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Understanding which cues people use to identify influencer marketing on Instagram: an eye tracking study and experiment

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ABSTRACT

While influencer marketing is gaining importance as a social media advertising strategy and guidelines require influencers to disclose the practice, it is still unclear whether Instagram users recognize and understand this type of advertising. This study aims to gain insights into the level of persuasion knowledge of influencer marketing on Instagram, and which cues Instagram users use to identify influencer marketing. An eye tracking study ($N=67$) and an online experiment ($N=371$) reveal that (1) Instagram users seem to be aware of influencer marketing but also make mistakes in identifying it within their Instagram feed, (2) users pay most attention to brand tags in pictures and 'Paid partnership' labels and least attention to #ad, and (3) disclosures, brand presence, and influencer type all influence the level of conceptual persuasion knowledge. Although previous research has shown that disclosures can be important drivers of persuasion knowledge activation, this study is the first to reveal that bottom-up factors such as brand presence and the type of influencer can also have this effect. Importantly, our findings signal that the lines between non-commercial and commercial content on Instagram are still blurred.

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Introduction

Influencer marketing is gaining importance as a social media advertising strategy as it can reach young audiences with personal, credible, and engaging content (Hudders, De Jans, and De Veirman 2021; De Veirman, Cauberghe, and Hudders 2017). The practice of influencer marketing involves compensating social media influencers—opinion leaders who communicate with a sizeable social network of people following them (De Veirman, Cauberghe, and Hudders 2017; Uzunoğlu and Misci Kip 2014)—to endorse products, brands, organizations, or ideas on their social media profiles

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(Campbell and Farrell 2020; Hudders, De Jans, and De Veirman 2021). As Instagram is currently the most popular social media channel for influencer marketing (Influencer Marketing Hub 2021), this study focuses on Instagram.

The success of influencer marketing can be partly explained by its covert nature (Campbell and Grimm 2019; Hudders, De Jans, and De Veirman 2021). Influencers often combine non-commercial and commercial posts making it difficult for their followers to distinguish between personal and sponsored posts. Therefore, the practice has instigated concerns about whether its persuasive intent is clear enough for its audiences (e.g. Campbell and Grimm 2019; Hoofnagle and Meleshinsky 2015). The Federal Trade Commission (FTC) in the US and the European Advertising Standards Alliance (EASA) have created guidelines that aim to increase transparency by requiring influencers and brands to clearly disclose any commercial relationship (FTC 2019; EASA 2018). Research has shown that disclosures such as #paidad, #sponsored and the 'Paid partnership' label can indeed increase ad recognition in the context of influencer marketing (Boerman 2020; Lou, Ma and Feng 2021; De Jans, Cauberghe and Hudders 2018; De Veirman and Hudders 2020; Evans et al. 2017; Kim and Kim 2021).

Interestingly, research also suggests that Instagram users seem to be well aware of advertising on Instagram (Chen 2018; Djafarova and Trofimenko 2019; Johnson, Potocki and Veldhuis 2019; Van Dam and Van Reijmersdal 2019). This raises the question whether we should be concerned about Instagram user's ability to identify influencer marketing, and whether users need disclosures. As persuasion knowledge is assumed to develop and shape by direct and indirect experience with advertising and persuasive episodes (Evans and Park 2015; Friestad and Wright 1994), Instagram users may have plenty of experience with influencer marketing and thus their persuasion knowledge regarding the advertising tactic may be well-developed. Although there is a large amount of disclosure studies (see Eisend et al. 2020 for a meta-analysis), most studies merely compare the same social media posts with and without disclosures. Therefore, it is still unclear whether people can identify influencer marketing within the broader and more realistic context of an Instagram timeline. The first aim of this study is to contribute to the large body of disclosure research by gaining insights into user's general level of persuasion knowledge of influencer marketing on Instagram.

Furthermore, there is still a tremendous amount of uncertainty about how consumers process influencer marketing and disclosures, and how they come to recognize influencer marketing (Campbell and Grimm 2019). Research into people's persuasion knowledge of sponsored content—such as influencer marketing—often focuses on disclosures as the most important antecedent of persuasion knowledge activation. However, based on the Persuasion Knowledge Model (PKM; Friestad and Wright 1994) and Covert Advertising Recognition and Effects (CARE) model (Wojdyski and Evans 2020), we propose that there are other cues that help users to infer the persuasive intent of a message, such as individual differences and context-driven (bottom-up) factors (e.g. message characteristics and delivery context). Thus, although many studies have provided evidence that disclosures can help users to activate persuasion knowledge (Eisend et al. 2020), we argue that people's ability to identify influencer marketing depends upon both top-down (i.e.

disclosures) and context-driven, bottom-up (i.e. brand presence and influencer type) cues. For instance, the mere presence of a brand in a post (e.g. a mention of a brand or a brand tag in a picture) may signal to users that an influencer might be paid to post the content. Additionally, users that are familiar with the fact that popular Instagrammers with many followers are likely to make money with their account may infer, based upon the source, that a post is sponsored (Boerman 2020; Domingues Aguiar and Van Reijmersdal 2018; Pedroni 2016). Thus, our second contribution to the literature is to add to our theoretical knowledge about the factors that drive the activation of persuasion knowledge in the context of influencer marketing.

Altogether, this study makes theoretical contributions to the understanding of Instagram user's level of persuasion knowledge of influencer marketing, and which top-down and bottom-up cues Instagram users attend to and use to identify influencer marketing. First, we report an eye tracking study ($N=67$) in which we investigated which cues Instagram users attend to in an Instagram timeline. Second, we describe an online experiment ($N=371$) comparing the effects of disclosures, brand presence, and influencer type on various levels of conceptual persuasion knowledge (i.e. ad recognition, understanding of selling and persuasive intent, and understanding of commercial source).

Persuasion knowledge in the context of influencer marketing

The PKM (Friestad and Wright 1994) was introduced to describe people's knowledge and understanding of persuasive messages, including advertising. The model proposes that personal persuasion knowledge, as a broad and frequently accessed knowledge structure, 'hovers' in readiness, available to people as an immediate source of help that they can depend on in generating valid product and agent attitudes (Friestad and Wright 1994). This means that people can activate and use their persuasion knowledge as soon as they recognize a persuasive message.

In the literature, the psychological model is regularly used to describe how people respond to and cope with sponsored content such as influencer marketing (Boerman, Van Reijmersdal, Rozendaal, and Dima 2018; Friestad and Wright 1999; Ham and Nelson 2019). Scholars often argue that hiding the persuasive message—for instance by asking an influencer to post a sponsored message—may circumvent the activation of persuasion knowledge (Boerman 2020; Evans et al. 2017). However, studies also show that people *do* state to know when Instagram posts are advertising (Chen 2018; Djafarova and Trofimenko 2019; Johnson et al. 2019). This would mean that influencer marketing does not circumvent the activation of persuasion knowledge, and Instagram users do recognize and understand the advertising tactic.

Intrigued by these seemingly contradictory findings, we want to gain insights into how well-developed Instagram users' persuasion knowledge is by presenting them an Instagram timeline and test their ability to identify sponsored content. Our first research question is therefore:

RQ1: To what extent are Instagram users able to distinguish commercial from non-commercial Instagram posts?

