



MASTER THESIS

#sponsored

The impact of persuasion disclosure  
types on Instagram on consumers'  
persuasion knowledge and brand  
evaluation as moderated by self-  
control

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## ABSTRACT

Consumers are exposed to advertisements and persuasion attempts in their media use, increasingly via social media. Social media are often consumed for relaxation and to pass the time, contexts in which consumers can become less attentive to what they are viewing, a circumstance which is also called a state of low self-control. In this state, consumers are often not able to recognize persuasive intent. Guidelines on disclosing sponsored content on Instagram are recent and few. The practice of influencer marketing has widely been criticized due to the practice of incorrectly disclosing paid partnerships with brands. Sponsorship disclosure should indicate commercial intent in order that consumers can be informed and either resist persuasion or engage with it.

### *Objective*

The current study aims at examining the extent to which different persuasion disclosure types (textual, symbolic, and the combination of both forms) impact consumers' knowledge of being exposed to persuasive content, also known as persuasion knowledge, and brand evaluation through the moderating role of self-control. With reference to the persuasion knowledge model, it is hypothesized that the presence of persuasion disclosure evokes higher levels of persuasion knowledge, resulting in consumers being better able to resist the persuasion attempt and in turn making less favorable brand evaluations. Sponsored content can be disclosed textually in a sentence, symbolically by hashtags (e.g., "#ad"), or through a combination of both forms. However, disclosure does not protect consumers in a state of low self-control against persuasion, as the disclosure and the content's persuasive intent are not recognized. Consumers activate their persuasion knowledge as a response to sponsorship disclosure, which activates resistance strategies that consumers use to cope with the persuasion attempt. It is hypothesized that self-control moderates the relationship between disclosure type, persuasion knowledge, and brand evaluation.

### *Methodology*

An online experiment was conducted that applied a between-subjects design. Respondents were randomly assigned to one of eight (self-control depletion x disclosure type) experimental conditions. The research population was familiar with the platform Instagram and actively used the social media application. Convenience sampling was applied, and 177 valid responses were recorded.

### *Results, Discussion, & Conclusion*

It was found that the combination of textual and symbolic sponsorship disclosure on Instagram is effective in indicating the sponsoring relationship between the brand and the influencer and results in consumers realizing that they are being persuaded. The combination of textual and symbolic disclosure uses a full sentence to declare the commercial intent as well as an abbreviation or hashtag and is therefore more likely to be seen and thus more effective in protecting consumers from unwanted persuasion. Consumers' self-control was found to be not very influential on recognition of the sponsoring relationship between the brand and the influencer as well as on the kinds of brand evaluations made.

**Keywords:** persuasion disclosure, sponsorship, social media, Instagram, persuasion knowledge, self-control, brand evaluation, Influencer marketing

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## 1. Introduction

In 2017, 2.48 billion people worldwide used social networking sites. It is predicted that in 2023 as many as 257.4 million users in the USA will use social networking sites (Statista, 2019b). Instagram is one of the most popular social networking sites worldwide, with 1,000 million active users. The increased popularity of social media has led to changes in the marketing and advertising landscape. To reach consumers, brands increasingly use social media channels to integrate persuasive advertising messages into non-commercial contexts (Cain, 2011). On social media, advertisements and commercials seem to be omnipresent, forcing consumer exposure, which makes it nearly impossible for consumers to critically evaluate what they are viewing. Differentiating between entertainment, information, and commercial content has become more and more difficult. The phenomenon of influencer marketing and sponsored posts contributes to the confusion. The number of brand-sponsored influencer posts on Instagram has risen from 1.26 million in 2016 to 6.12 million in 2020 (Clement, 2019a).

The integration of sponsored content into “traditionally non-commercial media” (Boerman & Van Reijmersdal, 2016, p. 3) has been criticized, as users may not be able to recognize the commercial and persuasive intent behind such posts (Boerman, Willemsen, & Van Der Aa, 2017). Especially when consumers view branded products embedded in sponsored editorial content in which the advertising message is spread via a third party (e.g., an influencer or celebrity), consumers might be less critical of persuasive editorial messages, compared to traditional advertising messages because of the fact that they, for example, might like the influencer (Nebenzahl & Jaffe, 1998). The integration of advertisements into editorial content makes recognizing the persuasive intent difficult, and consumers might be persuaded unconsciously, particularly because advertisements and commercials on social media cannot simply be avoided by adblockers (De Veirman & Hudders, 2019). Adblockers are plugins installed into internet browsers like Firefox which, after being configured, block advertisements (Vallade, 2008). As social media is often used via applications and uses various forms of nontraditional advertisements, adblockers become ineffective in making commercial content disappear from consumers' social media feeds.

The difficulty of recognizing the commercial intent of posts makes it hard for consumers to protect themselves against attempts at persuasion (Boerman, van Reijmersdal, & Neijens, 2012). Research by Friestad and Wright (1994) posits that consumers' understanding of persuasive messages and advertising messages is grounded in the recognition of the persuasive intent of the content or message. Hence, the propose is still of great importance today. The recognition of persuasive messages is more difficult than ever for consumers, as social media are often consumed for relaxation and to pass the time. Hence, consumers are less attentive to what they are viewing, a circumstance referred

to as a state of low self-control (Whiting & Williams, 2013). In this state, consumers are less resistant to persuasive messages and make more favorable brand evaluations, as they are not able or willing to critically evaluate the content (Janssen, Fransen, Wulff, & van Reijmersdal, 2016).

One factor that contributes to consumers' difficulty in recognizing persuasive messages on social media is that there are no consistent regulations on a European level regarding how sponsored content should be disclosed. Legislation on sponsorship disclosure in the social media context differs among European countries. Within the television context, sponsored editorial content and, for example, product placements must be disclosed by a warning message or symbol shown at the beginning of the television show or movie (Boerman, van Reijmersdal, & Neijens, 2014). This legislation is, however, only applicable to the television context and has not yet been transferred to the social media context. Marketing agencies such as Mediakix, Frankwatching, and Markethings have provided guidelines on how to disclose sponsored content on social media to protect consumers from unwanted persuasion, which is viewed as a consumer right (Cain, 2011). Further, Instagram has launched a feature to automatically disclose sponsored content by the sentence "In paid partnership with BRAND"; this feature is, however, only available to larger, verified influencers. Moreover, sponsorship can be disclosed either textually ("This post is sponsored by BRAND") or symbolically (by the hashtag "#sp," "#spon," "#ad," or "#sponsored" or by abbreviations such as "AD" or "SP") (Mediakix, 2016), or by a combination of the two forms.

Previous studies have examined the effects of disclosure in offline contexts, such as television (Van Reijmersdal et al., 2016); however, only little research has been conducted on the effects of sponsorship disclosure in the online (social media) context (see Boerman & Van Reijmersdal, 2016; Van Reijmersdal, Lammers, Rozendaal, & Buijzen, 2015). Instagram enables different types of persuasion disclosure: textual, symbolic, or a combination of both. Therefore, this study aims at examining the impact of sponsorship disclosure—textual, symbolical, or a combination of both—on persuasion knowledge and brand evaluation moderated by self-control in the online context in the case of Instagram.

Considering the preceding aspects, the central research question of this study is:

*To what extent does persuasion disclosure (textual, symbolic, or a combination of both), moderated by consumers' self-control, impact consumers' persuasion knowledge and brand evaluation in the context of persuasive advertising messages on Instagram?*

In accordance with the persuasion knowledge model developed by Friestad and Wright (1994), it is hypothesized that some types of persuasion disclosure on Instagram will evoke higher levels of persuasion knowledge than others, allowing consumers to resist the persuasion attempt by applying

coping mechanisms. It is further hypothesized that consumers will then, in turn, make a less positive brand evaluation about the brand being advertised in the Instagram post. However, research on the effect of different disclosure types (textual, symbolic, and the combination of both forms) on persuasion knowledge and brand evaluation with reference to the moderating role of consumers' self-control is scarce. For that reason, this research will contribute to knowledge of the theoretical and practical implications of sponsorship disclosure on social media. For marketers and influencers as well as brands, this research provides valuable insights regarding the evaluation of their advertising messages in editorial content and applied forms of sponsorship disclosure. Furthermore, the current study may contribute to the development of legislation regarding sponsorship disclosure.

The current study begins with the theoretical framework as a foundation and elaborates on persuasion knowledge, brand evaluation, and different disclosure types as well as formulating the hypotheses. Afterwards, the research model, design, and methodology are explained. Subsequently, the results are presented, followed by the discussion. Finally, the limitations of the study are presented, along with theoretical and practical implications and directions for further research.

## 2. Theoretical Framework

With the increase in online social media channels, brands have realized the potential of social media channels to reach consumers and to distribute sponsored advertising content (Evans, Phua, Lim, & Jun, 2017). Social media are characterized as “mobile and web-based technologies that enable individuals and communities to share, create, discuss, and modify user-generated content” (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011, p. 241). Furthermore, social media facilitate the possibility for consumers to interact with each other and with brands (Hennig-Thurau, Hofacker, & Bloching, 2013, p. 241). Instagram, in particular, is a photo and video-sharing social network on which users post photos and videos to be shared with their followers (Hu, Manikonda & Kambhampati, 2014).

A relatively new marketing tool is the phenomenon of Instagram influencers. Influencers are generally Instagram users with a large number of followers. Influencers such as Zoella (9.8 million followers @zoesugg), Nikkie de Jager (12.1 million followers @nikkietutorials) and Michelle Phan (1.9 million followers @michellephan) have a strong influence on their followers in promoting beauty products (Forbes, 2019) and are used as third-party endorsers (Freberg, Graham, McGaughey, & Freberg, 2011) to encourage consumers to purchase certain products or to spread a positive image of a brand (Lim, Mohd Radzol, Cheah, & Wong, 2017). Influencers usually receive products for free or are paid to promote brands or products on their Instagram profiles to shape consumer opinions. Influencers are categorized into micro- and macro-influencers according to the number of followers they have and their reach. They are trusted by their followers and specialize in a specific category or topic—for example, beauty, interiors, or fitness—within which they promote brands' products (Cauberghe, Hudders, & Veirman, 2017). Such posts are considered native advertising, as they blend in with other, non-commercial posts by the influencer, which makes sponsored content appear more natural and believable (Wojdyski & Evans, 2016; Luek, 2012).

Jin and Phua (2014) have found that influencers can significantly positively influence consumers' brand attitudes. Influencers reach large segments of consumers in a rather short time and are therefore a time-efficient as well as a cost-effective marketing tool for brands. Rapidly superseding traditional marketing tools such as traditional advertising campaigns, social media influencers have become a powerful marketing tool for such brands as Daniel Wellington, Missoma, Desenio, and Bose, to reach their target audiences online. (Jin & Phua, 2014). However, influencers often remain unclear about the sponsorship and their commercial relationship with the brand. As a result, consumers are not able to recognize these posts as sponsored and consequently as a form of advertisement, instead perceiving the posts as word-of-mouth endorsements (De Veirman & Hudders, 2017).

Despite the benefits of influencer marketing—for example, providing cost-efficient and trustworthy brand spokespersons—influencer marketing and native advertising have received



criticism from the Federal Trade Commission in the U.S. due to incorrectly disclosed advertising posts, which stem from paid partnerships with brands but present themselves as editorial content (Evans, Phua, Lim, & Jun, 2017). It is, however, questionable to what extent consumers perceive the content as sponsored. According to Cain (2011), it is considered the consumer's right to be able to recognize the content as a form of advertisement; since sponsored editorial content combines the aspect of advertisement and being publicity accessible, consumers face difficulty in recognizing the persuasive intention. For this reason, Cain (2011) also claims that sponsored editorial content can be viewed as an unfair or deceptive marketing technique used to persuade consumers unconsciously.

## 2.1 Types of persuasion disclosure on social media

Although advertising on Instagram has gained popularity and influencers' numbers of followers are increasing, there are no standardized guidelines on how to disclose sponsored content and posts on Instagram. Recommendations vary in different countries, where organizations, agencies, and institutions provide different recommendations on sponsorship disclosure. Since there is no clear legislation on labeling sponsored content on social media, marketing agencies have provided guidelines on disclosing sponsored content on Instagram to help consumers distinguish sponsored from non-sponsored content (MediaKix, 2016).

Sponsored content can first be disclosed symbolically (see **Figure 1**) through hashtags, such as “#ad,” “#spon,” “#sp” and “#sponsored,” which group content in categories (MediaKix, 2016); “#ad” and “#sponsored” are the hashtags most commonly used to symbolically disclose sponsorship. Hashtags are classified as user-generated content that categorizes and groups content on Instagram related to a specific theme. Additionally, sponsored content can be disclosed symbolically by abbreviations such as “AD” and “SP” without using the hashtag symbol, with the abbreviation “AD” being more common. Secondly, sponsored content can be disclosed textually (see **Figure 2**) to clarify the sponsorship by a brand by sentences such as “This post is sponsored by BRAND” or “In paid partnership with BRAND” (MediaKix, 2016). A textual labeling of sponsored content is more straightforward and clearer to the consumer (Boerman et al., 2014). Sponsored content can also be disclosed by using both textual and symbolic disclosure in a single post (see **Figure 3**). The hashtag “#gifted” has been added to indicate the nature of the partnership between the influencer and the brand. The hashtag “#gifted” is used to declare that the products that were given for free to the influencer by the brand, although the content creator was not asked to advertise the product in any way. Additionally, more and more influencers, including Lily Pebbles and Ruth Crilly, provide information on different disclosure types to educate their followers on the meaning behind the hashtag or sentence behind the paid partnerships in the so-called Instagram story highlights, which can be viewed until deleted by the influencer.

