How, Why, and When Disclosure Type Matters for Influencer Marketing

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Highlights

- First academic field study on the effects of influencer marketing disclosure
- Three online experiments provide insights on underlying behavioral mechanisms
- Platform-initiated branded content tool consistently leads to strongest effects
- Disclosure interacts with number of followers and previous brand endorsements
- Actionable recommendations for public policy makers, managers, and influencers

Abstract

Consumers' changing media consumption behaviors and skepticism toward traditional forms of advertising have prompted the growth of influencer marketing. Even as regulatory authorities call on brands and influencers to disclose the posts as advertising, no consistent guidelines exist. The distinct effects of self-generated versus platform-initiated disclosures also remain unclear, nor has research addressed the interplay of key influencer characteristics and marketing disclosures. This article reports on findings from the first academic field study of influencer marketing disclosures, as well as three experimental studies, which indicate that disclosure is a double-edged sword. When provided through a platform-initiated branded content tool, disclosure consistently exerts the strongest effect on perceptions of advertising, negatively relating to influencer trustworthiness and consumer engagement. The effects of disclosure type also depend on the number of followers and number of previously endorsed products (i.e., influencer characteristics). Yet consumers also express appreciation for transparency when influencers disclose posts as advertising, which increases perceived trustworthiness of the influencer and engagement with the post. The implications of these findings should inform choices by public policy makers, brand managers, and influencers.

Keywords: Influencer marketing, Instagram, disclosure, advertising transparency, multiple product endorsement

1. Introduction

Consumers spend substantial time on social media; in 2019 and 2020, average daily social media usage worldwide was 145 minutes per day (Statista, 2021a). With 1.2 billion monthly active users worldwide, Instagram ranks as the third most popular social network site (Statista, 2021b; messaging sites excluded). This growth corresponds partly with the rise of influencer marketing, defined as a tactic in which companies pay people (influencers), financially or in-kind, to produce social media content on behalf of the brands and influence consumers' preferences and purchase decisions (Association of National Advertisers, 2018). In the United States, Instagram and TikTok provide the main platforms for this effective marketing instrument (Haenlein et al., 2020). Notably, 63% of U.S. consumers report buying products due to influencers' recommendations (Statista, 2018a). The industry accordingly continues to grow, projected to reach $15 billion in 2022 (*Business Insider*, 2021).

Generally, consumers engage with content on social media because of personal interests (Stubb et al., 2019). They expect influencers to share insights on their personal lives and recommendations about the latest trends (Audrezet et al., 2020). Thereby, consumers tend to believe that influencers are acting personally rather than on behalf of brands (Firsching & Bersch, 2016), and they express more trust in influencers than in traditional advertisers (*Forbes*, 2016). Being "trustworthy" thus represents an important quality for social media influencers (eMarketer, 2019). Increasingly though, brands and influencers collaborate on Instagram; influencers share (sponsored) brand posts or document brand-related events or experiences (Evans et al., 2017) by weaving them into the daily activities of their Instagram accounts (De Veirman et al., 2017). Yet the integration of persuasive marketing attempts into social media content may obscure its commercial intent (Audrezet et al., 2020; Boerman et al., 2017), especially if the sponsorship is not clearly disclosed, creating the impression that influencer content is genuine and not the result of monetary or other compensation (Evans et

al., 2017). In this regard, influencer marketing is similar to native advertising, in which paid content resembles non-sponsored editorial content (Federal Trade Commission [FTC], 2015; Evans et al., 2017).

To avoid confusion, increase transparency, and protect consumers from "misleading and deceptive practices" (Boerman et al., 2017, p. 83), regulators in several countries (e.g., FTC in the U.S., ASA in the UK, Medienanstalten in Germany) call for disclosures and offer recommendations for when (i.e., which kinds of influencer-brand relationships) and how to disclose sponsored posts on social media, as we summarize in Table 1[1] (e.g., use clear and unambiguous language, avoid abbreviations or vague terms; FTC, 2019). Social media platforms also take on responsibility regarding disclosure (Digiday, 2020), such as when Instagram introduced the branded content tool, allowing users to tag their partner brands using "paid partnership with …" in the headers of their posts (Instagram, 2021). However, regulators and public policy makers do not recommend using the branded content tool as the *only* method of disclosure (Medienanstalten, 2018; FTC, 2019) and argue that a disclosure placed above the image of a post might easily be missed (FTC, 2017). Hence, they continue to struggle establishing clear and (globally) consistent standards for the effective disclosure of influencer marketing as advertising. Accordingly, the discussion on how to disclose is the starting point of our research: Although disclosing the commercial nature of posts increases transparency, it also may affect consumers' trustworthiness perceptions of influencers. Without a binding standard, influencers—for whom trustworthiness is a major currency—might opt for a legal but least intrusive disclosure option to safeguard their trustworthiness.

[Insert Table 1 about here]

In the legal domain, discussions on how to disclose have also begun. For example, in 2019, two similar cases of influencers who displayed branded products without disclosures

[1] Interestingly, recommendations for influencer marketing are very detailed, even regulating specific wordings, whereas U.S. regulations for product placement, for example, are relatively less clear, detailed and strict.

led German courts to rule completely differently. In one case, the influencer was permitted to exclude advertising disclosures if other factors, such as the number of followers, favored the recognizability of advertising (*Zeit Online*, 2019a). But in the other case, the courts obliged the influencer to disclose all posts that tagged brands (*Zeit Online*, 2019b). The question of whether followers realize influencers might be posting as part of a paid sponsorship and not acting completely privately was central to the different rulings. In turn, it appears relevant to consider influencers' previous activities and characteristics as key determinants. For example, micro influencers with relatively few followers (i.e., low follower count) tend to be perceived as more authentic and credible than macro influencers with millions of followers (i.e., high follower count), who may tend to lose their (exclusive) connections to followers (Appel et al., 2020). The latter have transformed "their digital activity into a full-time professional endeavor using a business approach" (Ruiz-Gomez, 2019, p. 17). Yet empirical research on the potential effects of follower count and influencer activities is scarce; to the best of our knowledge, no research has examined the interplay of disclosure type and influencers' prior activities as part of influencers' characteristics, next to follower count. Our study aims to fill this gap.