Attention to disclosures and brand cues

The CARE model (Wojdynski and Evans 2020) outlines potential antecedents and processes underlying the recognition of covert advertising. In general, the model proposes that the activation of persuasion knowledge relies on top-down, disclosure-driven and bottom-up, context-driven pathways. Covert advertising practices, such as influencer marketing, do not immediately convey their selling and persuasive intent through format alone. Therefore, the authors propose, users must utilize top-down cues, such as disclosures, and bottom-up cues within the message to estimate the message's intent. Based on this model, we argue that Instagram users may thus not only rely on disclosures, but also bottom-up factors to infer whether a post contains sponsored content.

The model refers to *disclosures* (e.g. #paidad and the 'Paid partnership' label) as a top-down factor that should be able to inform audiences about the commercial nature of Instagram posts. The disclosures used on Instagram vary in content, position, and visual prominence. Influencers can choose to use the standardized 'Paid partnership with [brand]' disclosure that is built in the Instagram platform and is placed on top of the picture. Alternatively, they can choose to include a hashtag in the caption underneath the picture. These hashtags can vary regarding their specificity and explicitness. Often used hashtags are #ad, #paidad, and #spon (FTC 2019). Studies have shown that disclosures such as the 'Paid partnership' label and #paidad can increase ad recognition (Boerman 2020; De Jans et al. 2018; De Veirman and Hudders 2020; Evans et al. 2017; Kim and Kim 2021; Lou, Ma, and Feng 2021). Research has also stressed that attention to a disclosure is vital, as attention to a disclosure increases its effect on ad recognition (Boerman, Van Reijmersdal and Neijens 2015, Wojdynski et al. 2017). Some studies even show that disclosures cannot activate persuasion knowledge when people do not attend to them (e.g. Boerman and Van Reijmersdal 2020; Van Reijmersdal et al. 2020).

The fact that disclosures on Instagram differ with regard to their content, position, and prominence is essential, as these factors influence users' attention to and the effects of a disclosure (Wojdynski et al. 2017; Wojdynski and Evans 2016). For instance, research comparing the effectiveness of different hashtags on Instagram showed that #paidad increased ad recognition, whereas #SP and #sponsored did not (Evans et al. 2017). In addition, people are least likely to engage with posts with clearer hashtags (such as #ad, #sponsored) than more ambiguous hashtags (e.g. #sp, #partner; Lou, Tan and Chen 2019). To our knowledge, no study has yet made a direct comparison between hashtags and the built-in label. We believe that such a comparison is vital to gain an understanding of which disclosures are clear and conspicuous (Campbell and Grimm 2019). Especially because the disclosures differ in position and content which may influence people's attention to them, and thus the degree to which they can effectively increase ad recognition.

Furthermore, the CARE model (Wojdynski and Evans 2020) introduces *brand presence* as bottom-up factor that influences ad recognition. The way in which the brand is communicated by the influencer on Instagram can be an important cue for users to activate existing advertising schema and persuasion knowledge. On Instagram, influencers have various opportunities to communicate a brand: they can mention the brand in the caption (either by just mentioning the brand, by referring to its account by adding @, or by including a hashtag) or they can tag the brand in the picture.

Prior research has shown that more prominently placed brands are more likely to activate persuasion knowledge (Cowley and Barron 2008; Van Reijmersdal, Neijens, and Smit 2005), whereas other studies do not find proof of such an effect of brand presence (Choi et al. 2018; Krouwer, Poels, and Paulussen 2017). To gain an understanding of how much attention the different disclosures and brand presence cues attract, and thus the degree to which can be used to infer whether posts are advertising, we conducted an eye tracking study. Our second research question is:

RQ2: How much visual attention do people attend to various disclosures and brand presence cues in an Instagram timeline?

Study 1: eye tracking study

Method and participants study 1

The eye tracking was conducted in the lab of the university in April 2019. Participants were asked to watch a video representing scrolling through an Instagram feed, showing a total of 50 different Instagram posts. A total of 72 participants were recruited through an internal university website, as well as flyers that were spread in the university. We excluded participants who did not have an Instagram account ($n=2$), were not comfortable filling out the questionnaire in English ($n=1$), and due to technical issues during the eye tracking ($n=2$), leading to a final sample of 67 Instagram users (79.1% female, $M_{\text{age}} = 22.25$, $SD_{\text{age}} = 4.16$). More than half of them had completed high school (58.2%) and 28.4% had a bachelor's degree, reflecting the sample's student character. Most participants used Instagram multiple times a day (76.1%).

Procedure study 1

Upon arrival, participants read an introductory text and signed an informed consent sheet before being asked to sit comfortably behind a 22-inch screen. The screen was placed approximately 21 to 28 inches from the participant. After successful 9-point calibration, participants were exposed to a video showing an Instagram feed. Eye movements were registered using the SMI RED eye-tracker with a gaze sample rate of 120 Hz per second. After watching the video, participants were asked to fill out a questionnaire on a computer in another room. This questionnaire asked participants about their ad recognition, followed by variables that were not included in this study (i.e. brand memory, disclosure memory, dispositional understanding of intent and source,¹ dispositional ad scepticism, dispositional ad liking), and ended with control questions about having an Instagram account, Instagram usage, age, gender, education, and a language check). Finally, participants were debriefed, thanked, and received either €5 or two research credits for taking part in the study.

Stimulus material study 1

We created a 4min 12s video that resembled scrolling through an Instagram feed of 50 posts (video available via [Online Appendix A](#)). Each post was shown for three

seconds, while scrolling to the next post took 2 seconds to resemble natural scrolling behaviour. All posts were real Instagram posts from 50 different, real Instagram accounts, with varying degrees of popularity ranging from nano-influencers (min. 711 followers) to macro-influencers (max. 122 million followers).

Half of the posts contained advertising while the other half were non-commercial fillers. Each of the 25 commercial post contained a combination of *disclosures* (i.e. the 'Paid Partnership' label above the picture, #paidad at the start or end of the caption, #ad at the start or end of the caption, or no disclosure) and *brand presence cues* (i.e. @brand in the caption, #brand in the caption, brand mentioned in the caption, or a brand tag in the picture). All combinations were included, some of which occurred multiple times to create 25 sponsored posts (see a detailed overview of all posts and combinations in [Tables 4 and 5 in the Online Appendix](#)). When the posts contained a brand tag in the picture, this brand tag appeared after one second and was visible for three seconds, before disappearing again and scrolling onto the next post.

Measures study 1

Visual attention to cues

The recorded eye tracking data were prepared and exported using the SMI BeGaze software. We created individual areas of interest (AOIs) for all disclosures and brand cues. Visual attention was measured with fixation time in milliseconds within each AOI. A fixation was measured whenever the eyes stayed at a point for at least 80 milliseconds. Fixation time is considered a valid indicator of attention that reflects participant's processing depth (King et al. 2019).