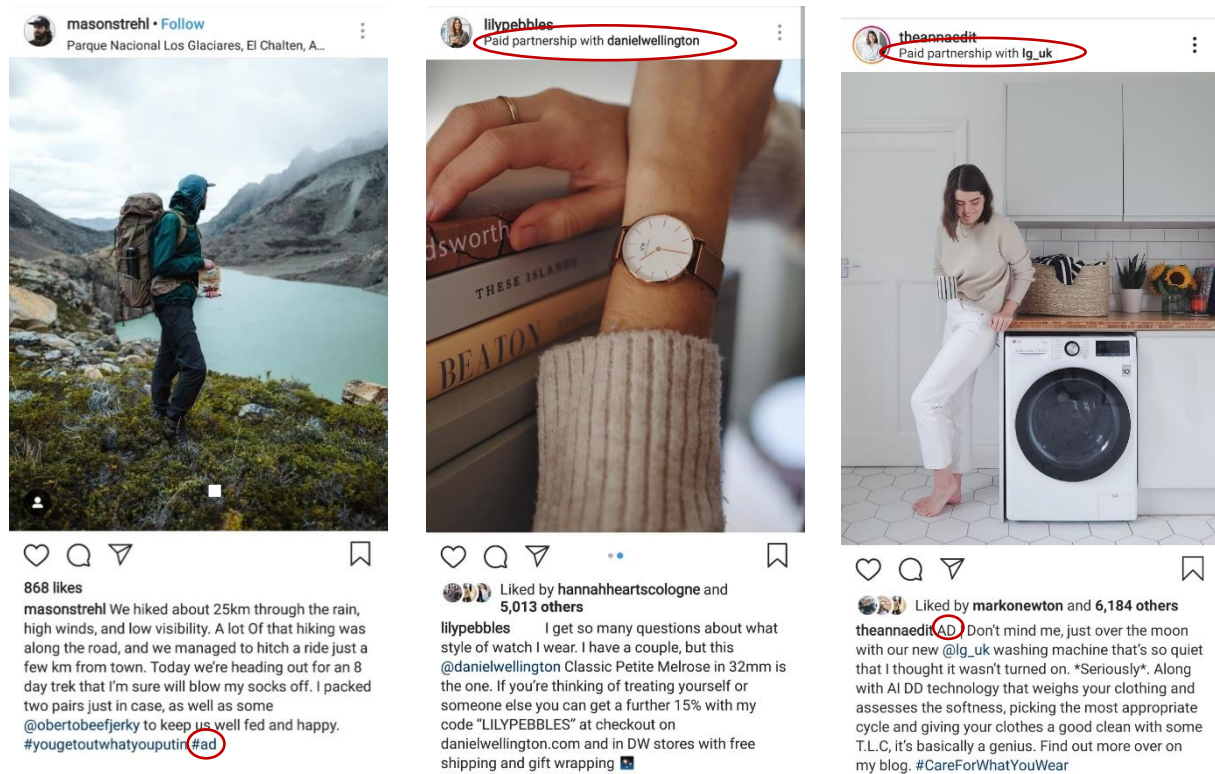


Figure 1 Symbolic disclosure on Instagram @masonstrehl

Figure 2 textual disclosure on Instagram @lilypebbles

Figure 3 Combination of textual and symbolic disclosure on Instagram @theannaedit

As legal systems vary from country to country, introducing laws and guidelines on sponsorship disclosure in the social media context is difficult. However, it is in general regarded as hidden or covert advertising if sponsored content is not labeled as such (Boerman & van Reijmersdal, 2016; Cain, 2011). The Federal Trade Commission (FTC) has presented guidelines on sponsorship disclosure on social media in the United States, suggesting that sponsored content and posts should include the hashtag “#ad” where it is easily recognizable (Federal Trade Commission, 2019). In Germany, influencers are expected to declare sponsored content through the hashtags “#ad” (“#Werbung”) or “#advertisement” (“#Anzeige”), as articulated in guidelines published by the Landesmedienanstalten (Die Medienanstalten, 2018). Within the Netherlands, guidelines on sponsorship disclosure have been introduced by Stichting Reclame Code. However, these guidelines do not specify how the sponsorship should be declared (Stichting Reclame Code, 2019). As a consequence, Instagram has launched an international feature to automatically disclose advertisements, sponsorships, and paid partnerships with brands. The phrase “paid partnership with...” is placed in the sub-header above the sponsored post and underneath the influencer’s name (Chacon, 2018). However, this feature is available only to influencers with a large number of followers. Still, there are difficulties in correctly disclosing content as sponsored.

Previous research has primarily examined the impact of disclosure types on timing in the television context (see Boerman et al., 2014) and “advertising-supported internet” (Campbell, Goldfarb, & Tucker, 2015, p. 9) and the duration of the disclosure in television programs (see for example Boerman et al., 2012). The results of these studies indicate that types of textual disclosure that use clear language expressions such as “advertisement” or “sponsored” lead to higher advertisement recognition than the use of more ambiguous language, such as abbreviations (Evans & Wojdyski, 2015). Textual disclosures (such as “this post is sponsored by BRAND”) that identify the brand were found to be more effective in making the sponsorship explicit. In textual disclosures, consumers are presented with more detailed information on the nature of the paid relationship between the brand and the content producer—that is, the influencer (Van Reijmersdal et al., 2015). Textual disclosure leads to better recognition of the content as advertising. Boerman et al. (2012) find that disclosures that contain language that distinguishes sponsored advertising content from other editorial content, such as symbolic disclosure by abbreviations or hashtags, leads to better recognition of the advertisement in general. The application of abbreviations or hashtags in the television context has been found effective only when consumers were provided with information and an explanation of the abbreviations or hashtags (Tessitore & Geuens, 2013). Textual disclosure that verbally clarifies the relationship between the content creator and brand and consequently differentiates advertised editorial content from non-commercial content is meant to lead to better advertisement recognition and thus to higher levels of persuasion knowledge. A combination of textual and symbolic disclosure combines the verbal clarification of the paid relationship between the brand and the content creator as well as the symbolic indication of sponsorship and therefore doubles the information given about the paid partnership in the caption as well as above the picture (Tessitore & Geuens, 2013).

However, only a few studies (see Boerman & Van Reijmersdal, 2016; Van Reijmersdal et al., 2015) have compared the effects of symbolic and textual persuasion disclosure in the online social media context. It has been shown that textual disclosure increases the recognition of sponsored content in online news (Wojdyski & Evans, 2015). Additionally, Tessitore and Geuens (2013) find that textual disclosure leads to higher levels of persuasion knowledge than symbolic disclosure. For that reason, the current study compares the impact of textual and symbolic disclosure as well as the combination of textual and symbolic disclosure on consumers' persuasion knowledge and brand evaluation in the online social media context of Instagram and posits the following hypotheses:

*Hypothesis 1a: Textual disclosure evokes a higher level of persuasion knowledge than symbolic disclosure.*

*Hypothesis 1b: The combination of textual and symbolic disclosure evokes a higher level of persuasion knowledge than textual or symbolic disclosure alone.*

## 2.2 Persuasion knowledge and brand evaluation

In the social media context of Instagram, on which advertisements can take various forms, including story ads, photo ads, video ads, carousal ads, and collection ads (Instagram, 2019), persuasion disclosure can help consumers to distinguish non-commercial editorial content from sponsored, commercial editorial content (Cain, 2011). Thus, persuasion disclosure can communicate the persuasive intent of certain content to consumers, which in turn will lead to the recognition of persuasive content. According to the reactance theory advanced by Brehm (1966), when “individuals feel that any of their free behaviors, in which they can engage at any moment or in the future, is eliminated or threatened with elimination, the motivational state of psychological reactance will be aroused” (Miron & Brehm, 2006, p. 4). As the state of reactance is directed at restoring the freedom of behavioral choice, individuals might attempt to restore the freedom of choice either directly or indirectly (Miron & Brehm, 2006). Van Reijmersdal et al. (2016) find that the recognition of sponsorship leads consumers to activate cognitive reactance strategies as well as counterarguing to cope with the persuasion attempt. Hidden advertising messages that cannot be identified as sponsorship are considered an invasion of privacy and make it difficult for consumers to mentally process the message. This is viewed as a violation of consumer autonomy (Nebenzahl & Jaffe, 1998).

Persuasion disclosure aims at activating consumers' persuasion knowledge (Boerman et al., 2012). Persuasion knowledge is the recognition of persuasive intent followed by a response on how to cope with the intent or how to respond to it (Friestad & Wright, 1994). The persuasion knowledge model proposed by Friestad & Wright (1994) helps to explain how people develop an understanding of persuasion and how this understanding is used to “interpret, evaluate and respond to persuasion attempts” (Boerman et al., 2012, p. 1049). The model claims that consumers need to be aware of being persuaded and need to perceive the persuasion attempt before they can fall back on their persuasion knowledge. Friestad and Wright (1994) also claim that due to forced exposure to advertising messages, over time consumers gain an understanding of the tactics and mechanisms marketers use to persuade them. The ability to recognize those tactics and mechanisms highlights the fact that consumers can shield themselves from persuasion attempts. The persuasion knowledge model defines different mechanisms of processing the persuasion attempt, namely being persuaded or creating a form of resistance (Friestad & Wright, 1994). Accordingly, being able to identify sponsored editorial content as a form of an advertisement within the online context makes consumers more critical (Boerman et al., 2012).

Persuasion knowledge has two dimensions, a cognitive and an attitudinal one. The cognitive dimension refers to the recognition of advertising, its source, and its audience and the understanding of the advertising's persuasive intent and selling intent (Rozendaal, Lapierre, van Reijmersdal, &

Buijzen, 2011). Persuasion disclosure makes consumers aware of the advertising content, which leads to consumers defending themselves against persuasive social media content (Fischer et al., 2008). The attitudinal dimension refers to an affective response to persuasive content through the use of attitudinal mechanisms (Buijzen et al., 2011). The attitudinal dimension includes “critical attitudes, such as skepticism and disliking, applied to a specific persuasion attempt,” whereby the consumer realizes that he or she is being persuaded by a certain brand and no longer responds neutrally (Buijzen et al., 2011).

Thus, consumers learn over time and through experience the aim of persuasive communication messages, which is to convince consumers to do or buy something, and they learn how to use resistance strategies to protect themselves against persuasion attempts (Friestad & Wright, 1994). Consequently, consumers also gain an increased understanding of how brands try to influence them. As consumers become able to identify the strategies by which brands try to persuade them, they become more able to resist persuasion attempts (Fischer et al., 2008). The realization that content on social media is sponsored leads consumers to more critical thinking regarding advertisements, as they fall back on resistance to cope with persuasion attempts (Van Reijmersdal et al., 2016). The most common form of resistance is cognitive resistance, which depends on previous experience and the characteristics of the persuasive message and can either be positive or negative (Van Reijmersdal et al., 2016).

In addition to activating persuasion knowledge, sponsorship disclosure can elicit responses that are not among the primary goals of disclosure, such as brand evaluations. As influencers reach large numbers of consumers, they have been found to have a positive effect on consumers' brand evaluation (Phua, Jin, & Kim, 2017). Disclosure aims at informing consumers about the advertised nature of the content and therefore emphasizes the brand that is advertised within the post. The disclosure thus functions as an additional prime for the brand (Boerman et al., 2012). Even though consumers enjoy and like particular forms of advertisements, such as native advertisements (Neijens & Smit, 2000), most consumers are skeptical towards advertisements, as they can elicit “critical feelings about honesty, trustworthiness, and credibility” (Boerman et al., 2012, p. 1049–1050). Persuasion disclosure functions as a reminder to consumers that the content they are viewing is sponsored, which in turn can negatively affect how consumers evaluate the brand advertised in the post (Boerman et al., 2012). Thus, the activation of consumers' persuasion knowledge can lead to a decrease in the persuasive outcome and can have a negative effect on brand evaluation (Boerman et al., 2015; Wojdoynski & Evans, 2015; van Reijmersdal et al., 2016). The activation of persuasion knowledge elicits defensive coping mechanisms to manage the persuasion attempt, which in turn negatively affects consumers' brand evaluations (Evans et al., 2017). Previous research has shown that

consumers become critical towards sponsored editorial content and as a consequence evaluate the brand more negatively upon realizing the persuasive intent behind the content (Fischer et al., 2008). The activation of persuasion knowledge consequently can lead to less favorable brand evaluations. In addition to the findings of Fischer et al. (2008), Van Reijmersdal et al. (2016) have researched brand evaluation in the context of sponsored editorial content on blogs. They demonstrate that consumers argue against the message presented in the sponsored content after being exposed to sponsorship disclosure. The advertised brands are evaluated less favorably after consumers have viewed disclosed sponsored editorial content which activates persuasion knowledge.

Previous research on disclosure types in television programs (Boerman et al., 2014) has shown that textual disclosure, in contrast to symbolic disclosure, was efficient in activating consumers' persuasion knowledge. Wojdyski and Evans (2015) demonstrate that textual disclosure in online news activates consumers' persuasion knowledge. Becker-Olsen (2003) finds that sponsored editorial content in banner advertisements leads to a positive response towards the brand. However, after consumers activate their persuasion knowledge, they show a neutral brand evaluation (Boerman et al., 2012). The present study examines the effect of persuasion disclosure on brand evaluation specifically in the online social media context of Instagram. This leads to the following hypotheses:

*Hypothesis 2a: Textual disclosure evokes a less favorable brand evaluation than symbolic disclosure.*

*Hypothesis 2b: The combination of textual and symbolic disclosure evokes a less favorable brand evaluation than textual or symbolic disclosure alone.*

*Hypothesis 3a: The presence of persuasion disclosure evokes a higher level of persuasion knowledge than when persuasion disclosure is absent.*

*Hypothesis 3b: The presence of persuasion disclosure evokes a less favorable brand evaluation than when persuasion disclosure is absent.*

*Hypothesis 4: A high level of persuasion knowledge evokes a less favorable brand evaluation.*

### 2.3 Self-control and sponsored editorial content

Consumers use social media primarily for entertainment, to pass the time, to escape reality and to relax (Whiting & Williams, 2013); as a result, content is consumed less critically and the messages sent are not always evaluated. Therefore, the average social media consumer is not motivated or is unable to evaluate social media content, which makes it even harder to recognize persuasion disclosure. On the whole, consumers, and humans in general, are faced with desires, natural tendencies and urges

that demand satisfaction. To give in into those desires, tendencies, and urges is not always possible, socially acceptable, or realistic. To deal with these challenges, humans must regulate their emotions and actions, which requires a great amount of mental effort, both cognitive and emotional. The ability to protect themselves from the persuasive attempt and to resist desires, urges, and natural tendencies is referred to as self-control (Fransen et al., 2016). Resisting the persuasion attempt is a resource-intensive process, as it involves active regulation of the self (Janssen, Fennis, & Pruyn, 2010). Previous research has shown that self-control is an important factor in resisting persuasion (Burkley, Anderson, & Curtis, 2011). The limited-resource model of self-control (Baumeister, Bratslavsky, Muraven, & Tice, 1998) posits that “any act of deliberate and regulated response by the self, such as overriding impulses, active choice, and controlled (as opposed to automatic) processing, draws on a limited intrapsychic resource” (Fennis et al., 2010, p. 911). Burkley, Anderson, and Curtis (2011), refer to self-control as a muscle that gets worn out after having used it; with every use of self-control, muscle willpower becomes exhausted. “This depletion of self-control means that each act of self-control impairs your ability to exert self-control on a subsequent task, gradually resulting in self-control fatigue” (Anderson et al., 2011, p. 488). Self-control can be restored after use, much as muscles recover over time. To make this point clearer, the depletion of self-control can be compared to being exhausted after doing sprints and then being less able to perform other physical tasks. Another example of self-control depletion is dieting and the desire to lose weight. One can stick all day to a diet plan and, for example, eat no sweets but then come home and indulge in snacks while watching television. During the day, much mental energy has been used to resist the desire to indulge; by evening, the state of self-control depletion has been reached.