In addition to addressing this gap, we consider the possibility that disclosure may be a double-edged sword, not just straightforwardly negative. As the number of brand-sponsored posts on Instagram continue to increase (e.g., from 3.70 million posts in 2018 almost doubling to an estimated 6.12 million posts in 2020; Statista, 2019), consumers have gained greater awareness that social media (and Instagram in particular) constitutes a commercial space (*Forbes*, 2019). Consequently, consumers develop experience regarding the occurrence of such sponsored content. Combined with increasing discussions in public media regarding influencers' incorrect (non)disclosure practices, this may create a situation in which "consum-

ers, especially younger ones, are losing trust in paid influencers" (*Forbes*, 2019). In this context, consumers might appreciate influencers' transparent acknowledgment of the commercial nature of their content, which could have a positive effect on consumers' trustworthiness perceptions.

Therefore, we seek to investigate the effect of distinct disclosure types on consumers' perceptions of the trustworthiness of influencers, which in turn might affect their engagement with influencer content. To explain the effects of disclosure types on perceptions of trustworthiness, we identify the underlying processes, as well as important boundary conditions related to influencers' characteristics, such as follower count and multiple product endorsements (MPEs; i.e., influencers' prior activities). In so doing, we shed light on the two contrasting outcomes of disclosure: a negative outcome evoked by the commercial nature of the content and a positive outcome caused by appreciation for the influencer's honesty. With an exploratory field study, we establish that disclosure reduces engagement with influencer content. Three follow-up online experiments show that disclosure, in particular the branded content tool, increases people's perceptions that posts are advertising, which lowers their perceptions of influencer trustworthiness and intentions to engage. Previous expectations that the posts will contain advertising content, based on the influencer's characteristics such as exposure to MPEs or a high number of followers, increase people's perceptions that the influencer's posted content is advertising. Yet consumers do not appear to use these expectations as input information if influencers use Instagram's branded content tool; seemingly because the tool already acts as a strong signal of commercial intent. However, when they encounter more subtle disclosures, people leverage expectations based on influencer characteristics to make their evaluations. That is, followers appear to be able to make natural (advertising) inferences. In addition, they appreciate the transparency signaled by an influencer who discloses the advertising content as such, again more for the branded content tool.

With these findings, this study makes three main practical contributions. First, it can help public policy makers establish appropriate disclosure standards, reflecting how different disclosure types influence consumers' perceptions that a post represents advertising. Second, brands can use these findings to increase the effectiveness of their influencer marketing campaigns, by selecting appropriate disclosure types and influencers, according to the numbers of followers and products the influencers already endorse. Third, social media influencers should recognize that disclosing advertising content can enhance perceptions of their transparency.

2. Background: Influencer marketing and disclosure types in social media

2.1 Influencer marketing

A social media influencer is "a person with a large and engaged follower base on social media platforms, which one would not know unless one follows them" (Haenlein et al., 2020, p. 17). Influencers post content (De Veirman et al., 2017) and are often perceived as experts in some specific field of interest, such as food, travel, fitness, or fashion (Haenlein et al., 2020). Even if the lines between social media influencers and celebrities are becoming blurred—influencers now become brands (*Forbes*, 2016), and celebrities use social media extensively to leverage their fame and interact with fans (Haenlein et al., 2020)—influencers are unlike traditional experts or celebrities who earn followers from careers outside social media (e.g., sports, music, acting). In addition, social media influencers tend to achieve a more relatable or down-to-earth appeal to followers (Schouten et al., 2020). Hence, influencer marketing may differ from traditional celebrity endorsements, by creating possibilities for bidirectional interactions, in which followers can comment on posts and receive replies from influencers, potentially creating a parasocial relationship (e.g., Sokolova & Kefi, 2019).

2.2 Influencer characteristics

A popular means to classify influencers on social media relies on their follower counts, which reflect the size of the audience influencers potentially can reach. Some categorizations

include multiple thresholds (e.g., nano with up to 10,000 followers; micro with 10,000–50,000 followers; mid-tier with 50,000–500,000 followers; macro with 500,000–1,000,000 followers; mega with more than 1,000,000 followers; Mediakix, 2021), and the exact categories and thresholds vary by source. For our study, we use a simplified two-group classification: micro influencers with fewer than 500,000 followers and macro influencers with more than 500,000 followers. Another characteristic that can effectively distinguish influencers reflects the "theme" that defines their online personas (e.g., mommy blog, tech-nerd, fashionista, foodie; *Forbes*, 2020). Finally, some brands and agencies judge influencers according to the content they have posted previously, using general quality criteria (e.g., with respect to the photos or captions they use) or measures of the number and diversity of previous product endorsements (Statista, 2018b).

2.3 Advertising disclosures in influencer marketing

Disclosure of advertising in contexts in which the advertising intent is not clearly identifiable—because it blends into the native content of a medium or platform—emerged with the increasing use of product placements in traditional media such as TV programs (e.g., Boerman et al., 2012, 2015; Campbell et al., 2013). The field later moved to online blogs (e.g., Campbell et al., 2013) and online news articles (Wojdynski, 2016; Wojdnyski & Evans, 2016). According to a meta-analysis by Eisend et al. (2020), disclosing sponsored content in various forms of offline and online media in which the commercial intent otherwise would not be evident, has, on average, a negative effect on brand attitudes, credibility, and source evaluation but a positive effect on advertising recognition, persuasion knowledge, and resistance.