Ad recognition

To measure ad recognition, we presented participants all pictures that were shown in the video and asked them to select those that they thought contained advertising or were sponsored. Small versions of the pictures (cut out of the Instagram timeline, excluding all other information such as captions and disclosures) were presented in lists of ten per page, and participants could select as many pictures as they wanted. This question led to an ad recognition score for each of the 50 Instagram posts in the feed (0 = *not identified as ad*, 1 = *identified as ad*). This measure provided two different insights. On a participant-level, it indicates the mean number of ads that participants identified as advertising ($M=21.28$, $SD=6.75$). On Instagram post-level, it specifies the percentage of participants that identified each post as advertising ($M=42.57$, $SD=29.12$).

Results study 1

Self-reported ad recognition

On average, participants recognized 16.97 ($SD=4.87$) of the 25 commercial posts as advertising and classified 4.31 ($SD=3.06$) of the 25 non-commercial posts as advertising. An ANOVA with the mean percentage of participants that indicated posts as

advertising as dependent variable, and the type of post (commercial vs. non-commercial post) as factor revealed a significant difference in ad recognition, $F(1, 48) = 161.43$, $p < .001$. On average, 67.9% of the 25 sponsored posts were correctly identified as advertising ($M=67.88$, $SD=13.08$), whereas 17.3% of the non-commercial posts were erroneously classified as advertising ($M=17.25$, $SD=15.03$). [Table 1](#) presents the percentage of people that indicated posts as advertising for each cue.

For the commercial posts, the minimum percentage of ad recognition was 41.8% (post of picture of a dog with #paidad and brand mentioned in caption) and the maximum was 88.1% (post by Kendall Jenner with 'Paid partnership' label and brand tag). One non-commercial post was erroneously classified as advertising by 59.7% of the participants (see [Figure 2](#) in [Online Appendix](#)). This post was by an influencer with 542,000 followers and showed him sitting on a bench with the Nike swoosh clearly visible on his shoes, which may have caused this suspicion.

Visual attention to cues

[Table 1](#) shows the average fixation times for the disclosures and brand presence cues, among all participants (i.e. including zeroes) and among participants who did fixate on the cue (i.e. excluding zeroes). Paired samples t-tests amongst all possible variations in the full sample showed a clear pattern. People paid most visual attention to brand tags in the picture ($M=260.64$ ms) and the 'Paid partnership' label ($M=236.45$ ms), and the least attention to #ad at the end ($M=34.21$ ms) and at the start of caption ($M=58.15$ ms).

In addition, more than half of the participants did not fixate on #ad at the start of the caption (62.7%) and on #ad at the end of a caption (56.7%). Paired samples t-tests among participants that fixated on the cues showed that, *when* participants fixated on the cues, they also spent significantly the most visual attention to the brand tag in a picture ($M=323.39$ ms) and 'Paid partnership' label ($M=251.46$ ms).

Conclusions study 1

The eye tracking study provides two important insights. Regarding RQ1, the findings indicate that people are able to distinguish commercial from non-commercial Instagram posts, however, they also make mistakes. Although most sponsored posts were correctly identified as advertising, participants also failed to identify several sponsored posts as advertising, and erroneously classified posts as advertising while they were not sponsored. The design of the eye tracking study does not enable us to empirically test what factors may have triggered these mistakes. The percentages of ad recognition do seem to be consistently high for posts by influencers with more than 10 million followers (see [Table 5](#) in the [Online Appendix](#) for an overview), indicating that the type of influencer may influence ad recognition. In addition, the picture that was erroneously classified as advertising by 60% of the participants clearly showed a brand symbol (Nike swoosh on shoes, see [Figure 2](#) in [Online Appendix](#)), which may have caused participants to believe it was advertising.

With respect to RQ2, the eye tracking study reveals that there is a large difference in visual attention between the disclosures and brand presence cues. Users paid most

Table 1. Ad recognition and visual attention to the disclosures and brand cues (Study 1, $N=67$).

	Ad recognition	Fixation time in ms, including 0	Fixation time in ms, excluding 0	Participants that did not fixate on cue*	Appearances in timeline
No disclosure or brand	17.3				
Brand tag in picture	68.3	260.64 ^a	323.39 ^a	19.4	4
'Paid partnership' label	71.0	236.45 ^a	251.46 ^a	6.0	7
#brand in caption	63.9	146.77 ^b	163.90 ^b	10.4	6
#paidad at start of caption	60.2	104.11 ^c	178.86 ^b	41.8	3
@brand in caption	70.3	104.00 ^c	142.20 ^{bd}	26.9	8
#paidad at end of caption	72.6	88.58 ^{cd}	164.85 ^b	46.3	3
Brand in caption	66.8	71.36 ^d	88.54 ^{ce}	19.4	8
#ad at start of caption	70.9	58.15 ^{de}	155.84 ^{be}	62.7	2
#ad at end of caption	60.1	34.21 ^e	79.04 ^{cde}	56.7	4

Note. Ad recognition scores represent the percentage of participants that indicated posts with this cue as advertising. ms = milliseconds.

*scores represent the percentage of participants with a fixation time of 0.0 milliseconds.

^{a-e}Values of fixation time with different superscripts in same column differ significantly from each other at $p < .05$.

attention to a brand tag in the picture (a brand presence cue) and the 'Paid partnership' label (a disclosure). Interestingly, these are the only two cues that were not part of the caption. These findings may thus be explained by the notion that Instagram is a highly visual medium, prioritising pictures and videos (Marengo et al. 2018; McCrory, Best and Maddock 2020), and suggest that users focus mostly on the information in and surrounding the actual visual content rather than the text underneath the picture. In addition, the 'Paid partnership' label is positioned on the top left, which is assumed to be the best position for a disclosure if users follow typical F-shaped viewing patterns (Wojdyski and Evans 2016). Although prior studies into disclosure of native advertising in news articles found that top disclosures attract the least attention because people may not follow the typical viewing pattern (e.g. Krouwer et al. 2017; Wojdyski and Evans 2016; Wojdyski et al. 2017), our eye tracking study reveals that, in the context of Instagram, the top left position is useful.

Furthermore, most users did pay some attention to hashtags communicating a brand. However, influencers may also mention brands without being paid to do so. Thus, although hashtags with brands attract attention, they do not function as a disclosure of sponsored content. Hashtags that do directly communicate that a post is a(n paid) ad often go unnoticed: more than half of the participants did not fixate at all at #ad, both at the start and end of a caption. This may be due to its size, as #ad was the smallest cue in our design. In addition, #paidad was not noticed by more than 41% of our participants, even when it was at the start of the caption. This finding is in line with previous research that showed that people often do not remember hashtag disclosures in Instagram posts (Evans et al. 2017).

Effects of disclosure and brand presence on persuasion knowledge

Although the eye tracking study provided some important insights into what cues catch the eye and how well people can distinguish commercial from non-commercial posts, it cannot provide us information on *why* people recognized some ads better than others. Based upon the findings of our eye tracking study and the literature,

we conducted an online experiment in which we compare the effects of the two most common disclosures that have proven to increase ad recognition (the standard 'Paid Partnership' label and #paidad), the bottom-up cue that attracted most attention (brand tag in picture), and influencer type as additional bottom-up cue.