Previous research has shown that self-control decreases after having exhausted the resources of self-control (Baumeister et al., 1998; Schmeichel, Vohs, & Baumeister, 2003). In a state of low self-control, consumers engage in less demanding and more passive actions and are therefore more vulnerable to adverse impulses, habits, and automatic processes (Fennis et al., 2010). The resistance to those impulses, habits, and automatic processes has been found to be a resource-limited activity. The depletion of self-control weakens the resistance to persuasion attempts (Baumeister, 2002). In 2007, Wheeler, Briñol, and Hermann found that consumers depleted in self-control showed less resistance to persuasive messages and showed more passive attitudes. In addition, Burke (2008) has demonstrated that persuasion by a “counterattitudinal message increased after an act of self-control, and more resistance toward a persuasive message diminished the amount of self-control resources available to use on a subsequent unrelated self-control task” (Fennis et al., 2010, p. 912).

Fransen et al. (2016) examined the effect of disclosure on brand evaluation and the moderating role of self-control. They showed that disclosure leads to less favorable brand evaluations and higher

resistance to persuasion attempts in consumers not depleted in self-control. Consumers depleted in self-control showed less resistance to persuasion attempts containing disclosure and made more favorable brand evaluations. The depletion of self-control—that is, consumers being in a state of low self-control—leads to consumers being less motivated to fall back on resistance strategies when presented with disclosed content and being, accordingly, less resistant to persuasion disclosure (Fennis et al., 2010). With no depletion of self-control—that is, when consumers are in a state of high self-control—consumers show higher resistance to persuasion disclosure and evaluate the brand less favorably (Janssen et al., 2016).

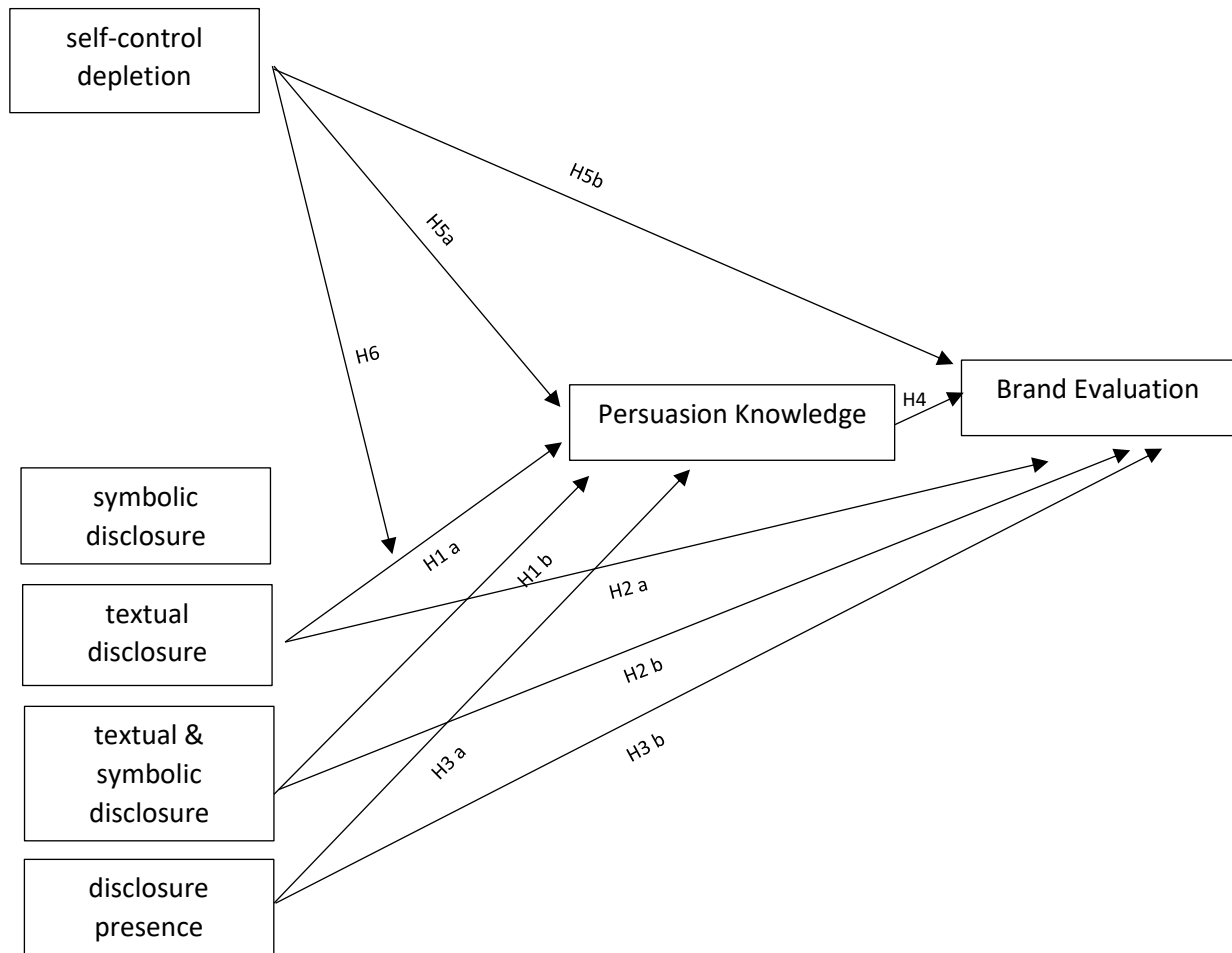
As native advertisements incorporate advertising messages into editorial content, the extent to which consumers recognize persuasion attempts in a particular state of self-control may vary (Fransen et al., 2016). Persuasion disclosure has been found effective in increasing resistance in consumers in a state of high self-control. The depletion of consumers' self-control, the state in which consumers are likely to engage in entertaining content, has been found to increase persuasive effects (Janssen et al., 2016; Reinecke, Hartman & Eden, 2014). Consumers using social media as a means of entertainment and relaxation might be depleted in self-control and therefore might not fall back on their persuasion knowledge, leading to more favorable brand evaluations. This leads to the following hypotheses:

*Hypothesis 5a: The depletion of self-control evokes a lower level of persuasion knowledge than no depletion of self-control.*

*Hypothesis 5b: The depletion of self-control evokes a more favorable brand evaluation than no depletion of self-control.*

*Hypothesis 6: The depletion of self-control negatively influences the relationship between disclosure types and persuasion knowledge.*





**Figure 4.** Conceptual framework of the impact of disclosure types on persuasion knowledge and brand evaluation moderated by self-control

### 3. Research Methodology

The current study aims to examine the extent to which different disclosure types might impact persuasion knowledge and brand evaluation moderated by self-control (see **Figure 4**). To obtain these insights, the research was divided into two parts. First, a pre-test was carried out to examine suitable content categories and brands to be applied as stimulus material containing either a textual disclosure, a symbolic disclosure, a combination of textual and symbolic disclosures, or no disclosure (control condition). Second, based on insights garnered from the pre-test, the main study was conducted in the form of an online experiment in which respondents were first depleted in self-control by being asked to fill in missing words without using the letter "e" (for example, "as green \_\_\_\_ grass"). The pre-test and main study are presented in more detail in the following sections.

#### 3.1 Research design

For this study, a two by two by two between-subject design (self-control: depletion/no depletion x persuasion disclosure type: textual (yes/no)/symbolic (yes/no)) was applied, resulting in eight experimental conditions. The online experiment was carried out among international consumers who were familiar with the social media platform Instagram and had an Instagram profile. The online experiment was distributed via an anonymous link on social media platforms such as Instagram and Facebook using convenience sampling along with snowball sampling as participants were asked to share the link to the experiment within their networks. An online experiment was chosen as a cost- and time-efficient research tool that allowed for a more diverse research sample as well as allowing participants to remain anonymous (Finley & Penningroth, 2015). Respondents were randomly assigned to one of the experimental conditions (persuasion disclosure type and self-control depletion). The scope of the study allowed for this sampling strategy, which was the most cost- and time-efficient sampling method. The estimated number of participants was a minimum of 30 participants per condition, resulting in a minimum research sample of 240 participants.

#### 3.2 Participants

A total of 177 valid questionnaires were received from 135 females and 41 males. The respondents' average age was 23 years. The majority (40.2%), had a bachelor's degree, followed by a master's degree (34.1%) and then a high school diploma (17.3%). Of the respondents, 35.2% were German, 13.4% were from the United Kingdom of Great Britain and Northern Ireland, and 8.4% were Dutch. The majority (77.7%) of the respondents reported using Instagram multiple times per day, while 14% used it once a day; thus, the sample showed a high familiarity with the social media platform. The majority chose to study content from the category travel (81%), followed by the categories pets (44%), food (30%), and home (23%).

**Table 1** Frequency disclosure type and depletion.

	Symbolic disclosure	Textual disclosure	Combination of textual and symbolic disclosure	No disclosure	Total
Depletion	15	23	21	20	79
No depletion	27	32	18	21	98
Total	42	55	39	41	177

### 3.3 Stimulus

#### Pretest

Prior to the main study, an online questionnaire was administered in March and April 2019 to obtain insights regarding familiarity with and liking of Instagram content categories and brands, which served as input for developing applicable Instagram posts examining the impact of disclosure types (symbolic, textual, and none) on persuasion knowledge and brand evaluation. Both familiarity with and liking of brands and content categories were assessed, as well-known brands tend to be more liked. However, it remains unclear under what circumstances this relationship arises. In this study, sponsorship disclosure was studied as a factor in brand evaluation. In the main study, two different brands were chosen per content category to minimize the risk of prior relationships with and opinions about the brands advertised in the post. Insights derived from the pre-test served as a basis for designing stimulus material for the main study. In total, 50 participants took part in the pre-test. However, only 39 participants reached the end of the questionnaire. The majority of the participants were female (79.5%) and the minority were male (20.5%). The average age of the sample was 23 years ( $SD = 2.21$ ).

Participants read a short introduction into the purpose of the questionnaire (see **Appendix A**), namely, to gain insight into familiarity with and liking of content categories and brands in order to design a follow-up study. Respondents were not informed about the follow-up study and its purpose, so as not to rule out the possibility of them serving as participants in the main study as well. Additionally, respondents were informed about their anonymity and the confidentiality of their data.

According to Forbes (2019), influencers can be categorized into 12 content categories. The following nine content categories, which match the scope of the present research, were selected and tested: pets, fashion, entertainment, travel, fitness, beauty, home, food and tech, and business. To test for applicable content categories, respondents were asked to rank the nine Instagram content categories first according to their familiarity with them, referring to how well-known the brands were, and secondly according to their liking of them. To examine a brand per content category, respondents were first asked to arrange four brands in each category according to their familiarity (1 = least familiar and 4 = most familiar) and secondly according to their liking (1 = least liked and 4 = most liked). At the end of the questionnaire, respondents were asked to answer questions about their age, gender,

nationality, and education to provide insight into the characteristics of the sample. The questionnaire used in the pre-test is presented in **Appendix A**.

#### Results pre-test

Participants were asked to rank the presented content categories according to their familiarity with them. The results of the most familiar and the most liked content categories are presented in **Table 2**. The most familiar content categories were pets, travel, and tech and business. The most liked content categories were home, travel, and food.

**Table 2** Descriptive statistics familiarity and liking content category

Descriptive statistics familiarity and liking content category							
	familiarity					liking	
	N	Min	Max	M	SD	M	SD
pets	39	1	9	5.46	2.89	5.05	2.99
fashion	39	1	9	4.33	2.54	3.90	2.37
entertainment	39	1	9	4.85	2.41	4.41	2.05
travel	39	1	9	5.21	2.34	5.54	2.14
fitness	39	1	9	4.64	2.47	4.77	2.76
beauty	39	1	9	5.13	2.69	5.36	2.53
home	39	1	9	5.38	2.52	5.72	2.39
food	39	1	9	4.79	2.59	5.38	2.65
tech & business	39	1	9	5.21	2.83	4.87	2.95
Valid N (listwise)	39						

To examine a brand in each content category to be advertised per post, respondents were asked to rank presented brands according to their familiarity with them. Within the content category pets, the brands PETA and WWF showed the highest average scores. TripAdvisor and Airbnb showed the highest average scores in the content category travel, and the brands Ikea and Maisons du Monde showed the highest average scores in the content category home. Lastly, the brands Starbucks and Oreo showed the highest average scores in the content category food. **Table 2** provides an overview of the mean scores and standard deviations on the liking and familiarity of all brands per content category.

**Table 3** Descriptive Statistics familiarity and liking brands per category (N = 39)

	Familiarity				Liking	
	Minimum	Maximum	M	SD	M	SD
<b>pets</b>						
PETA	1	4	2.65	1.11	2.36	1.09
WWF	1	4	2.51	1.22	2.90	1.23
Pedigree Petfoods	1	4	2.41	1.10	2.31	1.13
Whiskas	1	4	2.43	1.09	2.44	.97

<b>Fashion</b>						
H&M	1	4	2.90	1.17	2.51	1.10
ASOS	1	4	2.41	1.19	2.38	1.02
Calvin Klein	1	4	2.10	1.07	2.33	1.19
Zara	1	4	2.59	.94	2.77	1.16
<b>entertainment</b>						
MTV	1	4	2.03	1.22	1.90	1.1/
Disney	1	4	2.46	.88	2.51	.99
Netflix	1	4	2.92	1.31	3.05	1.19
Warner Bros.	1	4	2.59	.85	2.54	.82
<b>travel</b>						
National geographic	1	4	2.47	1.12	2.34	1.15
lonely planet	1	4	2.11	1.19	2.21	1.10
TripAdvisor	1	4	2.76	1.11	2.43	1.02
Airbnb	1	4	2.97	1.00	2.57	1.25
<b>fitness</b>						
Nike	1	4	3.00	1.17	3.03	1.11
Adidas	1	4	2.67	1.01	2.59	1.02
Puma	1	4	2.18	.99	2.08	1.01
Reebok	1	4	2.15	1.11	2.31	1.15
<b>beauty</b>						
Mac Cosmetics	1	4	2.67	1.11	2.34	1.15
NYX Cosmetics	1	4	2.28	.94	2.21	1.10
Glossier	1	4	2.21	1.28	2.43	1.02
Maybelline	1	4	2.85	1.04	2.57	1.25
<b>home</b>						
Ikea	1	4	3.10	1.35	3.05	1.36
MADE	1	4	2.26	.85	2.05	.86
Maisons du Monde	1	4	2.51	1.02	2.38	.94
Oliver Bonas	1	4	2.13	.98	2.51	1.07
<b>food</b>						
Starbucks	1	4	2.21	1.15	2.26	1.25
Oreo	1	4	2.38	.96	2.49	.91
Subway	1	4	2.67	1.11	2.41	1.19
Ben & Jerry's	1	4	2.74	1.21	2.85	1.07
<b>tech &amp; business</b>						
IBM	1	4	1.72	1.15	1.87	1.24
Adobe	1	4	2.59	.91	2.51	.89
Amazon	1	4	3.00	1.03	2.92	1.13
Microsoft	1	4	2.69	1.00	2.69	.95
Valid N (listwise)						

Based on the results of the pretest, participants in the main study were asked to choose from the content categories home, travel, pets, and food, as these content categories showed the highest average scores for liking and familiarity. The brands that were advertised in two separate posts within each category and showed the highest average scores in liking and familiarity were Ikea and Maisons du Monde, Airbnb and TripAdvisor, WWF and PETA, and Ben & Jerry's and Subway. The posts in the content category home advertised the brands Ikea and Maisons du Monde. The posts in the content category travel advertised the brands Airbnb and TripAdvisor. The posts in the content category pets advertised the brands WWF and PETA, and the posts in the content category food advertised the brands Ben & Jerry's and Subway. The stimulus material (eight designed posts in each content category) can be found in **Appendix C**.