Considering studies of influencer marketing specifically, as we detail in Table 2, we find three main research streams. The first pertains to the effects of disclosing influencer marketing per se (cf. nondisclosure; Boerman et al., 2017; De Jans et al., 2018). These studies indi-

cate that disclosing increases advertising recognition and persuasion knowledge and has detrimental effects on influencer- and brand-related outcomes such as trustworthiness, purchase intentions (De Jans et al., 2018), and online sharing intentions (Boerman et al., 2017). The second stream investigates different forms of disclosure, defined by the wording (De Veirman & Hudders, 2020; Evans et al., 2017) or the timing (Van Reijmersdal et al., 2020). Both the specific language used (e.g., clear terms such as "sponsored" versus abbreviations such as "SP"; Evans et al., 2017) and the compensation type (monetary vs. material; De Veirman & Hudders, 2020) affect sponsorship recognition, as well as influencer-, post-, and brand-related downstream consequences. In addition, van Reijmersdal et al. (2020) determine that visual attention and advertising recognition increase for disclosures that take place before, rather than during, an influencer marketing video. A third group of studies examines interaction effects between advertising disclosures and follower counts but offers inconclusive findings. Boerman (2020) finds no moderating effect of the number of followers on the effects of disclosing with a branded content tool; Kay et al. (2020) instead find that purchase intentions are the highest in response to micro influencers who provide in-text disclosures.

[Insert Table 2 about here]

Noting some gaps in these literature streams, we seek to clarify the unique impacts of disclosures of influencer marketing tactics in social media that differ from offline and other online advertising formats covered in the meta-analysis by Eisend et al. (2020). First, the direct feedback mechanisms of social media (e.g., likes, comments) provide clear measures of consumer reactions, beyond the awareness or attitude measures available in traditional disclosure settings. In a field study, we leverage actual social media data and observe direct follower engagement with posts that adopt different disclosure methods. Second, we acknowledge the diverse disclosure possibilities in social media, including self-created in-text disclosures, with and without hashtags, but also a standardized, branded content tool provided

by a social network. In this setting, the form of disclosure is more (in the case of self-created disclosures) or less (in the case of standardized disclosures) under the control of the influencer. Therefore, we extend prior literature by analyzing the differential effects of self-generated in-text disclosures versus standardized branded content tool disclosures. Third, we add to the limited knowledge regarding influencer characteristics and disclosure by considering both follower count and the previous number of products endorsed by an influencer and their implications for disclosure outcomes. Fourth, to move beyond a one-sided perspective that predicts that disclosure increases advertising perceptions, which leads to reactance and unfavorable attitudes, we consider whether consumers value influencers' transparency.

3. Theoretical foundation: Persuasion knowledge model of the effects of disclosure

We adopt the persuasion knowledge model (Friestad & Wright, 1994) as a foundation for our predictions. It offers predictions of how consumers react to persuasive content such as advertising. Namely, it asserts that consumers can resist persuasion only if they recognize the persuasion attempt. Their abilities to do so develop over time and through experience with various persuasion tactics that marketers or advertisers use. After consumers recognize persuasion attempts, they, among others, seek to evaluate their effectiveness and appropriateness; effectiveness refers to consumers' beliefs about, e.g., how strongly the tactics influence them, and appropriateness pertains to evaluations such as fairness or manipulability. Depending on their assessments, consumers decide how to react, using coping tactics that might include devaluing, ignoring, or approving the persuasion attempts (Friestad & Wright, 1994).

In influencer marketing, the relationships of sponsors to branded posts are often unclear, especially if the posts resemble non-commercial content (FTC, 2015). Moreover, influencers often include advertising content in friendly messages, such as wishing followers a nice day. Therefore, disclosing the sponsorship is a necessary condition for enabling consumers to identify the posts as advertising and activate their persuasion knowledge (e.g., Boerman et al.,

2017; De Veirman & Hudders, 2020; Wojdynski & Evans, 2016). Beyond this prerequisite, whether consumers recognize that a message is advertising may depend on the type of disclosure used. The prominence of disclosures, e.g., established through their visibility or unambiguity, determine their effectiveness (e.g., Boerman et al., 2015; Wojdynski, 2016). Thus, we expect that the prominence of the two disclosure options we investigate should differ. That is, in-text disclosures such as hashtags ("#advertising") can signal that the post consists of advertising, but Instagram's branded content tool ("paid partnership with…") should be more prominent and thus increase perceptions of advertising more. When influencers include multiple hashtags in their post captions, consumers may miss seeing those that disclose the advertising nature of the post, but the explicit phrase "paid partnership with…" appears as a standalone line in a post's header. This prominent position should enable consumers to identify the persuasion attempts of posts more easily. Formally,

H_{1a}: Compared with nondisclosure, disclosure induces higher perceptions that influencers' posts are advertising.

H_{1b}: Compared with in-text disclosures ("#advertising"), disclosures that use a branded content tool ("paid partnership with…") induce higher perceptions that influencers' posts are advertising.

Consumers tend to follow influencers because of their personal interest, rather than to receive commercial messages, and they expect influencers to provide original, appealing content (Audrezet et al., 2020). When they recognize branded advertising content and their persuasion knowledge has been activated, they may assign a different meaning to the content. Whereas they initially have not assigned any tactical meaning to the content, they now perceive it as a persuasion tactic, which could invoke critical views (e.g., Boerman et al., 2012, 2017; Friestad & Wright, 1994). That is, we predict that disclosing that the content is advertising has negative effects on consumers' perceptions of the content (i.e., the post), which may

lower their intentions to engage with the post (Stephen et al., 2015). In line with our argument in H_{1b} that the branded content tool is more prominent and prompts greater recognition of the commercial intent of a message, we also expect this tool to exert a more negative effect on engagement.

