 results, Google scholar gave me many researches that presenting about the social media guidelines. In order to find a new version of the regulations, I set the time range from 2022.

13-05-2023	UT Library	("Fashion industry" OR "Fashion product review" OR "Fashion product online review" OR "Fashion contents")	12,200 results, most of the researches in this results page were discussing about the e-commerce and the blockchain technologies. Due to the rapid development of fashion industry, I was able to know how influencer act in this field and their actual leverage.
13-05-2023	Google scholar	("Fashion industry" OR "Fashion product review" OR "Fashion product online review" OR "Fashion contents")	12,400 results, through those search strings, I got the researches that representing the fast development of fashion industry. In addition, I was able to find when and how the e-commerce employed into the fashion industry.