### 3.4 Procedure and materials

Participants enrolled in the online experiment via an anonymous link that was spread using convenience and snowball sampling. Participants were first asked to indicate their familiarity with and use of the social media platform Instagram to ensure familiarity with the layout and functionality of the platform. Participants who were not familiar with the platform were excluded from the experiment. Next, participants were randomly assigned to one of the eight experimental conditions. Participants were asked to perform either the depleted self-control task or the non-depleted self-control task. Participants were given limited time to ensure that the task was completed as quickly as possible. To create an unconscious depletion of self-control, participants were first asked to place themselves in a non-distracting environment. To ensure that participants completed the task successfully, answers were rated as true or false so that participants in the depleted condition could only fill in missing words without an "e" or "a." Participants were asked afterward to indicate the degree of effort the task had required. Next, participants were asked to choose one content category (home, travel, pets, and food), from which they studied the Instagram post. Instagram posts containing either a textual disclosure, a symbolic disclosure, textual and symbolic disclosures, or no disclosure followed. Next, persuasion knowledge and brand evaluation were examined. At the end of the experiment, demographic criteria, such as gender, age, and education, were gathered. Lastly, participants were thanked for participating in the experiment and were debriefed. For all conditions, the online questionnaire was designed with Qualtrics in the English language using items from formerly tested instruments and the researcher's developed stimulus material (**Appendix C**). A fully filled-in questionnaire was considered a valid response. The results of the online questionnaire were analyzed using the statistics program SPSS.

#### Self-control

Self-control refers to the cognitive ability or motivation to regulate one's emotions, thoughts, and behavior when exposed to impulses and temptations. In the context of the present research, self-

control refers to the ability or motivation consumers have to protect themselves against persuasive attempts by the regulation of their reactions (Baumeister et al., 1998). Consumers' self-control is a limited resource, meaning that after having to regulate one's emotions, thoughts, or behavior, self-control will suffer (Janssen et al., 2016). The state of low self-control is also referred to as a "couch-potato" state (Reinecke, Hartmann, & Eden, 2014) in which consumers expose themselves to entertainment media. Accordingly, it was hypothesized that persuasion disclosure would not be able to protect consumers in such a state from hidden persuasion. In the state of low self-control, also referred to as self-control depletion, the regulation of consumers' behavior is more difficult and more vulnerable to persuasion attempts.

Before participants were asked to study the Instagram post, their self-control was manipulated by a task based on Janssen et al. (2016). Half of the participants were administered to the depleted self-control condition and the other half was administered to the non-depleted self-control condition. Participants were presented with 15 sentences, each missing one word. In some cases, the missing word contains the letter "e" (e.g., in "as \_\_\_\_ as grass"; the missing word is green) (Janssen et al., 2016, p.10). Participants in the depleted self-control condition were asked to complete the given sentences without using an "e" in the missing word, which made it difficult for participants to complete the sentences, as to do so they had to suppress an automatic response. The depletion condition was expected to require more effort to be expended in executing the task, which would lead to participants being in a state of low self-control. Participants in the non-depletion condition were asked to complete the sentences without restrictions regarding the missing word. This was expected to lead to participants being in a state of high self-control.

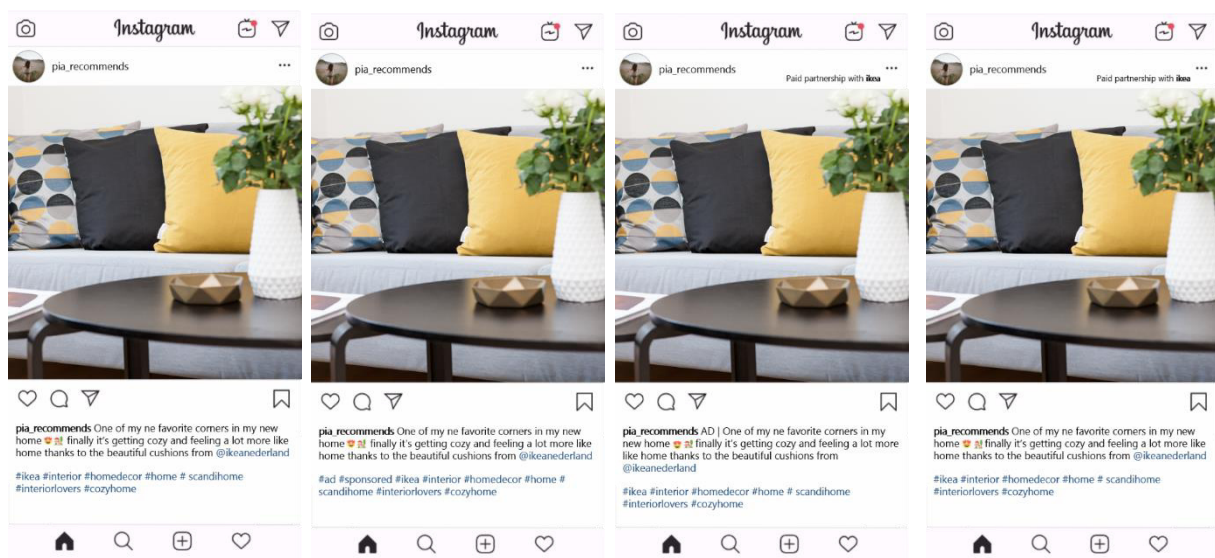
#### Required effort

After having completed the sentences, participants were asked about the effort required to complete the sentences to control for the depletion of self-control. To examine participants' required effort, the NASA task load index (NASA-TLX) developed by the Human Performance Group at NASA was applied. The NASA-TLX is "a multi-dimensional scale designed to obtain workload estimates from one or more operators while they are performing a task or immediately afterwards" (Hart, 2006, p. 94). Respondents were asked to indicate the degree of mental demand, physical demand, temporal demand, effort, performance, and frustration level associated with the task (e.g., "How mentally demanding was the task?") (Hart, 2006) after completing the depleted or not depleted self-control task to control for the effectiveness of the task. The NASA-TLX reported a Cronbach's alpha coefficient of .51. However, removing the item "How successful were you in accomplishing what you were asked to do?" from the scale resulted in a higher Cronbach's alpha coefficient of .77. This item was erased

from the scale, resulting in an acceptable internal consistency. The reported Cronbach's alpha was greater than .80 (Hart, 2006).

#### Persuasion disclosure type

Based on the insights garnered from the pre-test, four content categories were used in the online experiment. In total, eight Instagram posts for each content category were developed as stimulus material for the online experiment (**Appendix D**). Respondents were allowed to choose a content category at the beginning of the experiment that corresponded with their interests in order to ensure a pleasant online experiment. For each content category, two posts were developed, each advertising a different brand. The posts were created using the researcher's own Instagram profile to bypass the influence of a prior, known Instagram influencer. Each post within the same content category contained the same message and was either disclosed textually by "This post is sponsored by BRAND," disclosed symbolically by "#sponsored" and "#ad," disclosed both textually and symbolically by "This post is sponsored by BRAND" and "#ad," or not disclosed at all in the control condition.



**Figure 5.** Examples of textual disclosure, symbolic disclosure, both disclosure types, and no disclosure.

### 3.5 Measures

The stimulus material used in the main study was based on the outcomes of the pre-test questionnaire. The main study consisted of four different disclosure types:

- (i) symbolic disclosure
- (ii) textual disclosure
- (iii) textual and symbolic disclosure
- (iv) no disclosure



To minimize the chance of a participant having a prior relationship with the brand presented in the Instagram post, two posts were developed for each disclosure type (see **Appendix C**).

#### Persuasion knowledge

According to Campbell and Kirmani (2000), "persuasion knowledge refers to consumers' theories about persuasion and includes beliefs about marketers' motives, strategies, and tactics; effectiveness and appropriateness of persuasion tactics; psychological mediators of tactic effectiveness; and ways of coping with persuasion attempts." After viewing the post, participants were asked to indicate the extent to which they perceived persuasion disclosure to test for the activation of persuasion knowledge (Ham, Nelson, & Das, 2015). The subscale on persuasion recognition (e.g., "The Instagram post by the influencer is advertised") showed a reliable Cronbach's alpha of .81. Persuasion knowledge measured both the attitudinal and conceptual dimensions. The attitudinal dimension was measured on a 7-point semantic differential scale by the items *unreliable/reliable*, *not persuasive/persuasive*, *unfair/fair*, *not manipulative/manipulative*, *not fun/fun*, *not credible/credible*, *not entertaining/entertaining*, *not misleading/misleading*, *unacceptable/acceptable*, *not annoying/annoying*, and *distracting/not distracting* (Ham et al., 2015). The scale on the attitudinal dimension of persuasion knowledge showed a Cronbach's alpha of .77. Removing the item "The product/brand was shown by the influencer to entertain the consumer" resulted in a higher Cronbach's alpha coefficient of .79. This item was accordingly erased from the scale. The conceptual dimension of persuasion knowledge was measured by six statements on a 7-point Likert-scale (e.g., "The blogger showed the product to advertise the brand"). The scale on the conceptual dimension of persuasion knowledge showed a Cronbach's alpha of .47. Removing the item "I think the post of the influencer on the product/brand is annoying/not annoying" resulted in a Cronbach's alpha coefficient of .58, compared to Ham et al. (2015), who showed internal scale reliability of .95.

#### Brand evaluation

Lastly, respondents were asked to evaluate the brand advertised in the post. According to Bapat and Thanigan (2016), "brand evaluations determine consumers' affective responses towards a brand, such as liking, trust, and desirability." To measure brand evaluation, a four-item, 7-point semantic differential scale *bad/good*, *unfavorable/favorable*, *dislikable/likeable*, and *disagreeable/agreeable* (Barkus, Schmitt, & Zarantonello, 2009) was applied. The scale on brand evaluation showed a Cronbach's alpha coefficient of .94 and thus showed good internal consistency. Brakus, Schmitt, and Zarantonello (2009) show internal scale reliability of .77.

#### Reliability check

Reliability analysis was conducted, as shown in **Table 4**, to ensure that the applied questionnaire produced consistent and stable results. The scale measuring persuasion knowledge shows a critical Cronbach's alpha value to be considered as reliable. Therefore, outcomes concerning persuasion

knowledge should be interpreted carefully. The scales for required effort and brand evaluation both exceed the minimum of .7 required to be regarded as reliable in interpreting the results. Before the analysis, variables were grouped. Deletion of an item in the constructs for required effort ("How successful were you in accomplishing what you were asked to do?") and persuasion knowledge ("The brand was shown by the influencer to entertain the consumer") increased the reliability of the scales.

**Table 4.** Reliability analysis using Cronbach's alpha for scales

Scale	N items	Cronbach's $\alpha$
Required effort (NASA-TLX)	6	.77*
Persuasion recognition	2	.81
Persuasion knowledge	17	.58*
Brand evaluation	4	.94

\* items removed

### 3.6 Missing data analysis

Little's Missing Completely At Random (MCAR) test was conducted to determine whether data were missing completely at random. It was shown that data was not missing completely at random ( $\chi^2(55, N = 189) = .290.39, p = .001$ ) in the total sample. It was further shown that the no disclosure condition showed the highest dropout rate at 82.2%, followed by 67.5% in the symbolic disclosure condition. Further, Little's MCAR test was conducted in the depletion and no depletion condition. It was shown that data was not missing completely at random in the self-control depletion condition ( $\chi^2(34, N = 82) = 169.8, p = .001$ ). The symbolic disclosure condition showed the highest score of missing data at 74.4%, followed by the symbolic disclosure condition at 56.1%. It was shown that in the no self-control depletion condition data was also not missing completely at random according to Little's MCAR test ( $\chi^2(40, N = 107) = 118.17, p = .001$ ). In the no self-control depletion condition, no disclosure showed the highest percentage of missing data (77.1%), followed by symbolic disclosure at 56% missing data.

Additionally, multiple imputation was used to uncover patterns of missing data in the self-control depletion condition and the no self-control depletion condition. It was revealed that in the depletion condition 26.7% of the data was incomplete and in the no depletion condition 29.01% of the data was incomplete. **Table 5** provides an overview of the percentages of missing data among the different disclosure types in the depletion and no depletion condition.

**Table 5** *Incomplete responses depletion x disclosure type*

	Depletion	No depletion
Textual disclosure	45.1%	52.3%
Symbolic disclosure	56.1%	56%
Combination of textual and symbolic disclosure	26.8%	52.3%
No disclosure	74.4%	77.1%
Total incomplete responses	26.7%	29.01%

In the depletion condition ( $\chi^2(1, N=107) = 3.08, p = .08$ ), no data were missing on the scale of the NASA-TLX for required effort, and 2.4% of data was missing on the scale for persuasion knowledge as well as on the scale for brand evaluation. In the no depletion condition ( $\chi^2(1, N=107) = .02, p = .89$ ), 1.8% of data was missing on the scale of the NASA-TLX for required effort and 7.3% of data was missing on the scale of persuasion knowledge as well as on the scale for brand evaluation.

## 4. Results

### 4.1 Control variables

Before participants enrolled in the questionnaire, questions were asked regarding familiarity with the platform Instagram and frequency of use. Participants in the depleted self-control condition showed slightly higher frequency of use ( $M = 1.43$ ,  $SD = 1.02$ ) than those in the not depleted self-control condition ( $M = 1.36$ ,  $SD = 0.83$ ). Instagram was used multiple times per day in both self-control conditions. Additionally, all participants were familiar with the platform Instagram and had a personal Instagram account.