H_{2a}: Compared with nondisclosure, disclosure induces a lower engagement with posts.

H_{2b}: Compared with in-text disclosures ("#advertising"), disclosures using the branded content tool ("paid partnership with…") induce lower engagement with posts.

4. Disclosing on Instagram: Initial evidence from a field study

4.1 Method

To provide initial evidence that different types of disclosure exert distinct effects on consumers' engagement with an influencer's content, we collected 3,593 Instagram posts by 61 influencers. The selected German influencers represent multiple categories, with substantial variety in their profiles in terms of gender, focus (e.g., fashion, fitness, beauty), and follower counts. Among the 61 influencers included in our study, the follower counts ranged from 6,130 to 6,700,000 (M = 768,986; SD = 1,287,767). We manually collected all their posts with images (excluding about 200 video posts, which only provide the number of views instead of number of likes publicly), published between January and March 2018.[2] An independent coder, unaware of the research objective, performed the coding, which we describe subsequently. Table 3 contains the descriptive results, which indicate that during the 90-day observation period, each of the 61 influencers posted an average of 59 posts. Average engagement rates appear comparable to prior studies (De Vries, 2019).

[Insert Table 3 about here]

[2] We deliberately chose this observation period for several reasons: First, it avoided potential confounding effects that might have arisen as media reports and discussions about disclosure increased in Germany in later months. Second, the branded content tool was introduced in late 2017, and influencers as well as brands needed an adoption period. Thus, early 2018 constituted the best observation period for our study.

4.2 Measures

The measures of engagement on social media usually rely on likes, shares, or comments (e.g., Hughes et al., 2019; Rietveld et al., 2020), which represent key performance indicators for marketers (Peters et al., 2013). The number of likes is the most important performance metric of the success of an influencer's post, despite some platform-initiated efforts to reduce its importance (e.g., Haenlein et al., 2020). Users can also post comments under a post to express more detailed feelings of approval or disapproval, ask questions, and engage in discussions with other users. Although there are other forms of engagement available on Instagram (e.g., saves, shares), they are neither a central element of engagement on this platform nor publicly available. Accordingly, we include several operationalizations of engagement (see Table A1 in the Web Appendix) as our dependent variable: (1) engagement rate, which equals the number of likes plus the number of comments, divided by the follower count; (2) likes rate, equal to the number of likes divided by follower count; (3) comments rate, equal to the number of comments divided by follower count; (4) log-likes, the log of the number of likes; and (5) log-comments, the log of the number of comments. We use the number of likes (comments) that a post received up until the point of data collection in winter of 2019/20. By using ratios, we account for variation in follower counts; compared with micro influencers, macro influencers with many followers naturally should attract more likes and comments due to higher reach. Because engagement rate is also the most popular metric for influencer selections by brands (Bailis, 2020), we focus on this measure and use the other dependent variables as robustness checks.

The main independent variable includes three disclosure types: branded content tool, in-text disclosure, or both. Each disclosure was dummy coded to equal 1 if the disclosure option was present and 0 otherwise (the baseline category is nondisclosure). We also applied a pattern-matching algorithm to the caption text, to validate the disclosure coding using keywords

such as "#ad," "advertising," "sponsored," "paid," and "PR samples." The manual and automated codes differ for only 39 posts (i.e., 1.1%), including 15 false positives and 21 false negatives in the manual coding, and 2 false positives and 1 false negative in the automated coding.[3] Therefore, in the following, we report the results obtained from the automated coding of the disclosure variable. In our sample, most influencers used the in-text disclosure option (36.3%), as free text at the beginning of a caption or a hashtag at the end. They used the branded content tool (2.4%) and both disclosures (5.1%) much less frequently; 56.2% of posts did not contain any advertising disclosures.

Although we can observe disclosure (for which we assume commercial content), it is not possible to determine if undisclosed posts are not commercial or fail to disclose their commercial intent, because we do not know whether influencers received any compensation for their posts. During the observation period, disclosure guidelines had only recently been introduced, and many influencers did not disclose commercial posts. Therefore, to identify undisclosed posts that have commercial intents, we coded whether the posts contain any brand mention (using the @ or # symbol), brand tagging (i.e., link to a brand account in the image), or visible brand logos. As stated by the FTC, these actions are classified as endorsements and might require disclosures even without any direct monetary payment to the influencer by the brand (FTC, 2019; see Table 1)[4]. According to this coding scheme, 55.4% of all posts have commercial intents.

[3] This comparison cannot identify posts that were wrongly coded with both approaches, but we believe we captured most disclosures correctly.

[4] Recent FTC guidelines state that influencers have to disclose any "financial, employment, personal or family relationship with a brand" (FTC, 2019, p. 3). That includes monetary as well as other in-kind benefits influencers receive for mentioning a product (FTC, 2019), as well as cases in which influencers mention a product without being asked to do so but where they "knew or had reason to know or to believe that if the endorsement favored the advertised product some benefit […] would be extended to the endorser" (FTC, 2009). Yet, it does not include cases in which influencers make genuine recommendations without any relationship to the brand (FTC, 2019). Accordingly, not all brand mentions, brand tags, or brands displayed in posts have to be disclosed. However, ongoing legal disputes in Germany, for example, show that the question about when to disclose is not conclusively answered yet (e.g., *Spiegel*, 2021). In one case, because of the highly commercial use of the profile, a court in Germany obliged the influencer to disclose all posts tagging brands even without receiving any compensation for them (*Zeit Online*, 2019b).