Furthermore, where previous studies into the effects of disclosures of influencer marketing on Instagram tend to focus only on ad recognition as a measure of persuasion knowledge (Boerman 2020; Lou, Ma and Feng 2021; De Veirman and Hudders 2020; De Cicco, Iacobucci, and Pagliaro 2021; Evans et al. 2017), we believe it is also important to study more elaborate levels of conceptual persuasion knowledge. Conceptual persuasion knowledge includes the recognition of advertising but also the understanding of the selling and persuasive intent of a message, and understanding of the commercial source of sponsored content (Boerman et al. 2018; Rozendaal et al. 2011). Prior research has shown that disclosures can indeed increase the understanding of selling and persuasive intent and commercial source amongst adults (Van Reijmersdal et al. 2015) and children (Boerman and Van Reijmersdal 2020; De Pauw, Hudders and Cauberghe 2018).

Our eye tracking study revealed that Instagram users pay most attention to the 'Paid partnership' label and brand tags. The 'Paid partnership' label is a top-down disclosure that has already proven to increase ad recognition (Boerman 2020; Iacobucci and De Cicco 2020). In addition, its language is explicit and directly conveys the paid relationship between the influencer and the brand, which is suggested to be essential for an effective disclosure (Wojdyski et al. 2017). Therefore, we expect this top-down factor to lead to the highest level of ad recognition, understanding of selling and persuasive intent, and understanding of source.

Based upon the eye tracking study, an important bottom-up cue within the message that may facilitate the activation of persuasion knowledge is a brand tag in a picture. Brand tags attracted most attention in our eye tracking study, which shows that it is an effective way to communicate brand presence. This brand presence in an Instagram post may make users suspicious about the influencer's intent, increasing the chance that they use this information to infer that a message may have a persuasive intent (Wojdyski and Evans 2020). Based on users' experience with Instagram and influencer marketing, a brand tag may activate advertising schema and signal to users that the influencer chooses to prominently communicate the brand. However, a brand tag only communicates the brand's presence, it does *not* disclose any commercial relationship between the influencer and the brand. Users may thus—perhaps incorrectly—infer that the influencer was paid to post the branded content. Thus, although a brand tag does not guarantee that a post is advertising, we expect that users will see this as such an obvious way of communicating the brand that this may activate persuasion knowledge. We therefore expect brand tags to lead to considerable high levels of ad recognition, understanding of selling and persuasive intent, and understanding of source.

Finally, although #paidad did not attract a lot of visual attention in the eye tracking study, it attracted more attention than #ad. In addition, research identified this hashtag as the one that is most often remembered, and the most effective hashtag to increase ad recognition (compared to #SP and #Sponsored; Evans et al. 2017). Because a direct comparison between the commonly-used hashtag and the built-in label is vital to

gain an understanding of which disclosures are clear and conspicuous, we also included this top-down cue in our experiment. As this hashtag attracted less attention than the brand tag and 'Paid partnership' label, we expect #paidad to be the least effective in increasing ad recognition, understanding of selling and persuasive intent, and understanding of source, compared to no cue at all. This leads to the following hypothesis:

H1: The 'Paid partnership' label will lead to the highest levels of a) ad recognition, b) understanding of selling and persuasive intent, and c) understanding of source, followed by a brand tag, then #paidad, and no cue resulting in the lowest levels.

Effect of influencer type on persuasion knowledge

One very important element of the PKM that influences how people cope with persuasive messages is an individual's agent knowledge. Agent knowledge refers to whomever a person identifies as being responsible for designing and constructing a persuasion attempt (Friestad and Wright 1994) and consists of a person's beliefs about characteristics and goals of the persuasion agent (Ham and Nelson 2019). People can use their beliefs about the agent's characteristics and goals to cope with a persuasive message. Also in the CARE model, Wojdyski and Evans (2020) argue that the identification of source is intertwined with consumers' judgments about the intent of the message. Therefore, we propose that, next to the top-down factor 'disclosure' and bottom-up message cue 'brand tag', there is another potentially relevant bottom-up factor that may determine persuasion knowledge: the agent (or source) of the message. In the context of influencer marketing, the agent that is directly connected to a sponsored post is the influencer.

Influencers are often categorized based on the number of followers. Although cut-off points differ, in general nano-influencers have up to 5,000 followers, micro-influencers have 5,000–10,000 followers, meso-influencers have 10,000 to a million followers, and macro- or mega-influencers have more than a million followers (Boerman 2020; Campbell and Farrell 2020; Kay, Mulcahy and Parkinson 2020; Pedroni 2016). All types of influencers have their own advantages as brand endorsers. Nano-influencers are generally cost-effective, accessible, easy to relate to and engage with, and can create high quality content that can reach small but relevant audiences (Campbell and Farrell 2020; Domingues Aguiar and Van Reijmersdal 2018). Macro-influencers can reach a large audience but with lower engagement rates, and are interesting brand endorsers because of their opinion leadership, popularity, credibility, and attractiveness (De Veirman et al. 2017; Domingues Aguiar and Van Reijmersdal 2018; Jin and Phua 2014).

We propose that, based on their own direct experience, Instagram users may have developed agent knowledge about influencers, and persuasion knowledge about influencer marketing. Part of this persuasion knowledge might be the familiarity with advertising tactics such as celebrity endorsements (Friestad and Wright 1994), and the understanding that the number of followers a person can reach is important to brands. Instagram users may therefore understand that especially macro-influencers—with more than a million followers—are interesting spokespersons for brands and

thus are often paid by brands to post sponsored content (Boerman 2020; Kay et al. 2020). Therefore, users may infer, based on the type of influencer (i.e. the agent of the message) that posts including a brand may or may not be advertising. The consistent high ad recognition rates for posts by influencers with more than 10 million followers in our eye tracking study provide some preliminary evidence for this notion. Prior research, however, failed to find a difference in ad recognition between micro- (9,000 followers) and meso-influencers (300,000 followers; Boerman 2020). This may be explained by the notion that the differences between micro- and meso-influencers are too small, and thus people do not make a clear distinction between these types of influencers. In this study, we therefore compare a very small nano-influencer to a large macro-influencer, and propose the following hypothesis:

H2: Compared to a nano-influencer, a macro-influencer will lead to higher levels of (a) ad recognition, (b) understanding of selling and persuasive intent, and (c) understanding of source.

Combining the two hypothesized main effects, we also expect an interaction effect of the cues and influencer type. Disclosures are used to remove any uncertainty, or ambiguity whenever a communication is not clearly understood to be an ad (Campbell and Grimm 2019). Prior research has shown that both #paidad (Evans et al. 2017) and the 'Paid partnership' label (Boerman 2020; Iacobucci and De Cicco 2020) in Instagram posts can indeed increase ad recognition. If disclosures indeed induce sufficiently high levels of conceptual persuasion knowledge, users do not need to rely on other, context-driven, bottom-up cues such as the source of the message (i.e. influencer type). This would mean that, when a disclosure is included, the differences in conceptual persuasion knowledge between the nano- and macro-influencer is minimal.

When a disclosure is *not* included, users have to rely on context-driven, bottom-up cues to ascertain whether Instagram content is advertising. We expect that in more ambiguous posts without a clear disclosure, the source of the message will be an important driver of ad recognition. Users' knowledge and expectations of the different types of influencers would then be a cue for users to infer a commercial intent. We, therefore, expect larger differences in conceptual persuasion knowledge between the nano- and macro-influencer for posts that include no cue or a brand tag. Thus, we propose the following interaction hypothesis:

H3: The differences in users' ad recognition, understanding of selling and persuasive intent, and understanding of source between posts disseminated by a macro- or nano-influencer will be a) less pronounced when the post includes a disclosure (i.e. 'Paid partnership' label or #paidad), and b) will be greater when the post includes no cue or a brand tag.