Participants were asked to indicate whether they had been exposed to a sponsored post and remembered it correctly. Participants who had studied a post that contained no form of persuasion disclosure showed the highest average scores on the post being advertised and the product/brand shown being part of an advertisement. Participants who had studied a post that contained any form of disclosure (symbolic, textual, or a combination of textual and symbolic) showed lower average scores on persuasion recognition. **Table 6** provides an overview of the mean scores on persuasion recognition. Participants who had been exposed to a disclosed Instagram post did not recognize the persuasive intent of the post that had been declared by different types of persuasion disclosure.

**Table 6** Mean scores on Persuasion recognition (scale 1–7).

Items	Disclosure type			
	No disclosure	Symbolic disclosure	Textual disclosure	Combination of textual and symbolic disclosure
<i>The Instagram post by the influencer is advertised.</i>	3.0 (1.82)*	2.12 (1.5)*	2.6 (1.92)*	2.0 (1.47)*
<i>Showing the product/brand by the Influencer is advertisement.</i>	3.1 (1.74)*	2.1 (1.43)*	2.51 (1.55)*	2.32 (1.42)*

\*standard deviations noted in brackets

### 4.2 Effort required by the self-control depletion task

An independent samples t-test was used to determine the effectiveness of the self-control depletion exercise. Participants in the depleted self-control condition, who had been asked to complete the sentences without using the letter “e,” found that more effort was required to complete the task ( $M = 46.23$ ,  $SD = 13.94$ ) than participants in the non-depleted self-control condition ( $M = 24.26$ ,  $SD = 15.1$ ). Therefore, the self-control task effectively depleted participants' self-control ( $t(175) = 9.97$ ,  $p < .001$ ).

**Table 7** Means (SD) on NASA-TLX for required effort (scale 0–100)

		Self-control	
		Depletion	No depletion
Items	How mentally demanding was the task?	69.63 (18.79)*	35.45 (22.96)*
	How physically demanding was the task?	15.04 (16.31)*	9.51 (16.12)*
	How hurried or rushed was the pace of the task?	39.11 (24.65)*	26.92 (25.40)*
	How hard did you have to work to accomplish your level of performance?	59.56 (19)*	30.45 (23.02)*
	How insecure, discouraged, irritated, stressed, and annoyed were you?	47.81 (29.37)*	18.97 (22.22)*

*\*standard deviations noted in brackets*

### 4.3 Analysis

To analyze the data, constructs were grouped into variables within the statistical analysis program SPSS. Before the main analysis, several assumptions regarding independence, homoscedasticity, linearity, and normality had to be met by the mediation model and had to be evaluated as reliable.

The assumption of independence was met, as all answers were collected independently of one another other without the researcher's influence. Respondents completed the questionnaire individually and independently of other participants. As a result, it is highly unlikely that participants influenced one another's' answers. Additionally, the researcher's absence during the experiment increases the likelihood of independence. The assumption of independence was therefore met in this experiment. The assumption of homoscedasticity (i.e., homogeneity of variance) states that the spread of the outcome variables (persuasion knowledge and brand evaluation) is about equal among different points of the predictor variables (disclosure presence, disclosure type, and self-control). The spread of the outcome variables persuasion knowledge and brand evaluation was assessed using Levene's test. The results of Levene's test are presented in **Table 8**. Levene's test was not significant for the predictors disclosure presence, disclosure type, and self-control. It can, therefore, be assumed that the variances are equal. However, Levene's test was significant for the predictor disclosure type and the outcome brand evaluation. Therefore, the results of the main analysis should be interpreted with caution regarding the predictor disclosure type and the outcome brand evaluation.

**Table 8** Levene's test by predictor and outcome variable

	Persuasion knowledge	Brand evaluation
Disclosure presence	$F(1,163) = .005, p = .942$	$F(1,173) = 1.48, p = .225$
Disclosure type	$F(3,161) = .358, p = .784$	$F(3,171) = 3.84, p = .011$
Self-control	$F(1,164) = .191, p = .663$	$F(1,174) = .048, p = .827$

The assumption of linearity asserts that the outcome variables should be linearly correlated to the predictor variables, so that the predictor variables adequately predict the outcome variable. In the current study, the outcome variables are linearly related to the predictor variables. Therefore, the assumption of linearity has been met. The last assumption is the assumption of normality, which states that the sampling distribution of the mean is normal; this was also met, as the sample represents the general Instagram user.

#### 4.4 Analysis of variance

A multivariate analysis of variance (MANOVA) was conducted to investigate the effects of sponsorship disclosure type on the dependent variables brand evaluation and persuasion knowledge. The Wilk's Lambda value showed significant results of the main effects of disclosure type ( $F(6, 318) = 2.82$ ),  $p = .011$ , partial  $\eta^2 = .051$ ) on brand evaluation and persuasion knowledge. Accordingly, 5.1% of the variance in disclosure type across persuasion disclosure and brand evaluation is accounted for by the different disclosure types (textual, symbolic, and the combination of textual and symbolic). There are statistically significant differences between disclosure types (textual, symbolic, and a combination of textual and symbolic) in brand evaluation and persuasion knowledge. In addition, the effects of disclosure type on brand evaluation and persuasion knowledge were statistically significant.

#### 4.5 Main analysis

A statistically significant difference between the effects of different disclosure types on persuasion knowledge was determined by ANOVA ( $F(3,161) = 3.56, p = .016$ ). Hypothesis 1 predicted that textual disclosure would evoke a higher level of persuasion knowledge than symbolic or no disclosure. As presented in **Table 9**, the ANOVA did not reveal a statistically significant impact of textual disclosure on persuasion knowledge. Accordingly, the presence of textual persuasion disclosure, and thus sponsorship, disclosed in a full sentence such as "This post is sponsored by ..." did not lead participants to recognize the sponsored relationship of the influencer and the brand advertised. Contrary to what was hypothesized, symbolic disclosure and no disclosure were found to affect persuasion knowledge. Symbolic disclosure, made through abbreviations such as "SP" and "AD" or hashtags such as "#sponsored" led to a greater recognition of the sponsored nature of the post. No disclosure also led

to a greater recognition of the sponsorship. As no significant main effect of textual disclosure on persuasion knowledge could be found, Hypothesis 1a was rejected.

Hypothesis 1b predicted that the combination of textual and symbolic disclosure would evoke higher levels of persuasion knowledge than the other disclosure conditions. The ANOVA showed the combination of textual and symbolic disclosure to have a significant effect on persuasion knowledge. Thus, the combination of textual and symbolic disclosure leads consumers to fall back on their persuasion knowledge, through which the persuasive intent of the Instagram post is identified. Hypothesis 1b is therefore accepted.

**Table 9** Effects of disclosure type on persuasion knowledge

Measures	Persuasion Knowledge			
	<i>M</i>	<i>SD</i>	<i>F</i> (3,161)	$\eta^2$
Symbolic disclosure	3.54	.51	8.32	.049
Textual disclosure	3.83	.59	1.15	.007
Combination of textual and symbolic disclosure	3.73	.52	*.15	.001
No disclosure	3.93	.56	4.27	.026

\* $p < .05$

There was a statistically significant difference between the disclosure type groups in terms of their effect on brand evaluation, according to the ANOVA ( $F(3,171) = 2.92, p = .036$ ). Hypothesis 2a predicted that textual disclosure would evoke a less favorable brand evaluation. As presented in **Table 10**, the ANOVA did not reveal textual disclosure to have a statistically significant impact on brand evaluation. When exposed to textual persuasion disclosure, brands are not evaluated more negatively. As no significant main effect of textual disclosure on brand evaluation was found, hypothesis 2a was rejected. However, the ANOVA revealed symbolic disclosure to have a statistically significant impact on brand evaluation. When exposed to symbolic disclosure in the form of hashtags such as “#ad” and “#sponsored” or abbreviations such as “SP” and “AD,” brand evaluation was more negative.

In hypothesis 2b, it was predicted that the combination of textual and symbolic disclosure would evoke less favorable brand evaluations than the other conditions. The ANOVA did not reveal the combination of textual and symbolic disclosure as having a statistically significant impact on brand evaluation. This suggests that disclosure in a combination of textual disclosure (e.g., “This post is sponsored by BRAND”) and symbolic disclosure (e.g., “#ad,” “SP”) does not affect brand evaluation. When exposed to a combination of textual and symbolic disclosure, brand evaluation is not more negative. For this reason, hypothesis 2b was rejected.

**Table 10** Effects of disclosure type on brand evaluation

Measures	Brand evaluation			
	<i>M</i>	<i>SD</i>	<i>F</i> (3,173)	$\eta^2$
Symbolic disclosure	4.81	1.49	*8.36	.046
Textual disclosure	5.49	.88	2.64	.015
Combination of textual and symbolic disclosure	5.32	1.06	.07	.000
No disclosure	5.40	1.25	.65	.004

\* $p < .05$

A multivariate analysis of variance (MANOVA) was used to investigate the effects of disclosure presence on persuasion knowledge and brand evaluation. There was no statistically significant impact of disclosure presence on persuasion knowledge or on brand evaluation ( $F(2,161) = 2.3$ ,  $p = .104$ ; Wilk's  $\Lambda = .972$ , partial  $\eta^2 = .028$ ).

**Table 11** Effects of disclosure presence on brand evaluation and persuasion knowledge

Measures	Brand evaluation		Persuasion Knowledge	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Disclosure presence	5.26	1.17	3.71	.56
Disclosure absence	5.48	1.19	3.93	.57

$p < .05$

Nevertheless, the between-subjects effects test of the MANOVA revealed a statistically significant main effect of disclosure presence on persuasion knowledge ( $F(1,164) = 4.45$ ,  $p = .036$ ). The strength of the effect of disclosure presence on persuasion knowledge resulted in a partial eta squared of  $\eta^2 = .027$ . However, higher levels of persuasion knowledge were found when disclosure was absent, as presented in **Table 11**. Therefore, hypothesis 3a was rejected. The presence of persuasion disclosure was found to be effective in indicating the sponsored nature of an Instagram post. Further, the results suggest that disclosure presence does not affect brand evaluation. Specifically, when exposed to persuasion disclosure, brands are not evaluated more negatively. As no statistically significant main effect of disclosure presence on brand evaluation could be found, hypothesis 3b was rejected.

In hypothesis 4 it was stated that high levels of persuasion knowledge would evoke less favorable brand evaluations. A linear regression analysis was conducted to predict brand evaluation based on persuasion knowledge. The results of the regression indicate that persuasion knowledge explains 9% of the variance ( $R^2 = .09$ ,  $F(1, 162) = 16.07$ ,  $p < .001$ ) in brand evaluation. It was found that persuasion knowledge significantly predicted brand evaluation ( $Beta = .3$ ,  $p < .000$ ). Brand evaluations are more positive when persuasion knowledge is high. Thus, when consumers realize the sponsored nature of an Instagram post, the brand is evaluated more positively. Consequently, hypothesis 4 was rejected.



A multivariate analysis of variance (MANOVA) was used to investigate the effects of self-control depletion on persuasion knowledge and brand evaluation. Hypothesis 5a stated that the depletion of self-control would evoke a lower level of persuasion knowledge. Hypothesis 5b stated that the depletion of self-control would evoke a more favorable brand evaluation. As presented in **Table 12**, the MANOVA did not reveal any statistically significant impact of self-control depletion on persuasion knowledge or on brand evaluation ( $F(2,161) = .23, p = .79$ , Wilk's  $\Lambda = .997$ , partial  $\eta^2 = .003$ ). The depletion of self-control did not lead to significantly lower levels of persuasion knowledge, whereby consumers do not realize the persuasive intent behind an Instagram post. Similarly, the depletion of self-control did not lead to significantly more favorable brand evaluations. As no significant main effect could be found, hypothesis 5a and hypothesis 5b about the impact of self-control depletion on persuasion knowledge and brand evaluation were rejected.

**Table 12** Effects of self-control depletion on persuasion knowledge and brand evaluation

Measures	Persuasion knowledge		Brand evaluation	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Self-control depletion	3.74	.55	5.24	1.13
No self-control depletion	3.77	.58	5.36	1.19

$p < .05$

Hypothesis 6 assumed an interaction between self-control depletion, disclosure type, and persuasion knowledge. It was stated that the depletion of self-control would negatively influence the relationship between disclosure type and persuasion knowledge. Univariate analysis of variance (ANOVA) was conducted to test the relationship between disclosure type and persuasion knowledge. It was shown that disclosure type is a non-significant predictor of persuasion knowledge ( $F(4, 163) = 1.78, p = .14, \eta_p^2 = .04$ ). Hypothesis 5a already tested the depletion of self-control as a predictor of persuasion knowledge. As no significant relationship was found between the depletion of self-control and persuasion knowledge and disclosure type and persuasion knowledge, no further mediation analysis was conducted. As a consequence, hypothesis 6 was rejected.

#### 4.6 Results of the hypotheses

	<b>Hypothesis</b>	<b>Result</b>
<b>Hypothesis 1</b>	<i>1a: Textual disclosure evokes a higher level of persuasion knowledge than symbolic disclosure.</i>	Rejected
	<i>1b: The combination of textual and symbolic disclosure evokes a higher level of persuasion knowledge than textual or symbolic disclosure alone.</i>	Accepted
<b>Hypothesis 2</b>	<i>2a: Textual disclosure evokes a less favorable brand evaluation than symbolic disclosure.</i>	Rejected
	<i>2b: The combination of textual and symbolic disclosure evokes a less favorable brand evaluation than textual or symbolic disclosure alone.</i>	Rejected
<b>Hypothesis 3</b>	<i>3a: The presence of persuasion disclosure evokes a higher level of persuasion knowledge than when persuasion disclosure is absent.</i>	Rejected
	<i>3b: The presence of persuasion disclosure evokes a less favorable brand evaluation than when persuasion disclosure is absent.</i>	Rejected
<b>Hypothesis 4</b>	<i>4: A high level of persuasion knowledge evokes a less favorable brand evaluation.</i>	Rejected
<b>Hypothesis 5</b>	<i>5a: The depletion of self-control evokes a lower level of persuasion knowledge than no depletion of self-control.</i>	Rejected
	<i>5b: The depletion of self-control evokes a more favorable brand evaluation than no depletion of self-control.</i>	Rejected
<b>Hypothesis 6</b>	<i>6: The depletion of self-control negatively influences the relationship between disclosure types and persuasion knowledge.</i>	Rejected

## 5. Discussion

The present research focuses on the impact of different sponsorship disclosure types on persuasion knowledge and brand evaluation in the context of sponsored Instagram posts. The following research question was developed: *“To what extent does persuasion disclosure (textual, symbolic, or a combination of both), moderated by consumers’ self-control, impact consumers’ persuasion knowledge and brand evaluation regarding persuasive advertising messages on Instagram?”* To answer the central research question, a conceptual model was developed based on the persuasion knowledge model proposed by Friestad and Wright (1994) and the concept of individuals’ self-control (Friestad & Wright, 1994; Burkley, 2008). Multiple hypotheses were formulated that stated that an Instagram post containing a particular type of sponsorship disclosure would evoke higher levels of persuasion knowledge and in turn less favorable brand evaluations.