To validate this coding, we took random samples of 10 posts from each of the three groups: disclosed posts, undisclosed posts with commercial intents, and undisclosed posts without commercial intents. Next, we recruited 143 respondents between the ages of 18 and 65 years (M = 35.7 years; 56 women) from Clickworker, a crowdworking platform similar to Amazon Mechanical Turk. Each respondent evaluated five random posts, indicated perceptions that the post is advertising, and detailed the inferred motivation of the influencer (see Tables A3 and A4 in the Web Appendix). The results show that disclosed posts lead to significantly higher perceptions that the post is advertising than undisclosed posts with commercial intents ($\Delta_1 = 1.38$, $p < .001$).[5] The latter posts also increase the perception that the post is advertising compared with undisclosed posts without commercial intents ($\Delta_2 = 1.72$, $p < .001$). We find a similar pattern for inferred monetary motivations ($\Delta_1 = .61$, $p = .011$; $\Delta_2 = -1.27$, $p < .001$). Therefore, undisclosed posts with commercial intent cues (e.g., tagging a brand) appear to be perceived as commercial content by consumers.

4.3 Results

To assess the influence of disclosure type on customer engagement with a post *k* by influencer *i*, while controlling for post and influencer characteristics, we utilize a multilevel model (Goldstein, 2011):

$$(1) Engagement_{ik} = \alpha_i + \mathrm{B}\, Disclosure\ Type_{ik} + \Gamma\, Post\ Characteristics_{ik} + \varepsilon_{ik},$$

and

$$(2) \alpha_i = \alpha_0 + \Theta\, Influencer\ Characteristics_i + \nu_i,$$

that accounts for repeated observations (posts) *k* by each influencer *i*, where α_i is an influencer-specific random constant with $\nu_i \sim \mathrm{N}(0, \sigma_\alpha^2)$. Engagement is influencer-specific, because it depends on unobservable characteristics of the influencer (e.g., entertainment value,

[5] The reported effects are estimated group differences from a cross-classified, multilevel model with random intercepts that account for both unobserved respondent-specific response styles and unobserved post-specific response styles.

attractiveness, etc.) and followers (e.g., how active and engaged the followers of an influencer are). The random constant covers these unobserved influences so that we can focus on disclosure and other observable post characteristics to explain the remaining variation. We also control for central influencer characteristics such as gender and follower count, which do not vary across posts, so that they only explain variation in α_i. We control for post-specific characteristics, such as time and day, because they might affect engagement. Posts that appear on weekdays during working hours, for example, might receive fewer likes than posts on weekends, when more users are active (Jalali & Papatla, 2019). Furthermore, we count the total number of hashtags, mentions (i.e., use of the @ symbol to link to another Instagram account), and characters in post captions. On Instagram, hashtags function as searchable keywords and thus might increase the potential exposure of a post (Rietveld et al., 2020). Mentioning other accounts also could increase engagement through the mentioned account owners or their followers. Longer captions likely contain more information and thus could increase engagement more than shorter captions, though they also require more information processing effort (Pancer et al., 2019).

We estimate the model with the subsample of 2,331 posts that were coded as either containing disclosures or signaling commercial intent—that is, posts that aim to promote a brand or product according to our coding. We thus avoid comparisons of advertising posts with non-advertising posts. The results, however, also remain robust when we use the full sample.

The results in Table 4 indicate significant negative effects of all disclosure types on engagement. In-text disclosure has the weakest effect (–.303, $p = .005$), followed by the branded content tool (–.638, $p = .004$) and then the combined disclosure options (–.739, $p < .001$), which has the strongest negative effect on engagement, in line with H_{2a}. Although the magnitude of the effect favors H_{2b}, with a much stronger negative effect for the branded content tool than for in-text disclosure, the difference is marginally not significant (–.335, $p = .151$). We

find a significant difference only between in-text versus both disclosure options (–.436, $p <$ .001). However, the sample size for the branded content tool condition is small; only 87 posts included just this tool, which may explain the insignificant difference.

These results are mostly robust to several model variations, such as including versus excluding control variables or using different engagement outcomes.[6] The only exceptions involve the comments rate and log-comments, for which in-text disclosure is not significant (–.016, $p = .087$; –.068, $p = .138$, respectively). Finally, we also tested interactions of disclosure with the continuous variable follower count as well as binary variables that dichotomize follower count into micro and macro influencers at different thresholds, between 300,000 and 700,000 in steps of 100,000. No significant effects emerge on the engagement metrics, so the negative effect of disclosure appears stable across influencers with different follower counts.

[Insert Table 4 about here]

4.4 Discussion

The field study results reveal that disclosing that an Instagram post is advertising has negative effects on engagement, and that the different disclosure types have distinct effects. Overall, a disclosure relates to a particularly strong decrease in likes. For example, posts that disclose advertising using the branded content tool attract average like rates that are .591 percentage points lower than those for posts that do not disclose but have a commercial intent cue (note that the median like rate in our sample is only 3.06%). The effects on comments are not as strong as those on likes. The (lower) engagement rate appears driven mostly by the effects on likes. This observation is not surprising, because we only count the comments. Liking is generally a positive expression of agreement, but comments might be negative, such as complaints about the commercial nature of posts.

[6] We also applied fixed-effects panel regressions and a negative binomial model on the raw number of likes and comments, to account for the count nature of the data and overdispersion in the likes and comments. The results are qualitatively unchanged.

5. Study 1

Using the evidence of the relationship between various disclosure options and consumers' engagement with (disclosed) content established in the field study, we investigate several further relationships, as detailed in Figure 1, in three experimental studies.