Study 2: online experiment

Design and participants study 2

We conducted an online experiment with a 4 (disclosure or brand cue: no cue, 'Paid partnership' label, #paidad, brand tag in picture) x 2 (influencer type: nano-influencer vs. macro-influencer) between-subjects design. The data were collected between May

30 and June 3, 2019 via the crowdsourcing platform Prolific. Prolific offers several important advantages compared to other platforms, such as MTurk. For example, it can provide a more diverse sample, higher data quality, and pre-screening (Palan and Schitter 2018; Peer et al. 2017). People could participate in our study when they used Instagram on a regular basis, were of British nationality, and were fluent in English.

In total, 455 participants filled out the questionnaire. We excluded participants who did not complete the full questionnaire ($n=5$), who did not own an Instagram account ($n=20$), or who failed our attention checks ($n=64$), leading to a final sample of 371 participants (77.6% female, $M_{\text{age}} = 31.94$, $SD_{\text{age}} = 10.82$). Educational levels were equally distributed: 19.7% had finished high school, 29.3% did not have a college degree or had an associate degree, and 50.9% had a bachelor's degree or higher. Most participants use Instagram multiple times a day (50.9%) or approximately once a day (24.3%).

Procedure study 2

All participants were invited via the Prolific platform and were redirected to our experiment in Qualtrics. After agreeing to the informed consent form, participants were randomly assigned to one of the eight conditions (min $n=41$, max $n=52$). They were exposed to an overview of an Instagram account (the influencer type manipulation), followed by a post of that Instagrammer (including the disclosure or brand cue manipulation). Participants had to view both the overview and the post for ten seconds before being able to continue to the next page. The subsequent questionnaire entailed questions about participants' online behavioural intentions, ad recognition, brand memory, responses to the brand and influencer, brand familiarity and use, conceptual persuasion knowledge measures, attitudinal persuasion knowledge (scepticism, liking), and several control variables, manipulation checks, and demographic variables. For reasons of clarity and brevity, we decided to dismiss the attitudinal persuasion knowledge measures in this study. Upon completion, participants were debriefed, thanked and received their payment (£1). Participation took approximately 10 minutes ($M=10.05$, $SD=4.69$).

Stimulus material study 2

The stimulus materials consisted of an overview of an Instagram account (see [Figure 3 in Online Appendix](#)) and one post by that user (see [Figure 4 in Online Appendix](#)). The overview of the Instagram account showed the number of posts, followers, and following, the profile picture, name, account title, biography, and highlights. Both account pages showed a grid with six pictures. The last picture on both accounts was the manipulated post. We used real nano- and macro-influencers to increase the external validity of our study. All information was identical, except for the pictures in the overview, the number of followers, and the account title and type.

In the nano-influencer condition, the profile belonged to Marissa Bell. The account overview showed that she had 715 followers, the title 'blogger' and, no blue check mark. The introductory text to this account said:

You will now see an overview of an Instagram page and then an Instagram post, both by Marissa Bell. Marissa Bell is an Instagrammer with 715 followers. She doesn't have a verified account, that would be recognizable by a blue check mark next to her name. Take a look at the Instagram page and the post, we will ask you some questions about it afterwards.

The macro-influencer condition showed the profile of model and actress Doutzen Kroes that had six million followers, the title 'public figure', and a blue check mark. The instructions said:

'Doutzen Kroes is a well-known model and Instagrammer with 6 million followers. She also has a verified account, recognizable by the blue check mark next to her name. It means Instagram has confirmed that her account is authentic.'

Subsequent to the account overview, participants were exposed to an Instagram post by the respective account. This post contained the same picture showing a blonde woman from the back trailing a suitcase by the brand *Suit Suit*. Her face was not visible, enabling us to pretend it was a post by both accounts. The post had 214 likes and the caption said: 'Let the journey begin'. To create different conditions with respect to disclosure and brand presence, the post either included the label 'Paid partnership with suitsuit_' above the picture, #paidad in the caption, a brand tag to suitsuit_ in the picture, or no cue.

Measures study 2

Conceptual persuasion knowledge

We measured **ad recognition** by asking participants to indicate to which extent they agreed or disagreed (1 = *strongly disagree*, 7 = *strongly agree*) with four statements: 'The post I just saw contained advertising', 'The post I just saw showed or mentioned brands', 'The post I just saw was commercial', and 'The post I just saw was paid by a brand'. The mean score of these four statements was used as a measure of ad recognition (Eigenvalue = 3.07, explained variance = 76.71%, $\alpha = .90$; $M = 5.04$, $SD = 1.59$; Boerman and Van Reijmersdal 2020; Van Reijmersdal et al. 2016).

The other two measures of conceptual persuasion knowledge were based upon the Persuasion Knowledges Scales of Sponsored Content (Boerman et al. 2018). We measured participants' **understanding of selling and persuasive intent** by asking them to indicate the extent to which they agreed (1 = *strongly disagree*, 7 = *strongly agree*) with eight statements starting with 'The reason Suit Suit is shown in the Instagram post is to...' followed by six correct (e.g. 'sell products', 'make people think positively about the brand') and two incorrect, filler reasons ('entertain people' and 'make the post more fun'). The mean score of the six correct statements was used as a measure of understanding of selling and persuasive intent (Eigenvalue = 3.84, explained variance = 64.02%, $\alpha = .88$; $M = 5.99$, $SD = 0.82$). High scores indicate a better understanding of selling and persuasive intent of sponsored content.

We measured the **understanding of the commercial source** by asking participants: 'Sometimes people on Instagram mention or show a brand in their posts. To what extent do you agree or disagree with the following statements?' (1 = *strongly disagree*, 7 = *strongly agree*) 'The Instagrammer pays for showing the brand Suit Suit in the

Instagram post', 'Instagram pays for showing the brand in the Instagram post', 'Suit Suit pays for showing the brand in the Instagram post', and 'Instagram users pay for being exposed to the brand in the Instagram post'. Because the correct item (the brand is paying) best represents a person's understanding of the source of sponsored content, we used only this item as a measure of understanding the commercial source ($M=6.19$, $SD=1.08$).

Control variables

We measured participants' frequency of Instagram use ('On average, how often do you use Instagram?' 1.1% = *Never*, 0.3% = *Yearly*, 7.0% = *Monthly*, 16.4% = *Weekly*, 24.3% = *Approximately once a day*, 50.9% = *Multiple times a day*) and brand familiarity ('Before participating in this study, did you already know the brand Suit Suit?' 98.7% said no). Product interest was measured by asking participants to indicate to what extent they agreed with the items (1 = *strongly disagree*, 7 = *strongly agree*): 'I like buying suitcases and bags', 'I like seeing something about suitcases and bags on social media', and 'I am interested in suitcases and bags' ($\alpha = .91$; $M=3.49$, $SD=1.52$). Regarding the influencer, we asked participants whether they were familiar with the Instagram account (3.5% said yes), and whether they followed her on Instagram (0.5% said yes). Lastly, we asked participants about their age, gender, and educational level.