Persuasion via sponsored content (on Instagram) is often regarded as unfair and deceptive (Cain, 2011; Nebenzahl & Jeffe, 1998). Legislation on the disclosure of sponsored content and product placement was first established within the television context (Cain, 2011); these measures were followed by GDPR guidelines on the disclosure of sponsored content in the social media context along with the availability of disclosure features on Instagram. Consumers who do not recognize the commercial nature of sponsored (editorial) content can be persuaded unwillingly. As a means of declaring the sponsored, commercial intent of (editorial) content, different types of sponsorship disclosure have been established to assist consumers in recognizing the commercial intent and to activate their persuasion knowledge (Campbell et al., 2007). As advertising has shifted towards online platforms, including social media platforms like Instagram, academic research has also turned its focus from offline to online advertising contexts. Sponsorship disclosure can take various forms, especially in the online context. According to marketing agencies (e.g., Mediakix, Frankwatching, etc.), the most commonly used disclosure types are textual, symbolic, or a combination of both forms (Statista, 2019a). Previous research has provided evidence against the effectiveness of persuasion disclosure. For example, Janssen et al. (2016) find that the depletion of self-control leads consumers to be persuaded more after being exposed to persuasion disclosure than no depletion of self-control. These findings are contrary to the purpose of sponsorship disclosure, namely, to protect consumers from unwanted persuasion. Hence, this study examines the impact of different disclosure types on persuasion knowledge and brand evaluation via the moderating role of consumers’ self-control in the online context of Instagram.

The following sections elaborate on the research results by hypothesis, the limitations of the research, its theoretical and practical implications, and directions for future research.

## 5.1 Discussion of the main results

The following results were obtained by testing the formulated hypotheses. It was found that the combination of textual and symbolic disclosure—that is, sponsorship disclosure in the form of a full sentence indicating the relationship between the influencer and the brand advertised and an abbreviation or hashtag such as “#ad” at different positions within the Instagram post—evokes a higher level of persuasion knowledge than textual or symbolic disclosure alone. Additionally, contrary to what was hypothesized, Instagram posts that did not contain any form of sponsorship were also perceived as advertisements. Moreover, the study revealed that consumers' self-control is of less importance than prior research (see for example Burkley, 2008; Janssen et al., 2016) stated, when being exposed to sponsored editorial content.

No support could be found for the hypothesis that textual disclosure evokes a higher level of persuasion knowledge than symbolic disclosure (H1a). A possible explanation might be that consumers are becoming more aware of sponsored content on social media, and on Instagram in particular, and therefore have adjusted their persuasion knowledge to accommodate new advertising formats such as social media and native advertising. Due to the widespread familiarity with sponsored formats, the mere exposure effect helps to provide an understanding of why textual disclosure is not effective in evoking a higher level of persuasion knowledge. Another possible explanation might be that textual disclosure contains the word “sponsored,” which consumers can directly relate to advertising and which in turn activates their conceptual persuasion knowledge to help them protect themselves from unwanted persuasion (Boerman et al., 2017).

Further, the hypothesis was supported that disclosure in a combination of textual and symbolic forms results in a higher level of persuasion knowledge than textual or symbolic disclosure alone (see H1b). This means that sponsorship disclosure in a full sentence (“This post is sponsored by BRAND”) and an abbreviation or hashtag (“AD,” “#ad”) is more effective in indicating the sponsored nature of sponsored editorial content than either a full sentence or an abbreviation or hashtag alone. The full sentence clearly conveys the sponsored relationship between the influencer and the brand, which makes interpreting the message easier for consumers. The abbreviation or hashtag could then serve as a reminder that the content viewed is sponsored editorial content. Further, as the textual and symbolic disclosure are placed in different positions in the sponsored post, the role of disclosure position should be investigated. Textual disclosure is in most cases presented in the header, whereas symbolic disclosure appears in the caption of the post. This might function as a double prime of sponsorship disclosure, which suggests the importance of further investigation into disclosure positions.

Additionally, Tessitore and Geuens (2013) note that symbolic disclosure by hashtags or abbreviations, in particular, requires consumers to have prior knowledge of the meaning behind the symbol. Thus, symbolic disclosure is only effective in declaring sponsorship when consumers are aware of its meaning. Hence, consumers who are not familiar with the symbolic disclosure (hashtag or abbreviation) are unable to activate their persuasion knowledge. Therefore, the combination of textual and symbolic disclosure (abbreviation "AD" and sentence "This post is advertised") leads to higher levels of persuasion knowledge and is more effective in indicating the sponsored nature of an Instagram post.

Furthermore, no evidence could be found that textual disclosure evokes a less favorable brand evaluation than symbolic sponsorship disclosure (see H2a). This is to say that sponsorship disclosure in a full sentence ("This post is sponsored by BRAND") does not lead to a more negative evaluation of the brand. Textual disclosure repeats the brand name and exposes the consumer to the brand name in a full sentence. According to learning theories, such as the associative memory theory (Anderson, 1995; Robinson, 1995), this could function as an additional prime to enhance consumers' recall of the brand name, so enhancing the processing of the brand as well as drawing attention to the brand in general. Additionally, the influencer advertising the brand in the post might be mediating the relationship between disclosure type and brand evaluation, a possibility which requires further investigation. Similarly, no evidence could be found that sponsorship disclosure in a combination of textual and symbolic forms evokes a less favorable brand evaluation than symbolic disclosure alone (see H2b). When influencers are used to post the sponsored content, this might have a positive effect on brand evaluation: consumers might like the influencer more than the brand, which in turn results in greater liking of the brand and therefore a more positive brand evaluation. Further research is needed into the role of influencer popularity and the interplay between it and brand evaluation. As consumers become more familiar with sponsored content on social media, they also develop a preference for content that advertises a brand, product or feature. This might also explain why brands were not evaluate more negative when advertisements were present.

Further, the presence of persuasion disclosure, in either textual, symbolic, or a combination of textual and symbolic forms, was not found to affect persuasion knowledge or to evoke a less favorable brand evaluation (H3a & b). This result was contrary to what was hypothesized, showing that participants perceived posts as advertisements even when they did not contain any form of disclosure. This outcome is in line with prior studies on disclosure (see Boerman, Van Reijmersdal, & Neijens, 2012; Campbell, Mohr, & Verlegh, 2013; Wojdyski & Evans, 2015) and highlights the fact that little attention is paid to disclosure by consumers. Therefore, the results should be interpreted carefully, as the outcomes only account for consumers who recognized the sponsorship disclosure correctly. This

outcome can be explained by the persuasion knowledge model proposed by Friestad & Wright (1994). The presence of a brand name itself in an Instagram post can lead to the recognition that the post or content contains some form of sponsorship or advertisement, even when sponsorship disclosure is not present. Further, the brand may cause a positive effect that overweighs the negative effect of perceived sponsorship.

In addition, the vague legal situation regarding sponsorship disclosure in the social media context, and on Instagram in particular, might confuse consumers about what is advertising and what is not advertising, as some influencers, such as Lily Pebbles (@lilypebbles), indicate that their content is not sponsored using hashtags such as “#notanad” or indicate that the products shown were a PR gift by using the hashtag “#gifted”. Furthermore, the hashtag “#affiliatelink” is sometimes used to declare that influencers earn a fee from purchases made via the link. The number of hashtags and sentences available to declare the sponsorship or lack thereof is great and therefore potentially confusing for consumers. A possible explanation might, therefore, be that consumers are confused by the increasing number of hashtags and sentences included within Instagram posts and as a result have become less attentive to what is shown and have arrived at the misconception that much content contains some form of advertisement, which leads to the activation of persuasion knowledge even when a post does not contain any form of sponsorship disclosure.

This research reveals that consumers have difficulties in distinguishing sponsored content from editorial content, as influencers and other endorsers have different motivations for posting content online, such as expressing a liking for a brand, providing product recommendations, or entertainment. Therefore, this study makes an important contribution in demonstrating that influencer marketing on social media platforms such as Instagram has become a powerful marketing tool for brands. In addition, it was revealed that the persuasion knowledge model does not provide a full understanding of how consumers' persuasion knowledge regarding persuasive advertising messages on Instagram works.

No support could be found for the hypothesis that a high level of persuasion knowledge evokes a less favorable brand evaluation (see H4). Contrary to what was hypothesized, brand evaluation was more positive when the level of persuasion knowledge was high (see H4). That is to say that when consumers were aware of the commercial intent of the post and the brand that was advertised in the post, the brand was evaluated more favorably. This might stem from the honesty represented by sponsorship disclosure, in which the brand openly admits to having paid the influencer to promote its products or the brand in general. Moreover, the influencer paid to promote the brand might have a moderating role between persuasion disclosure and brand evaluation. If the influencer is trusted and liked, brand evaluations might be more positive, independent of sponsorship disclosure and

persuasion knowledge. The recognition of sponsored content is not alone sufficient to reduce its persuasive effect. Skepticism and disbelief towards the content and disclosure is required before consumers' awareness of the sponsored nature of the post evokes a less favorable brand evaluation (Boerman, et al., 2012). Therefore, further investigation on the role of the influencer in brand evaluation in relation to a high level of persuasion knowledge is needed.

Although participants were successfully depleted in self-control through the self-control depletion task performed at the beginning of the online experiment, no evidence could be found that the depletion of self-control evokes a lower level of persuasion knowledge (H5a) or a more favorable brand evaluation (H5b). That is to say that consumers in a state of low self-control did not realize the commercial intent behind the sponsored post to a greater extent than consumers who were not depleted in self-control. Similarly, low self-control did not evoke less favorable brand evaluations. A possible explanation might be that self-control was already reduced by the questions measuring persuasion knowledge and brand evaluation. Further, Janssen et al. (2016) argue that disclosure can act as an extra prime for sponsorship and therefore can support the persuasive effects of sponsorship disclosure. Janssen, Fennis, and Pruyn (2010) have shown that sponsorship disclosure functions as a forewarning message to persuasion attempts. The disclosure directly influences depleted consumers' self-control so as to marshal their remaining resources of self-control to protect themselves against persuasion attempts. Also, as participants were depleted by a self-control task which they had to do by themselves, participants may have withheld some of their resources of self-control for future tasks in the online experiment. A repeated assessment of the effort required by the tasks, measuring the level of self-control after being exposed to the disclosed Instagram post, could provide further insights into consumers' level of self-control at the time of being exposed to persuasive messages on Instagram. Further investigation into the relationship between self-control and social media usage, persuasion knowledge, and brand evaluation is required.

Just as no evidence was found that the depletion of self-control evokes a lower level of persuasion knowledge, neither was any evidence found for the depletion of self-control moderating the relationship between disclosure type and persuasion knowledge (H6). The research question of the present study was "To what extent does persuasion disclosure (textual, symbolic, a combination of both forms), moderated by consumers' self-control, impact consumers' persuasion knowledge and brand evaluation regarding persuasive advertising messages on Instagram?" It was found that the presence of persuasion disclosure had an impact on the activation of persuasion knowledge but not on brand evaluation. When persuasion disclosure was present, the commercial intent of a post was recognized; however, brand evaluations were not less favorable after this recognition. Moreover, it was found that a combination of textual and symbolic disclosure had an impact on consumers'

persuasion knowledge. Again, however, even when the persuasive intent was recognized, brand evaluations did not become less favorable. Although consumers were effectively depleted in self-control, low self-control did not evoke low persuasion knowledge or more favorable brand evaluations. In turn, self-control did not (negatively) influence the relationship between disclosure type and persuasion knowledge along with brand evaluation.

The present study makes a contribution to the research on persuasion disclosure in the social media context and, specifically, on Instagram. Prior research on disclosure has for the most part focused on television programs and blogs; disclosure research within the online social media context of Instagram has been scant. Since the media landscape is changing towards a more online and interactive approach, marketers and brands have realized the importance of adapting their marketing and advertising strategies to where their consumers are—on social media platforms such as Instagram. Instagram is the social media platform most commonly used by marketers and brands to persuade consumers through native advertising—for example, through influencers and their social media accounts—which underscores the importance of experimental research on the effects of persuasion disclosure on consumers. The main purpose of persuasion disclosure is to protect consumers from unwanted persuasion by declaring the commercial intent of the content so that consumers can resist the persuasion intent (Boerman et al., 2012). Based on the outcomes of this study and the prior research of Wei, Fischer and Main (2008), sponsorship disclosure does not always fulfill its purpose of indicating the sponsored nature of the content so that it is recognized as such by consumers. Persuasion knowledge was activated, however, when consumers in this study were presented with a combination of textual and symbolic disclosure. Boerman et al. (2015) have likewise found that consumers show different levels of persuasion knowledge when exposed to different types of persuasion disclosure. As social media are often consumed in a state of low self-control, it may have been the case that consumers in this study did not pay attention to the disclosure and that therefore persuasion knowledge was not activated. However, self-control depletion was not found to function as a mediator of the relationship between disclosure type and persuasion knowledge.

## 5.2 Limitations and recommendations

The study has its limitations and suggests directions for further research. At present, this research increases the small number of studies on disclosure types in the social media context of Instagram while taking into consideration consumers' self-control. Further insights and understandings for researchers, marketers, and practitioners, as well as consumers, are needed to fully understand the effect of disclosure types on consumers' persuasion knowledge and brand evaluation, especially as consumers are often not very attentive and aware when using social media sites.



Only the combination of textual and symbolic disclosure had a significant effect on persuasion knowledge. Disclosure types, furthermore, did not provide any significant results regarding the outcome variables persuasion knowledge and brand evaluation. An explanation for there being no further main effect of disclosure type on persuasion knowledge and brand evaluation could lie in the chosen picture and caption of the fictitious Instagram post, which might not have been perceived as credible. However, the interaction between the perception of the Instagram post, the disclosure type, and the outcome variables persuasion knowledge and brand evaluation can only be ruled out in a fully controlled (laboratory) experimental setting. A fully controlled experimental setting would allow participants to correctly follow the instructions and might yield a lower dropout rate.