[Insert Figure 1 about here]

H_{1a} predicts a link between disclosure options and consumers' perceptions that a post is advertising, stating that disclosure itself, by activating consumers' persuasion knowledge, increases the likelihood they will identify a post's commercial intent. When consumers recognize that posts are advertising, they may assign different meanings to them (Boerman et al., 2012; Friestad & Wright, 1994) and infer a manipulative intent of the post or a (monetary) motive of the influencer. This change in meaning might trigger critical or distrustful attitudes not only toward the post, but also toward the influencer as the source of the message (Boerman et al., 2017; Friestad & Wright, 1994; Moore et al., 1994), whom consumers likely follow to gain access to genuine content, not financially motivated persuasion attempts. Thus, perceptions that a post is advertising may reduce trust in future content and negatively affect overall perceptions of the influencer's trustworthiness, which is a critical quality for influencers (eMarketer, 2019). Perceived trustworthiness can determine the persuasive effectiveness of endorsers in general, because it reflects consumers' faith in the information they provide (e.g., Ohanian, 1990, 1991). In addition, consumers' willingness to share and engage with information online depends on trustworthiness perceptions (Boerman et al., 2017). In summary, we offer the following predictions:

H_3: The perception that a post is advertising relates negatively to perceived influencer trustworthiness.

H_4: Perceived influencer trustworthiness relates positively to engagement with the influencer's posts (e.g., liking the post).

H_5: In a three-step, serial mediation process, disclosures increase perceptions that a post is advertising, which relates negatively to perceptions that the influencer is trustworthy, which relates positively to engagement with the influencer's posts (e.g., liking the post).

In line with H_{1b}, we expect this negative indirect effect to be stronger for the branded content tool disclosure ("paid partnership with…") than an in-text disclosure ("#advertising").

5.1 Method

As part of a larger data collection effort, we employed a 3 (disclosure type: nondisclosure, in-text disclosure, branded content tool) × 2 (follower count: low [micro], high [macro]) × 2 (prominence of the product: low, high)[7] between-subjects design (see Figure A.1 in the Web Appendix). We pretested the stimulus material and chose a gender-neutral watch as the advertised product, for which we created a fictitious brand and a mock Instagram account, to be able to include a brand tag. For the online questionnaire, we recruited participants by distributing English- and German-language survey links through social network sites, mailing lists, and two platforms, SurveyCircle (SurveyCircle, 2020) and PollPool (PollPool, 2018). Of the 529 respondents who completed the questionnaire, we excluded those with an abnormally short or long survey completion time[8], indicated they put little effort in, were younger than 18 years of age, or claimed they already followed the focal influencer (Meade & Craig, 2012; Paas et al., 2018).

The 464 participants of the final sample (293 women, 384 German, M_{age} = 26.5 years) were assigned randomly to the experimental conditions by the online survey tool. Participants

[7] Prominence and follower count were included in the larger data collection process, because we expected that showing the product in detail or an influencer with a high follower count might alter perceptions that the post is advertising. Prominence was manipulated by showing the product in detail (high prominence) or else focusing on the influencer (low prominence). Follower count was manipulated by varying the number of followers in the profile header and number of likes and comments in the post. However, neither factor exerted a significant effect on advertising perceptions (Table A6, Web Appendix) in this study. To clarify the effect of disclosure, we thus do not elaborate further on prominence or follower count and instead only include them as control variables.

[8] In detail, we used a relative speed index variable provided by the online platform which we used to program the online experiment in Study 1 (Leiner, 2019). It is roughly equivalent to excluding participants that are three times slower or two times faster than the median.

viewed a modified version of a real Instagram post by a male influencer (minimum exposure time of 20 seconds) and then filled out the questionnaire. It ended with a short debriefing, explaining that the posts had been modified for research purposes. All the posts featured identical layouts, with a profile header that displayed the profile picture, number of posts, follower count (*manipulation*), and number of followees (users the influencer follows) of the influencer. In line with past research (e.g., Wojdynski & Evans, 2016) and existing regulations (e.g., FTC, 2019), we included "#advertising" in the caption for the in-text conditions. The branded content tool condition featured "paid partnership with …" in the header, directly below the influencer's name. The nondisclosure condition did not contain any disclosure. We manipulated the number of likes and comments to match the number of followers in the various follower count conditions.

5.2 Measures

For the dependent variable *intention to like the post* (M = 1.64, SD = 1.13), we asked participants to state the likelihood they would click on the "like" button of this Instagram post. For the mediators, we measured *perception that the post is advertising* (M = 4.60; SD = .90) in line with prior literature on disclosure (e.g., Boerman et al., 2012, 2014, 2015; Evans et al., 2017). We measured *perceptions that the influencer is trustworthy* using Ohanian's (1990) source credibility scale, which offers high reliability ($\alpha = .90$), so we took the mean over all items (M = 2.59; SD = .80; for the measures, see Table A5 in the Web Appendix). As control variables we additionally included whether participants owned an Instagram account and their demographics (age, gender).

5.3 Results

5.3.1 Manipulation checks. Participants indicated whether the post they saw was disclosed by selecting from three options, each representing one of the disclosure types. The results show that 77.7% correctly recognized nondisclosure, 50.6% correctly classified the in-

text disclosure, and 68.6% recognized the branded content tool disclosure. According to a binomial test, all results significantly differ from guessing ($p < .001$), so the disclosure manipulation is successful.

5.3.2 Model estimation. We used PROCESS model 6[9] (version 3.4, Hayes, 2017) in IBM SPSS 26 to run a sequential mediation model with perception that the post is advertising and influencer trustworthiness as mediators. Intention to like is the dependent variable, disclosure type is the independent variable, and nondisclosure is the baseline (i.e., the independent variable is multicategorical). Table A6 in the Web Appendix provides the detailed estimation results.

5.3.3 Direct effects. Disclosure with the branded content tool (cf. nondisclosure) exerts a significantly positive effect on perceptions of advertising (.233, $p = .026$), but we find no significant effect for in-text disclosure (.109, $p = .307$), so we find only partial support for H_{1a}. Contrary to H_{1b}, we do not find significant differences across disclosure types (.124, $p = .186$), though the branded content tool has a stronger (significant) effect than the in-text disclosure (not significant).