Manipulation checks

To test whether people correctly perceived the different influencer types, we asked them to indicate how many followers they thought the Instagram user had (1 = 0–1,000, 2 = 1,001–10,000, 3 = 10,001–50,000, 4 = 50,001–250,000, 5 = 250,001–1,000,000, 6 = *More than 1,000,000*). Additionally, we explained what a verified account is and asked them whether the Instagram user had a verified account (0 = *No*, 1 = *Yes*). Because the post was originally not posted by both Instagram users, we also asked participants: 'Do you believe that this picture was actually posted by the Instagram user?' (0 = *No*, 1 = *Yes*). As a manipulation check of the transparency cue, we asked participants whether they recognized seeing any of the hashtags or statements disclosing that the post contained advertising (1 = *#ad*, 2 = *#paidad*, 3 = *#sponsored*, 4 = *Paid partnership with [brand]*, 5 = *Sponsored content*, 6 = *Advertising*, 7 = *None of the above*).

Attention checks

Following recommendations by Kees et al. (2017) we included two attention checks. First, we added a statement to the product interest statements in which we asked participants to select answer option 'somewhat agree' as answer. 20 participants (4.6%) failed this check. Second, we added a question in which we told participants: 'Research shows that people, when answering questions, prefer not to pay attention and minimize their effort as much as possible. If you are reading this question, please select 'None of the above'. What was this study about?' (1 = *Managing body weight*, 2 = *Advertising on Instagram*, 3 = *Video games*, 4 = *None of the above*). 49 participants (11.3%) failed this second check and answered 'Advertising on Instagram'. In total, 64 participants were excluded because they failed one ($n=59$) or two ($n=5$) of the attention checks.

Results study 2

Manipulation check

Our manipulation of influencer type was successful. With respect to the number of followers, 84.2% in the nano-influencer condition accurately stated that the Instagram user had less than 1,000 followers and 70.2% in the macro-influencer condition correctly remembered the Instagram user had more than 1 million followers, $\chi^2(5) = 322.07$, $p < .001$. In addition, 94.7% of the participants in the nano-influencer conditions correctly recalled that the Instagram user did not have a verified account, and 92.8% of the participants in the macro-influencer conditions correctly recalled that the Instagram user had a verified account, $\chi^2(1) = 284.70$, $p < .001$. Furthermore, there was no significant difference in perceived realism of the post between the two types of influencers (nano-influencer 67.9%, macro-influencer 69.6%), $\chi^2(1) = 0.13$, $p < .721$, and there was no significant difference in the amount of participants that followed the accounts (0.5%, $n=1$ for both influencers), $\chi^2(1) = 0.00$, $p = .973$. Logically, more participants were familiar with the macro influencer (nano-influencer 0.5%, macro-influencer 6.6%), $\chi^2(1) = 10.21$, $p = .001$.

Additionally, 92.9% in the no cue conditions, and 93.6% in the brand tag conditions correctly indicated not to have seen a hashtag or statement disclosing that the post contained advertising. More importantly, 60.4% correctly recognized #paidad, and 47.1% correctly recognized the 'Paid partnership' label. Although the disclosures were not correctly recognized by all participants, correct disclosure recognition was significantly different between the groups, $\chi^2(18) = 353.60$, $p < .001$.

Randomization check

The eight experimental groups did not differ with respect to frequency of Instagram use, $F(7, 363) = 0.60$, $p = .759$, brand familiarity, $\chi^2(7) = 6.91$, $p = .438$, product interest, $F(7, 363) = 1.03$, $p = .410$, age, $F(7, 363) = 1.57$, $p = .144$, education level, $F(7, 363) = 0.65$, $p = .715$, and gender, $\chi^2(7) = 3.38$, $p = .847$.

Hypothesis testing

A MANOVA with disclosure/brand cue and influencer type as factors (see Table 2), revealed a significant effect of the cues on the three types of persuasion knowledge, Wilks' lambda = 0.78, $F(9, 878) = 10.69$, $p < .001$, $\eta^2 = 0.08$.

First, the disclosure and brand cues had a significant effect on ad recognition, $F(3, 363) = 31.98$, $p < .001$, $\eta^2 = 0.21$. Bonferroni post hoc tests showed that all differences were significant ($p < .001$), except for the comparison between the brand tag and #paidad ($p=1.000$). The 'Paid partnership' label led to the highest ad recognition ($M=6.08$) compared to all other cues (no cue $M=4.07$, #paidad $M=5.13$, brand tag $M=5.01$). Both the brand tag and #paidad led to higher ad recognition compared to no cue. This means that H1a is partially supported: the 'Paid partnership' label indeed led to the highest level of ad recognition, and no cue led to the lowest ad recognition. However, ad recognition did not differ between the brand tag and #paidad.

Table 2. Main effect of disclosure and brand cues on persuasion knowledge (Study 2, $N=371$).

	No cue	#paidad	Brand tag	'Paid Partnership' label
Ad recognition	4.07 (1.40) ^a	5.13 (1.46) ^b	5.01 (1.51) ^b	6.08 (1.32) ^c
Understanding of selling and persuasive intent	5.79 (0.84) ^a	5.94 (0.94) ^{ab}	6.03 (0.82) ^{ab}	6.25 (0.56) ^b
Understanding of source	6.07 (1.08) ^a	6.30 (1.06) ^a	6.04 (1.04) ^a	6.36 (1.14) ^a

Note. Means with different superscript in same row differ significantly from each other at $p < .05$.

Second, we found a significant effect on the understanding of the selling and persuasive intent, $F(3, 363) = 5.36$, $p = .001$, $\eta^2 = 0.04$. Bonferroni post hoc comparisons only revealed a significant difference between no cue ($M=5.79$) and the 'Paid partnership' label ($M=6.25$; $p = .001$). H1b is thus only supported for the 'Paid partnership' label.

Third, we found no significant effect of any cue on understanding of the source, $F(3, 363) = 1.93$, $p = .125$. H1c is not supported. This insignificance may be due to a ceiling effect, as 79.2% of the participants scored 6 or 7 on understanding of source, and only 5.9% scored 4 (neutral) or lower. This suggests that most participants understood that the brand Suit Suit paid to show the suitcase in the Instagram post, regardless of the cue that was incorporated in the post.

The MANOVA also revealed a significant effect of the influencer type on the three types of persuasion knowledge, Wilks' lambda = 0.95, $F(3, 361) = 6.19$, $p < .001$, $\eta^2 = 0.05$. The macro-influencer led to a significant increase in ad recognition, $F(1, 363) = 13.52$, $p < .001$, $\eta^2 = 0.04$, understanding of selling and persuasive intent, $F(1, 363) = 10.75$, $p = .001$, $\eta^2 = 0.03$, and understanding of source, $F(1, 363) = 7.87$, $p = .005$, $\eta^2 = 0.02$, compared to the nano-influencer (see Table 3 for all means). These findings completely support H2.

Furthermore, the MANOVA revealed no significant interaction effect of the disclosure/brand cues and influencer type on conceptual persuasion knowledge (p 's $> .128$). Figure 1 presents the means for all conditions for the three dimensions of conceptual persuasion knowledge.