Next, the conducted experiment was controlled in the sense that respondents had to follow the online experiment, which does not rule out the possibility that other covariates that were not controlled for within the experimental setting could have been accountable for the associations. The social media site Instagram uses a timeline—a so-called “feed”—in which consumers view content by scrolling down, which makes it a rather automatic process that does not involve much thinking. This study did not make use of the timeline setting but exposed consumers to a single (sponsored) Instagram post. Not being able to scroll may have caused difficulties for participants in recognizing the Instagram setting. For this reason, only participants familiar with the application Instagram were sampled for this study. Participants were presented with only a single post to design a controlled and uncluttered experiment whereby participants were not influenced by other content on the feed. The design of the app, the color of the app and the disclosure, the photographs used in the post, and the influencer who advertised the post were kept constant among the different conditions. The chance of confounding variables was thereby reduced; however, interaction effects of measured variables may still have occurred. The results are therefore likely to be accounted for by the manipulation of disclosure type. Hence, it would be interesting to further investigate the role of the timeline on Instagram, as the effect of disclosure types could be neutralized when consumers also pay attention to other content on the timeline. As disclosure functions as an indicator or warning signal, it could fade due in the clutter caused by the other content on the timeline. A combination of different research methods—for example, an experimental questionnaire along with an eye-tracking method—could provide additional insights into which parts of the (sponsored) post are most attended to, thereby also providing insights into the effect of the position of persuasion disclosure, given that the part of the sponsored post to which consumers pay the most attention—for example, comments, caption, hashtags, or images or videos—has not yet been evaluated.

Moreover, Instagram is a social networking site that presents consumers with content from their network and other accounts they follow, such as those of celebrities and influencers. In this study,

consumers were instructed to imagine viewing the presented post on their own Instagram feeds. However, that remained a fictitious scenario. Influencers are often trusted in their fields and viewed as personages with whom to identify (Schouten, Janssen, & Verspaget, 2019). This is why marketers and brands make use of influencers as part of their marketing activities. The influencer used in this study was fictitious; therefore, the identification with the influencer was absent. Additionally, likes and comments were absent in the post presented in this study, which may have reduced the identification with and trust in the influencer. An experiment in which consumers can choose from a list of known influencers could increase identification with and trust in the influencer.

The NASA Task Load Index was applied to measure the effort required of participants to perform the self-control depletion task. As participants indicated their required effort immediately after having completed the task, the effects of the depletion might have lessened by the time they were presented with the stimulus post. Also, participants might have correlated their task performance with their workload ratings when indicating their required effort. The required effort was based on participants' opinions and was, therefore, not an objective measurement. Additionally, participants might have given socially desirable answers regarding the difficulty experienced in completing the task. Further research could apply the NASA-TLX at two time-points within the experiment, once after participants complete the self-control task and again after they have studied the Instagram post, ruling out the chance of correlating the personal performance with the workload of the task.

This study's sample consisted mostly of female participants. Women tend to follow influencers more often than men (Clement, 2019b). Therefore, women are more likely to follow an influencer on Instagram and to be presented with sponsored editorial content that contains a form of disclosure than men. For the female participants of this study, it could have been easier to imagine the scenario with which they were presented in the online experiment. In further research, the focus should be on a more equal gender distribution to investigate whether these gender differences are unique in the present research or occur naturally.

Further, the convenience sampling method was applied, which resulted in a deficit of participants, which therefore constrains the representativeness and generalizability of the research results. The current sample runs the risk of homogeneity, as it consists mostly of young adults currently enrolled as students. Although data were collected over multiple weeks, no further participants could be recruited for this study. However, an increase in the number of participants would have not been likely to result in changes in the outcomes, since participants familiar with Instagram, and Instagram users in general, are a relatively homogeneous population. Further research should try to increase the number of participants by applying different sampling methods and collecting data from numerous demographics, thereby enhancing external validity.

Another limitation, along with the small sample size, is the fact that not all conditions were distributed equally, which makes interpreting the results difficult. Although participants were randomly assigned to one of the experimental conditions with the help of the randomizer in Qualtrics, an equal distribution could not be achieved. Further investigation into the technical aspect of equal distribution in Qualtrics is required to achieve equal distribution among the different conditions. Participants in the no depletion condition showed a higher number of incomplete cases than participants in the depletion condition, which might be due to these participants not finding the questionnaire interesting enough to continue or to them not feeling committed to the experiment due to not having completed the depletion task but rather having been able to choose any word they wanted. Future research should focus on a more equal distribution among the different conditions by correctly programming a randomizer of the survey platform to ensure greater reliability and validity of the research results to make recommendations.

The analysis of the moderating role of consumers' self-control did not reveal self-control to be a significant influence in the relationship between disclosure type and persuasion knowledge and brand evaluation. Thus, there might be other factors and variables that moderate this relationship. Studying other factors, such as advertisement recognition, disclosure position, disclosure language, and relationship with the influencer, as moderating or influencing factors could help to provide further insight into persuasion knowledge and brand evaluations to protect consumers from unwanted persuasion with recognizable forms of persuasion disclosure.

This study uses persuasion knowledge and brand evaluation as the outcomes, and thus as the dependent variables within the research. Further research could investigate the impact of different persuasion disclosure types on, for example, purchase intention, brand recall, and brand preference. Moreover, different disclosure types (textual, symbolic, and the combination of textual and symbolic) were introduced as disclosure types used on the social networking site Instagram. Further research could aim at replicating the present research on another social networking site, such as Facebook, with these disclosure types and their impact on persuasion knowledge and brand evaluation, along with testing their effectiveness in terms of advertisement recognition.

### 5.3 Practical implications

The results of this study have certain practical implications. It was demonstrated that only the combination of textual and symbolic disclosure effectively helps Instagram users to identify the commercial intent of an Instagram post. Instagram provides influencers with an automatic feature with which to declare a paid partnership with a brand; the symbolic disclosure, however, must be added manually by the influencers. Instagram should include the symbolic disclosure in its automated sponsorship disclosure feature to protect consumers from unwanted persuasion. This would also be

beneficial for influencers, as influencers who do not disclose sponsored content receive disciplinary warning letters for publishing misleading content and have to face the legal consequences.

The results show that even Instagram posts that do not contain any form of disclosure are perceived as advertisements. This shows that consumers are more and more confused when it comes to viewing editorial and non-commercial content that is published on social media. Advertisers and marketers might value consumers' confusion as beneficial for effective influencer marketing on social media. Consequently, further research on consumers' perception toward and confusion about non-commercial content and content that does not contain any form of disclosure should be investigated in further research.

The perception of non-sponsored Instagram posts as advertisements did not influence brand evaluation. Brands were not evaluated more negatively when being advertised in an Instagram post. It was found that the recognition of the sponsored relationship between the brand and the influencer resulted in better brand evaluations. This result suggests that consumers might place more trust in a brand that openly declares its marketing and advertising partners. With the help of marketing agencies, brands should in the future openly declare sponsored relationships with influencers and other advertising partners. However, further investigation on the role of the influencer and brand evaluation is essential to fully understand brand-related outcomes of paid partnerships on social media.

## 5.4 Conclusion

As native advertising, social media advertising, and the phenomenon of influencers are an emerging field of advertising, the current study makes a contribution to a rather new field of research in the area of sponsorship disclosure on social media. This study aims at increasing understanding of how different sponsorship disclosure types impact persuasion knowledge and brand evaluation. A relatively novel view on sponsorship disclosure was taken by considering the concept of consumers' self-control as a influential factor. The analysis reveals that only sponsorship disclosure in a combination of textual and symbolic forms ("This post is sponsored by BRAND" combined with, for example, "#ad," "#sponsored," or "AD") was effective in indicating the sponsored nature of the Instagram post and thereby affecting consumers' persuasion knowledge. However, depleted self-control was not found to lower persuasion knowledge or to cause consumers to be more responsive to persuasive content. Further, it did not lead to less positive brand evaluations due to the sponsored partnership. Additionally, contrary to the findings of prior research, consumers' self-control depletion was not found to be influential on persuasion knowledge and brand evaluation independent of the applied disclosure type.

The present research suggests that the different sponsorship disclosure types are not effective in clearly declaring the sponsored relationship between the influencer and the brand and call for

remodeling the legislation on advertising and sponsored brand partnerships on social media. Even posts that did not contain any form of disclosure were perceived as advertisements. This result underscores the need for consistent regulations on sponsorship disclosure in the social media context. Moreover, self-control is of less importance than previous studies suggest in moderating the role of self-control with regards to persuasion knowledge. For that reason, more investigation into the role of consumers' self-control and social media usage is required to uncover other mechanisms and motivations involved in processing sponsored editorial content online.

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## Appendix A – Pre-test of the online experiment

Dear participant,

Thank you for participating in this research as part of my master thesis at the University of Twente. In the following short questionnaire, you will be asked to arrange product brands and Instagram content categories according to what category and brand you are most familiar with and like the most.

The questionnaire will take no longer than 5 minutes. All data will be treated in strict confidence and will only be used to design a follow-up study. Your participation is completely voluntary and you are able to stop the questionnaire at any moment without giving any reasons.

Thank you for participating!

Pia Cyperek  
University of Twente  
MSc Communication Studies

Please arrange the following content categories according to your familiarity with the category where 1=least familiar and 9=most familiar.

- ☐ pets
- ☐ fashion
- ☐ entertainment
- ☐ travel
- ☐ fitness
- ☐ beauty
- ☐ home
- ☐ food
- ☐ tech & business

Please arrange the following content categories according to your liking where 1=least liked and 9=most liked.

- ☐ pets
- ☐ fashion
- ☐ entertainment
- ☐ travel
- ☐ fitness
- ☐ beauty
- ☐ home
- ☐ food
- ☐ tech & business

Please arrange the following brands according to your familiarity with the brand where 1= least familiar and 4=most familiar.

### **pets**

- ☐ PETA
- ☐ WWF
- ☐ Pedigree
- ☐ Whiskas

**fashion**

- ☐ H&M
- ☐ ASOS
- ☐ Calvin Klein
- ☐ Zara

**entertainment**

- ☐ MTV
- ☐ Disney
- ☐ Netflix
- ☐ Warner Bros.

**travel**

- ☐ National geographic
- ☐ lonely planet
- ☐ Tripadvisor
- ☐ AirBnb

**fitness**

- ☐ Nike
- ☐ Adidas
- ☐ Puma
- ☐ Reebok

**beauty**

- ☐ Mac Cosmetics
- ☐ NYX Cosmetics
- ☐ Glossier
- ☐ Maybelline

**home**

- ☐ Ikea
- ☐ MADE
- ☐ Maisons du Monde
- ☐ Oliver Bonas

**food**

- ☐ Starbucks
- ☐ Oreo
- ☐ Subway
- ☐ Ben & Jerry's

**tech & business**

- ☐ IBM
- ☐ Adobe
- ☐ Amazon
- ☐ Microsoft

Please arrange the following brands according to your liking where 1= least liked and 4=most liked.

**pets**

- ☐ PETA
- ☐ WWF
- ☐ Pedigree
- ☐ Whiskas

**fashion**

- ☐ H&M
- ☐ ASOS
- ☐ Calvin Klein
- ☐ Zara

**entertainment**

- ☐ MTV
- ☐ Disney
- ☐ Netflix
- ☐ Warner Bros.

**travel**

- ☐ National geographic
- ☐ lonely planet
- ☐ Tripadvisor
- ☐ AirBnb

**fitness**

- ☐ Nike
- ☐ Adidas
- ☐ Puma
- ☐ Reebok

**beauty**

- ☐ Mac Cosmetics
- ☐ NYX Cosmetics
- ☐ Glossier
- ☐ Maybelline

**home**

- ☐ Ikea
- ☐ MADE
- ☐ Maisons du Monde
- ☐ Oliver Bonas

**food**

- ☐ Starbucks
- ☐ Oreo
- ☐ Subway
- ☐ Ben & Jerry's

**tech & business**

- ☐ IBM ☐ Adobe ☐ Amazon ☐ Microsoft

Lastly, please answer a few questions about yourself.

**Demographics**

1. How old are you? \_\_\_\_\_
2. What is your gender?
  - ☐ male
  - ☐ female
  - ☐ other (specify): \_\_\_\_\_
3. What is your nationality?
  - ☐ German
  - ☐ Dutch
  - ☐ other \_\_\_\_\_
4. What is the highest degree or level of school you have completed? If currently enrolled, the highest degree received.
  - ☐ No schooling completed
  - ☐ Some high school, no diploma
  - ☐ High school graduate, diploma or the equivalent (for example: GED)
  - ☐ Some college credit, no degree
  - ☐ Trade/technical/vocational training
  - ☐ Associate degree
  - ☐ Bachelor's degree
  - ☐ Master's degree
  - ☐ Doctorate degree (PhD)
  - ☐ Professional degree
  - ☐ Other \_\_\_\_\_

Thank you for participating!

## Appendix B – Questionnaire online experiment

Dear respondent,

Thank you for your interest in participating in my research study on Influencer marketing on Instagram. As part of my Master thesis I am conducting the following questionnaire and thanks to your contribution and time spent, I am aiming to provide practical as well as academic insights on different disclosure types on Instagram. The questionnaire will take **10 to 15 minutes**.

There are no right or wrong answers, so I would like to encourage you to give honest answers. Please be informed that your participation in the research is completely voluntary and you are able to stop at any time without giving any reasons. Your data is treated confidentially and anonymously.

If you have any questions regarding this research do not hesitate to contact me.

Kind regards

Pia Cziperek

MSc Communications Science University of Twente

p.c.cziperek@student.utwente.nl

**I have read and understood the information that is displayed above and agree to participate in this study.**

- ☐ **I agree.**
- ☐ **I do not agree.**

Do you know the social media platform Instagram?

- ☐ Yes
- ☐ No

Do you have an Instagram account?

- ☐ Yes
- ☐ No → end of survey
- ☐ I don't know.

How often do you use Instagram on average?

- ☐ multiple times per day
- ☐ once per day
- ☐ once per week
- ☐ once per month
- ☐ less than once a month

### **Self-control task (depletion)**

In the following part, you will be asked to perform a language test as fast and as accurate as possible. Below you will find several English sayings and proverbs. It is your task to complete these incomplete sentences to create a complete sentence. **BUT NOTE:** You can only use words that **do not contain an 'e'**.

For example, "The .... go to roost" can actually supplemented with for example the word "chickens" but in your case, you have to use another word that does not contain the letter "e", such as "turtles".



If you do use a word that contains the letter 'e', your participation cannot be used for the experiment.

1. After \_\_\_\_ comes sunshine. (rain)
2. \_\_\_\_ is money. (time)
3. Better \_\_\_\_ than never. (late)
4. There is no place like \_\_\_\_\_. (home)
5. Comparing \_\_\_\_\_ to oranges. (apples)
6. As \_\_\_\_\_ as grass. (green)
7. A \_\_\_\_\_ is worth a thousand words. (picture)
8. The \_\_\_\_\_ bird catches the worm. (early)
9. Hope for the \_\_\_\_\_, but prepare for the worst. (best)
10. \_\_\_\_\_ come, easy go. (easy)
11. A \_\_\_\_\_ saved is a penny earned. (penny)
12. You can't judge a book by its \_\_\_\_\_. (cover)
13. A chain is only as strong as its \_\_\_\_\_ link. (weakest)
14. \_\_\_\_\_ is power. (knowledge)
15. Still waters run \_\_\_\_\_. (deep)

### Self-control task (not depleted)

In the following part, you will be asked to perform a language test. Below you will find several English sayings and proverbs. It is your task to complete these incomplete sentences to create a complete sentence.