Perceptions that the post is advertising relate significantly negatively to perceptions that the influencer is trustworthy (–.146, $p = .008$), in line with H_3. We also find that perceptions that the post is advertising relate negatively to intentions to like (–.154, $p = .036$), whereas influencer trustworthiness relates significantly positively to these intentions (.484, $p < .001$), as predicted by H_4.

5.3.4 Indirect effects. To estimate the indirect effects in H_5, we use 10,000 bootstrap samples, randomly set the seed equal to 100, and derive percentile bootstrap confidence intervals with a 95% confidence level (BootCI95%). To examine the effects of the two disclosure types

[9] We include heteroscedasticity-consistent standard error (HCSE) estimators in our analyses, because the normality and homoscedasticity of residuals may be a problem. Specifically, we rely on HC4 estimators (Cribari-Neto, 2004). The advantage of using HCSEs is that it does not require any assumptions about the form of the heteroscedasticity of the residuals (Hayes & Cai, 2007).

(in-text and branded content tool) relative to nondisclosure, the mediation model estimates two relative indirect effects (Hayes, 2017). In support of H_5, disclosure using the branded content tool (vs. nondisclosure) has a significantly negative indirect effect on intentions to like the post, through perceptions that the post is advertising and that the influencer is trustworthy (–.017 [–.042; –.001]). We also find a negative indirect effect of the branded content tool (vs. nondisclosure) only through the perception that the post is advertising (–.036 [–.092; –.001]). No significant indirect effects arise from in-text disclosure (vs. nondisclosure). Moreover, we do not find direct effects of either disclosure type on intentions to like the post (i.e., full mediation), in line with our prediction that disclosures affect liking intentions indirectly. Again, no significant difference arises between disclosure types, contrary to our expectations. Following Boerman et al. (2014), we ran the same serial mediation analyses with a reversed sequence of mediators. It did not produce significant indirect or direct effects, in support of the postulated mediation model.[10]

5.4 Discussion

Study 1 investigates two popular disclosure options on Instagram. We find that the use of "#advertising" in the caption of a post does not increase perceptions that the post is advertising. However, the branded content tool has a highly significant, positive effect on advertising perceptions, which relates negatively to the perceived trustworthiness of the influencer and thereby decreases consumer engagement, in the form of intentions to like the post.

Contrary to arguments that a lot of followers provides a cue that posts are advertising (*Zeit Online, 2019a*), which might make disclosures unnecessary, we find no significant effect of follower count on perceptions that a post is advertising. In our simplified study design though, the manipulation of the number of followers only occurred in the profile header. With

[10] An exception is a significantly negative indirect effect of the branded content tool (cf. nondisclosure) on intention to like through the perception of advertising (–.036 [–.092; –.001]). However, this result is still in line with our postulated mediation model.

Study 2, we adopt a more sophisticated manipulation, involving the influencer's entire profile and previous posts.

6. Study 2

Study 1 established links among disclosure type, perceptions that a post is advertising, and perceptions that an influencer is trustworthy. Other factors also might facilitate consumers' advertising perceptions, so with this study, we investigate whether follower count or influencers' prior endorsing activities, that is, the number of brands and products they endorse, can drive advertising perceptions. The perception of influencer trustworthiness represents our focal outcome.

As an influencer's audience grows, consumers' perceptions of the influencer may change. For example, consumers may perceive that influencers with high follower count (i.e., macro influencers) are less accessible (Ruiz-Gomez, 2019), start to doubt their genuine interests (*Forbes*, 2019), and suspect that their activities are professional endeavors. According to attribution theory, consumers try to infer why people endorse specific products (Mowen & Brown, 1981), such as whether they believe in and are satisfied with the products or instead are receiving monetary compensation to endorse the products. Consumers may infer more easily that macro influencers, compared with micro influencers, whom they associate with authenticity and non-commercial interests (Hatton, 2018), receive compensation for their activity (Dhanik, 2016).

If influencers work with multiple brands and endorse multiple products, consumers may perceive the link between the influencer and each brand as less distinctive. Consumers use perceptions of distinctiveness to infer the reasons for the endorsement, such as, for example, that the endorser really likes the brand or its products. With many endorsements and resulting lower distinctiveness, the likelihood increases that they attribute endorsements to external causes (e.g., monetary incentives) rather than inherent product features or quality (Mowen &

Brown, 1981). This attribution, based on influencers' profile information which depicts previous activities, may increase consumers' expectations that influencers are posting advertising content.

H_6: Expectations that posts are advertising based on influencers' profiles are higher for (a) macro influencers than for micro influencers and (b) influencers who endorse multiple products (MPE) rather than few products.

If consumers expect to see more advertising, the salience of the concept of advertising itself is high too (Guido, 2001; Neisser, 1976):

H_7: Expectations that posts are advertising based on influencers' profiles relate positively to perceptions that posts are advertising.

A clear disclosure makes the nature and intentions of persuasive messages evident, which reduces consumers' need to make inferences based on other (less clear) signals, such as follower count or prior activities. That is, inferred heuristics get replaced by clearer signals (such as disclosure), which offer more accessible and potentially more diagnostic information (Feldman & Lynch, 1988): No matter whether consumers expect to see advertising or not, they saliently perceive that posts are advertising when they are disclosed as such. Thus, disclosure should weaken the relationship postulated in H_7. Following our intuition in H_{1b}, that the branded content tool is a more prominent method of disclosure than in-text disclosure, we expect to find differences between the two disclosure options:

H_{8a}: Disclosure weakens the relationship between expectations that posts are advertising based on influencers' profiles and perceptions that the post is advertising.

H_{8b}: This moderating effect is stronger for disclosures that use the branded content tool ("paid partnership with…") than for in-text disclosures ("#advertising").

In summary, we seek to revalidate the serial mediation tested in Study 1 (H_5) and also extend the investigation to include advertising expectations as an additional mediator, preceding

perceptions of advertising. Accordingly, we postulate a moderated, serial mediation process, reflected in the combination of H_{6a} and H_{6b} with H_7, H_3, $H_{8a,}$ and H_{8b}.