To gain more insights into the interaction of the specific cues, we also tested the moderation with Model 1 of PROCESS v3.5 (with 5,000 bootstrap samples and the 'Paid partnership' label and nano-influencer as reference categories) which included separate interaction terms. As expected, the differences in conceptual persuasion knowledge were minimal and not significantly different between the two influencer types in the conditions with #paidad and the 'Paid partnership' label. However, the analyses also revealed that there were no significant differences in understanding the intent or source between the two influencer types in the no cue and brand tag condition. Although the differences in ad recognition do seem to be larger between

Table 3. Main effects of type of influencer on persuasion knowledge (Study 2, $N=371$).

	Nano-influencer	Macro-influencer
Ad recognition	4.76 (1.63) ^a	5.34 (1.50) ^b
Understanding of selling and persuasive intent	5.86 (0.84) ^a	6.14 (0.77) ^b
Understanding of source	6.03 (1.16) ^a	6.35 (0.97) ^b

Note. Means with different superscript in same row differ significantly from each other at $p < .05$.

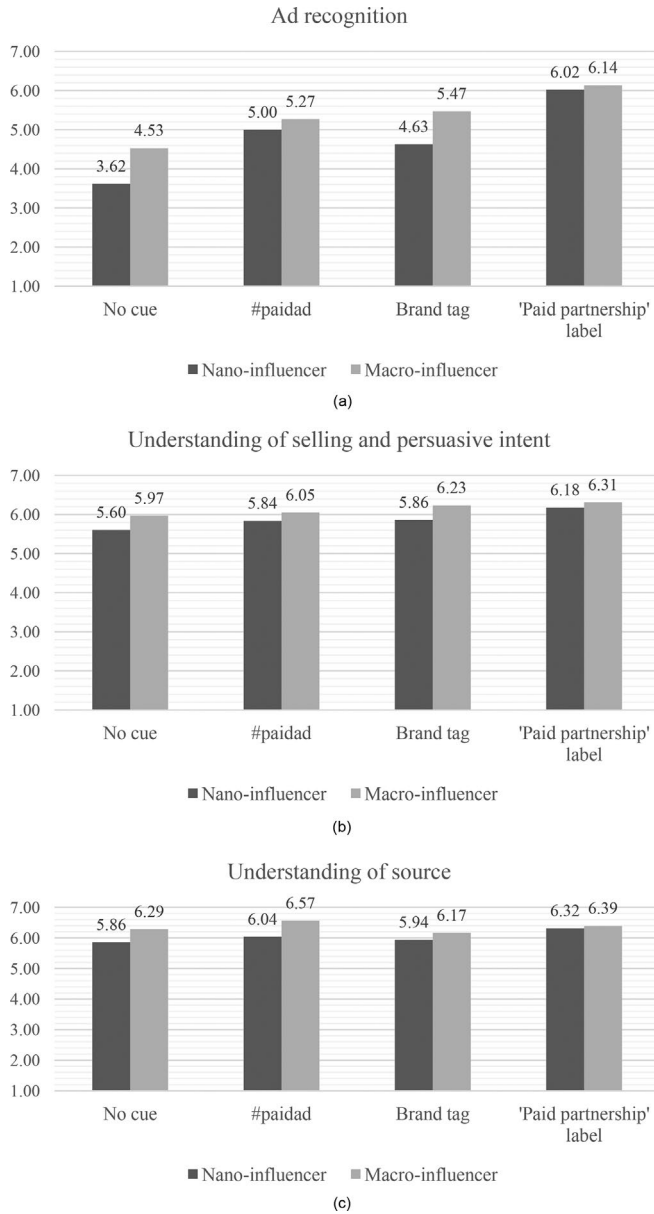


Figure 1. (A) Interaction effect of disclosure or brand cue and influencer type on ad recognition. (B) Interaction effect of disclosure or brand cue and influencer type on understanding of selling and persuasive intent. (C) Interaction effect of disclosure or brand cue and influencer type on understanding of source.

the nano- and macro-influencer in the no cue and brand tag conditions, these differences were only marginally significant (no cue * influencer type $b=0.80, p = .051$; brand tag * influencer type $b=0.73, p = .081$). Overall, this means that the cues are equally effective for the influencer types. H3a was thus supported, and H3b was not.

Conclusion and discussion

While influencer marketing is gaining importance as a social media advertising strategy and guidelines require influencers to disclose the practice, it is still unclear whether and how users come to recognize and understand this type of advertising (Campbell and Grimm 2019). This study aimed to gain insights into the level of persuasion knowledge in the context of influencer marketing on Instagram, and which cues Instagram users rely on to identify influencer marketing. The two studies provide three important new insights.

First, our eye tracking study showed that Instagram users, in general, do seem to be able to distinguish most commercial from non-commercial Instagram posts and thus their persuasion knowledge appears to be quite well-developed. In line with these findings, the online experiment also showed fairly high scores of conceptual persuasion knowledge in general (with all means above the midpoint). However, people also failed to identify one in three sponsored posts as advertising, and erroneously classified 17% of the non-commercial posts as advertising. Although previous studies showed that people believe that they are well aware of advertising on Instagram (Chen 2018; Djafarova and Trofimenko 2019; Johnson et al. 2019; Van Dam and Van Reijmersdal 2019), this study suggests that they may be overconfident as people do not always identify influencer marketing, and even mistakenly think posts are sponsored although they are not.

Second, the eye tracking study revealed that there is a large difference in visual attention between disclosure and brand presence cues. Users paid most attention to a brand tag in the picture and the 'Paid partnership' label. Disclosures in the form of hashtags often go unnoticed: more than half of the participants did not fixate at all at #ad, both at the start and end of a caption, and more than 41% did not notice #paidad. This finding suggests that—despite their popularity—hashtags such as #ad and #paidad do not seem to clearly and conspicuously disclose advertising on Instagram.

Although attention to a disclosure is vital, attention does not guarantee that a disclosure increases ad recognition or influences more elaborate levels of persuasion knowledge. Ultimately, our experiment provides useful new insights into which cues can drive the activation of persuasion knowledge. Our findings suggest that Instagram users use both top-down (disclosures) and bottom-up factors (brand presence and influencer type) to distinguish commercial from non-commercial content. Compared to no cue, a brand tag, #paidad, and 'Paid partnership' label all increased ad recognition, suggesting that all of these cues signal to Instagram users that influencer content is sponsored. However, only the 'Paid partnership' label (a top-down cue) seemed to increase more elaborate levels of conceptual persuasion knowledge, as it improved the understanding of the selling and persuasive intent of the message. Furthermore, the influencer type also seems to be an important bottom-up cue: all components of conceptual persuasion knowledge were consistently higher for a post disseminated by a macro-influencer compared to a nano-influencer. This suggests that Instagram users have quite well-developed agent knowledge, and thus a good understanding of the importance of popular influencers to brands because of their large reach.

Theoretical implications

Our findings have some relevant theoretical implications. First, our studies provide important insights into the question whether Instagram users have already developed persuasion knowledge concerning influencer marketing. Consistent with the line of reasoning in the PKM (Friestad and Wright 1994), we found that Instagram users may have indeed developed persuasion knowledge by their experience with the persuasive tactic. Overall, our study shows that people are able to correctly identify most of the sponsored posts as advertising, and have a good understanding of the source of influencer marketing.