1. After \_\_\_\_ comes sunshine. (rain)
2. \_\_\_\_ is money. (time)
3. Better \_\_\_\_ than never. (late)
4. There is no place like \_\_\_\_\_. (home)
5. Comparing \_\_\_\_\_ to oranges. (apples)
6. As \_\_\_\_\_ as grass. (green)
7. A \_\_\_\_\_ is worth a thousand words. (picture)
8. The \_\_\_\_\_ bird catches the worm. (early)
9. Hope for the \_\_\_\_\_, but prepare for the worst. (best)
10. \_\_\_\_\_ come, easy go. (easy)
11. A \_\_\_\_\_ saved is a penny earned. (penny)
12. You can't judge a book by its \_\_\_\_\_. (cover)
13. A chain is only as strong as its \_\_\_\_\_ link. (weakest)
14. \_\_\_\_\_ is power. (knowledge)
15. Still waters run \_\_\_\_\_. (deep)

### Required effort

The following statements are about the sentences task that you just performed. Please indicate to what extent you found the task effortful from 1=very low to 7=very high.

- How mentally demanding was the task?
- How physically demanding was the task?
- How hurried or rushed was the pace of the task?
- How successful were you in accomplishing what you were asked to do?
- How hard did you have to work to accomplish your level of performance?

- How insecure, discouraged, irritated, stressed and annoyed were you?

### **Instagram posts – persuasion disclosure type**

In the following you can choose a content category from you will see an Instagram post. The blogger is a regular Instagram user and posts about her daily activities and experiences which she shares with her followers. Imagine you are seeing the following post in your own Instagram feed on your smartphone. To participate in this experiment, you will have to look at the following post for at least 15 seconds before you can continue and click through to the next page.

I would like to study a post from the content category...

- Home
- Travel
- Pets
- Food

1. Textual disclosure
2. Symbolic disclosure
3. Textual and symbolic disclosure
4. No sponsorship disclosure

See Appendix C for the Instagram post per condition.

### **Persuasion Knowledge**

Totally disagree – Disagree – Slightly disagree – Neutral – Somewhat agree – Agree – Totally Agree

Please indicate to what extent you agree to the following statements from 1 = totally disagree to 7 = totally agree.

- The Instagram posts by the influencer is advertised.
- Showing the product/brand by the Influencer is an advertisement.

Please indicate to what extent you agree to the following statements.

The product/brand was shown by the Influencer to....

- to inform the consumer
- to sell product/brand XXX
- to let product/brand XXX be liked → make me/the consumer like product/brand XXX
- to entertain the consumer
- to stimulate the sale of product/brand XXX
- to influence the consumer

Please indicate to what extent you agree to the following statements based on the Instagram post you just viewed. I think the post of the Influencer on product/brand is...

- unreliable/ reliable
- not persuasive/ persuasive
- unfair/ fair
- not manipulative/ manipulative
- not fun/ fun
- not credible/ credible
- not entertaining /entertaining
- not misleading/ misleading
- unacceptable/ acceptable
- not annoying/ annoying

- distracting/ not distracting

### **Brand evaluation**

In the following, you are asked to evaluate the brand shown in the Instagram post. Please indicate to what extent you agree to the following items.

- bad/good
- unfavorable/ favorable
- dislikable/likable
- disagreeable/agreeable

**Lastly, please answer a few questions about yourself.**

### Demographics

How old are you? \_\_\_\_\_ years

What is your gender?

- ☐ male
- ☐ female
- ☐ other (specify): \_\_\_\_\_

What is your nationality?

- ☐ German
- ☐ Dutch
- ☐ other \_\_\_\_\_

What is the highest degree or level of school you have completed? If currently enrolled, the highest degree received.

- ☐ No schooling completed
- ☐ Some high school, no diploma
- ☐ High school graduate, diploma or the equivalent (for example: GED)
- ☐ Some college credit, no degree
- ☐ Trade/technical/vocational training
- ☐ Associate degree
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Doctorate degree (PhD)
- ☐ Professional degree
- ☐ Other \_\_\_\_\_

### **Debriefing**

The purpose of the online experiment was to investigate how different persuasion disclosure types (i.e. “#ad, AD and This post is sponsored by ...”) impact persuasion knowledge (knowledge of being persuaded by for example an advertisement) and brand evaluation influenced by self-control (the ability to control your feelings that you want to show). It was necessary to withhold information about the purpose of the online experiment prior to your participation in order to obtain unbiased responses.

If you wish to withdraw your initial consent for participating in this questionnaire please send an e-mail to the researcher: [p.c.czyperek@student.utwente.nl](mailto:p.c.czyperek@student.utwente.nl).

The Instagram posts that were shown within this research were fictitious and were only created for the purpose of this research study.

## Appendix C – Stimulus material Instagram posts

### Home – Ikea



Figure 1 Home - Ikea - symbolic disclosure



Figure 3 Home - Ikea - textual disclosure



Figure 2 Home - Ikea - no disclosure



Figure 4 Home - Ikea - combination of textual and symbolic disclosure

## Home –Maisons du Monde



Figure 5 Home - Maisons du Monde –symbolic disclosure



Figure 6 Home - Maisons du Monde - no disclosure



Figure 7 Home - Maisons du Monde - textual disclosure



Figure 8 Home - Maisons du Monde - combination of textual and symbolic disclosure



## Travel – Airbnb



Figure 9 Travel - Airbnb - symbolic disclosure



Figure 10 Travel - Airbnb - no disclosure



Figure 11 Travel - Airbnb - textual disclosure



Figure 12 Travel - Airbnb - combination of textual and symbolic disclosure

## Travel – TripAdvisor

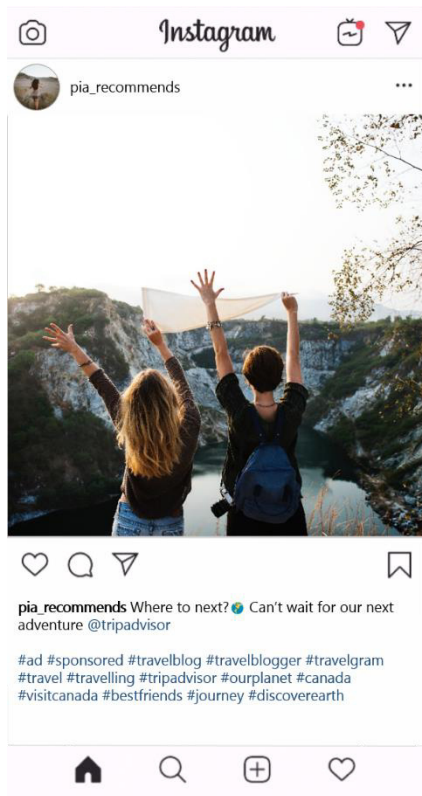


Figure 13 Travel - TripAdvisor - symbolic disclosure

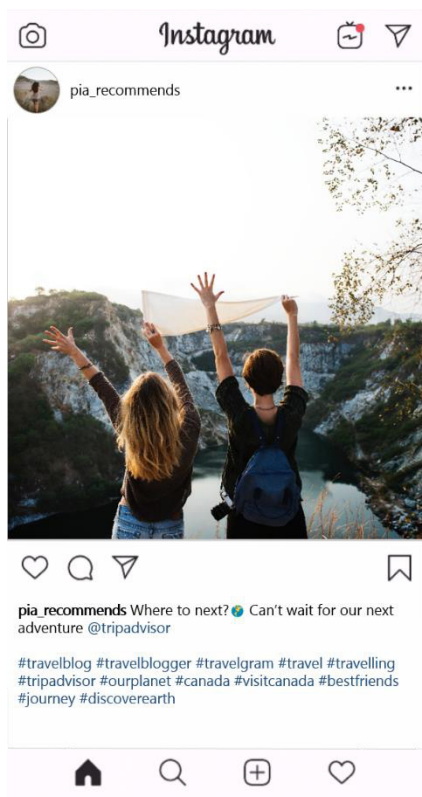


Figure 14 Travel - TripAdvisor - no disclosure

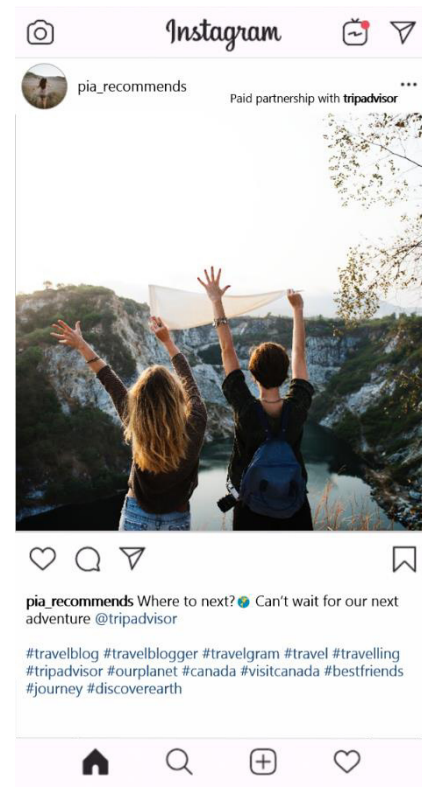


Figure 15 Travel - TripAdvisor - textual disclosure

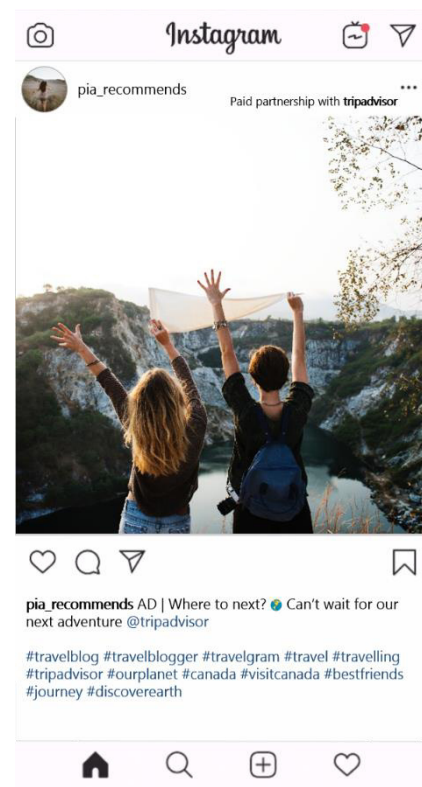


Figure 16 Travel - TripAdvisor - combination of textual and symbolic disclosure



## Pets – WWF



Figure 17 Pets - WWF - symbolic disclosure

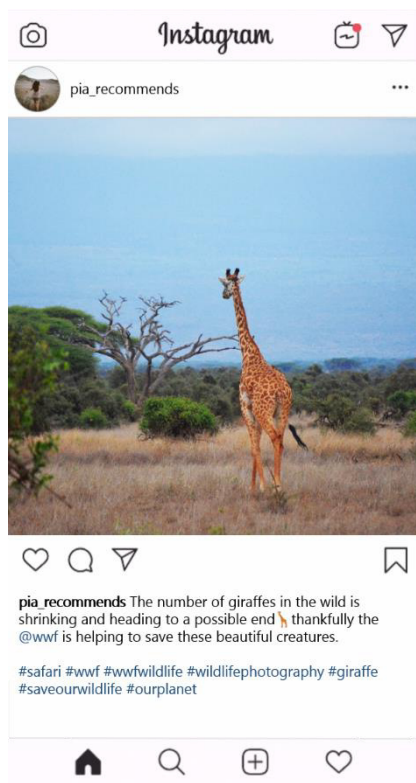


Figure 18 Pets - WWF - no disclosure

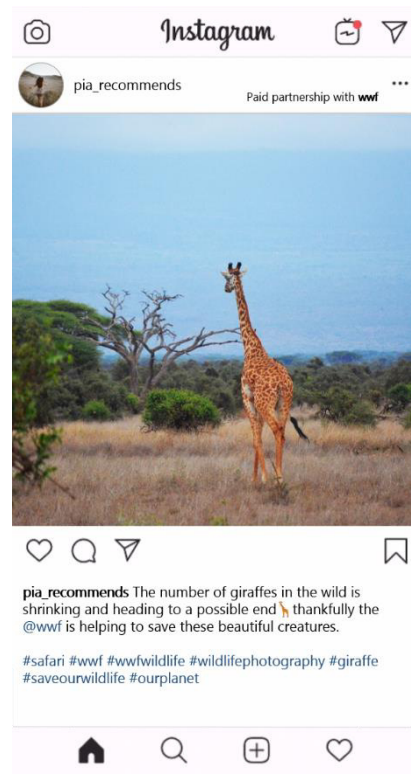


Figure 19 Pets - WWF - textual disclosure

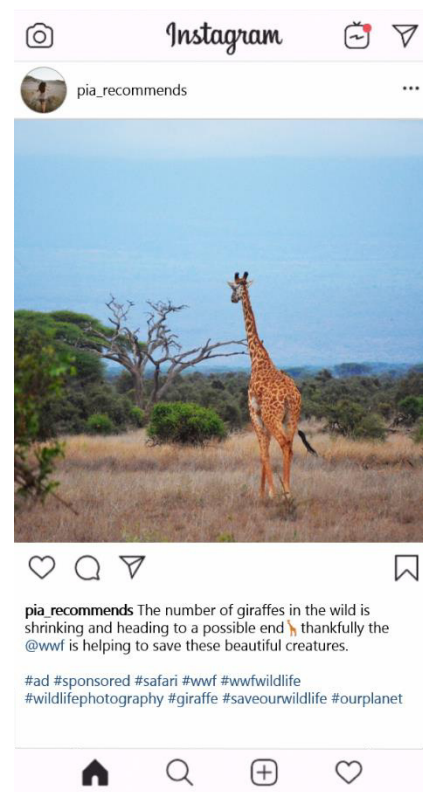


Figure 20 Pets - WWF - Combination of textual and symbolic disclosure

## Pets – PETA



Figure 21 Pets - PETA - symbolic disclosure



Figure 22 Pets - PETA - no disclosure



Figure 23 Pets - PETA - textual disclosure



Figure 24 Pets - PETA - combination of textual and symbolic disclosure



## Food – Ben & Jerry's



Figure 25 Food - Ben & Jerry's - symbolic disclosure



Figure 26 Food - Ben & Jerry's - no disclosure



Figure 27 Food - Ben & Jerry's - textual disclosure



Figure 28 Food - Ben & Jerry's - combination of textual and symbolic disclosure

## Food – Subway



Figure 29 Food - Subway - symbolic disclosure



Figure 30 Food - Subway - no disclosure



Figure 31 Food - Subway - textual disclosure



Figure 32 Food - Subway - combination of textual and symbolic disclosure