Second, the studies improve our understanding of which cues Instagram users attend to and use to identify influencer marketing. The CARE model (Wojdyski and Evans 2020) is an important framework to understand which factors may help people to recognize covert advertising. Our study shows that—in line with the CARE model—the activation of persuasion knowledge depends upon top-down and context-driven, bottom-up factors, specifically: disclosures (top-down), brand presence (bottom-up), and influencer type (bottom-up). Thus, although previous research has repeatedly shown that disclosures can be important drivers of persuasion knowledge activation (e.g. Boerman 2020; De Veirman and Hudders 2020; Evans et al. 2017), this study is the first to empirically demonstrate that both top-down and bottom-up factors drive users' activation and use of conceptual persuasion knowledge in the context of influencer marketing. By doing so, it makes a contribution to the integration of theory into the growing body of research into influencer marketing and disclosures.

Nevertheless, further research is needed to gain more knowledge about the determinants of persuasion knowledge activation. There are many other message and source cues that may be important, such as the actual persuasive message, the prominence of the brand in the picture, the expertise of the influencer, and how often an influencer posts advertising. In addition, following the CARE model (Wojdyski and Evans 2020), future research is also needed to understand which individual differences (e.g. age, individual level of persuasion knowledge, experience with the tactic, familiarity, and parasocial relationship with the influencer) may determine the activation and application of persuasion knowledge.

Practical implications

Overall, our studies have some important practical implications for various stakeholders. Our findings show that not only disclosures can activate Instagram user's persuasion knowledge: Users also attend to other cues to decide whether an Instagram post is sponsored. The 'Paid partnership' label is the most effective way because it attracts visual attention, causes the highest ad recognition, is the only cue to increase more deeper levels of conceptual persuasion knowledge (i.e. understanding of persuasive and selling intent), *and* is a guarantee that the post is actually sponsored. However, our findings suggest that other content-driven cues—such as brand tags in the picture and influencer type—also attract visual attention and increase the perception that a post is sponsored. This raises an important issue because these

cues are *not* a guarantee that there was a commercial relationship between the influencer and the brand. Thus, although persuasion knowledge seems to be quite developed in the context of influencer marketing on Instagram, our research suggests that Instagram users also rely on cues that may make them incorrectly identify non-commercial posts as advertising.

Our findings also have important implications for regulators and self-regulatory bodies such as the FTC and EASA. We conclude that the standardized, built-in 'Paid partnership' label is the most effective disclosure. The label attracted the visual attention of almost all participants in our eye tracking study, and it increased the activation and application of conceptual persuasion knowledge. Thus, answering a call to study which disclosures enable consumers to self-identify content as advertising (Campbell and Grimm 2019), we find that the 'Paid partnership' disclosure can be seen as most clear and conspicuous. These findings contradict the FTC's assumption that this standardized disclosure does not suffice because it might not attract attention (FTC 2017a, 2017b). Therefore, we argue that the FTC may understate its utility: the 'Paid partnership' label is a highly noticeable and helpful cue for Instagram users to identify ads.

The hashtag #paidad seems to lead to the same level of ad recognition as a brand tag, but is less effective than the standardized label as it does not raise users' understanding of the selling and persuasive intent. Moreover, our studies suggest that people do not pay attention to disclosures in the form of hashtags. Despite its popularity and the FTC's recommendation to use #ad because it is simple and clear (FTC 2019)—#ad remained unnoticed by more than half of our participants in the eye tracking study. This suggests that the recommended #ad is an ineffective way to clearly and conspicuously disclose advertising on Instagram.

Limitations and future research

The combination of our eye tracking study and online experiment provides some novel and meaningful insights, but also had disadvantages. For instance, because the 50 posts in the Instagram feed in our eye tracking study contained various—but not all possible—combinations of the cues, the data did not permit an analysis of the effect of the (visual attention to the) particular cues on ad recognition. Although this limitation was partly solved with the subsequent online experiment that facilitated a deeper understanding of the effects of the cues on persuasion knowledge, future eye tracking studies may attempt to draw more insightful conclusions on the effect of visual attention to cues on users' ad recognition on Instagram.

Furthermore, as in any study, we had to find a balance between internal and external validity. The use of a video and a 22-inch screen in the eye tracking did not reflect actual browsing behaviour on a phone in one's own pace, which diminished the external validity of our eye tracking study. However, this set-up did guarantee that all participants were exposed to the same content for the same amount of time, and thus had the same opportunity to pay visual attention to the content, disclosures, and cues. Consequently, fixation times between the disclosures and brand presence cues were comparable, increasing internal validity. Moreover, if this setting affected participants' visual attention, this would have been the same for all participants.

In addition, our online experiment consisted of a forced exposure to one post, one brand, and one product type, diminishing the generalizability of our findings. Furthermore, we only included two specific influencers and provided minimal information about their Instagram accounts. Further research should be done to reveal the robustness of our findings.

Finally, as in other studies into disclosures (e.g. Boerman et al. 2015; Boerman and Van Reijmersdal 2020; Evans et al. 2017; Wojdyski et al. 2017) attention to the disclosures (in the eye tracking study) and disclosure recognition was quite low (60.4% correctly recognized #paidad, and 47.1% correctly recognized the 'Paid partnership' label in our experiment). We also know that attention to and memory of a disclosure increases its effect on ad recognition (Boerman, Van Reijmersdal and Neijens 2015; Evans et al. 2017; Wojdyski et al. 2017). Our eye tracking study confirmed that attention varies between the different cues. We decided to include all participants (including those who failed the disclosure recognition check) in our analyses in Study 2, because we wanted to control for this (in)attention and did not want to overestimate the effects of the specific disclosures.

Conclusions

To conclude, our studies show that Instagram users seem to be aware of influencer marketing, but also make mistakes in identifying it within their Instagram feed. The 'Paid partnership' label is an effective transparency cue that can help people to recognize influencer marketing. Hashtags such as #ad and #paidad are less effective. More importantly, our study provides the important new insight that brand presence and source cues can make people infer that Instagram content is sponsored. This indicates an important problem: brand tags and macro-influencers activate persuasion knowledge and thus signal to people that content is probably paid for. However, these cues do *not* guarantee that there was a commercial relationship between the brand and influencer, and thus people may incorrectly believe that content is advertising. This demonstrates that the lines between non-commercial posts and advertising are currently blurred on Instagram, and reveals the important issue of grey areas in which posts are perceived as advertising, even though they are not, and vice versa. In addition, this issue does not only affect consumers. Brands that are tagged in posts without paying the Instagrammer might dissent this ostensible affiliation. For instance, brands might rather not be associated with particular influencers who do not fit their brand.

Note

1. There were no significant correlations between ad recognition and dispositional understanding of intent ($r = .05$, $p = .704$), and ad recognition and dispositional understanding of source ($r = .07$, $p = .557$).

Disclosure statement

The authors declare that there is no conflict of interest.

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Data availability statement

The data that support the findings of this study are available from the corresponding author, [SB], upon reasonable request.

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