6.1 Method

We employ a 3 (disclosure type: nondisclosure, in-text disclosure, branded content tool) × 2 (follower count: low [micro], high [macro]) × 2 (multiple product endorsement [MPE]: yes, no) between-subjects factorial design (see Figure A1 in the Web Appendix). As in Study 1, we varied the disclosure type with the branded content tool ("paid partnership with …") and in-text disclosure ("#advertising"). The experimental manipulation first displayed the profile of the (male) influencer with the number of posts, follower count (manipulation), and number of followees. It also included information on the influencer's interests. A second screenshot showed the last nine posts by this influencer, which featured either posts with visible brands and products (MPE: yes) or not (MPE: no). We pretested the stimulus material. We collected the data in Germany, using an online questionnaire. Participants were randomly assigned to the treatments. They first saw the profile screenshots of the influencer, and then the entire profile information appeared for at least 20 seconds (similar to Study 1). Next, they viewed a post by the influencer, followed by our variables of interest. We varied the promoted product (lemonade), which again should resonate equally with both genders. At the end, participants again received a debriefing. A total of 935 participants completed the questionnaire, and after similar exclusions as used in Study 1, the final sample includes 802 participants (571 women; M_{age} = 30.0 years).

6.2 Measures.

The focal measures are similar to those in Study 1 (see Table A5 in Web Appendix): *perception that the influencer is trustworthy* (M = 4.16, SD = 1.10; α = .92) and *perception that the post is advertising* (M = 5.72, SD = 1.80). In addition, we measured the *expectation that an influencer will post advertising based on the profile* (M = 4.26; SD = 2.08) using a single

item. We again measured Instagram account ownership, participants' demographics (age, gender) as control variables, and additionally included Instagram usage intensity. We also gathered participants' perceptions of the realism of the influencer's profile, because the profile in this study did not exist in reality (M = 4.68, SD = 1.75).

6.3 Results

6.3.1. Manipulation checks. Participants indicated whether the post was disclosed as advertising by selecting from four options, three of which represent one of the (non)disclosure types and one decoy. The results show that 78.9% of participants correctly recognized nondisclosure; 60.8% correctly classified in-text disclosure; and 73.6% correctly classified the branded content tool disclosure. According to a binomial test, all percentages significantly differ from guessing ($p < .001$). In addition, the participants evaluated follower count on a 7-point scale. Participants in the macro influencer condition perceived follower count as significantly higher (M = 5.25) than those in the micro influencer condition (M = 3.89; $\Delta = 1.36$, $p < .001$). Finally, the participants specified how they perceived the number of products depicted on the profile and confirmed the significantly higher number in the MPE condition (M = 4.52) than in the non-MPE condition (M = 2.95; $\Delta = 1.57$, $p < .001$). Thus, all the manipulations are successful.

6.3.2. Model estimation. We estimated a moderated, serial mediation model with follower count and MPE as independent variables (micro influencer and no MPE as the base). Disclosure type (multicategory dummy with nondisclosure as the base) moderates the path between advertising expectations and perceptions that the post is advertising (see Figure 1). Tables A7 and A8 in the Web Appendix provide the detailed results of the model estimation.

6.3.3. Direct and moderating effects. Perceptions that a post is advertising again negatively relate to consumers' perceptions of the influencer as trustworthy (–.069, $p = .004$; H_3). However, in contrast with Study 1, both types of disclosure, the branded content tool (.603, *p*

< .001) and in-text (.292, p = .049), significantly increase consumers' perceptions that a post is advertising, in support of H_{1a}. In this study, we also confirm H_{1b}, because the effect of disclosure using the branded content tool is significantly stronger than that of in-text disclosure (.310, p = .025).

The effect of the expectation that the post is advertising, based on the profile of the influencer, on perceptions of advertising is insignificant for the branded content tool. The prediction in H_7 holds for nondisclosure and in-text disclosure: The conditional direct effect of expectations of advertising on perceptions of advertising for nondisclosure is positive and significant (.232, p < .001). For in-text disclosure, the interaction effect with expectation of advertising is not significant (.067, p = .381), such that the conditional direct effect remains significant (.299, p < .001). In contrast, the interaction effect of expectations of advertising with the branded content tool disclosure is significantly negative (–.169, p = .021), such that the conditional direct effect becomes insignificant (.063, p = .166). Thus, we cannot confirm H_{8a} completely, because the interaction effect with in-text disclosure is not significant. However, as postulated in H_{1b} and H_{8b}, the branded content tool appears to be a stronger and clearer (disclosure) signal. Our results also mirror the prediction that expectations of advertising depend on follower count and previous activities. That is, expectations that posts are advertising are higher for macro influencers (vs. micro influencers; .401, p = .005, H_{6a}) and in the MPE (vs. no MPE) condition (.554, p < .001, H_{6b}).

6.3.4. Indirect effects. To examine the effects of the two disclosure types relative to nondisclosure, through perceptions that a post is advertising, on influencer trustworthiness, we again estimate two relative indirect effects for each disclosure type. The relative indirect effect through perceptions of advertising on trustworthiness is significant for the branded content tool (–.042 [–.080; –.012]), but marginally not for in-text disclosure (–.020 [–.049; .000]). Regarding the conditional indirect effects of both follower count and MPE, we find evidence

of a serial mediation process through expectations of advertising and perceptions of advertising on trustworthiness for the nondisclosure condition (follower count: –.006 [–.015; –.001]; MPE: –.009 [–.020; –.002]) and the in-text disclosure (follower count: –.008 [–.019; –.001]; MPE: –.011 [–.023; –.003]). These effects do not arise for the branded content tool (i.e., index of moderated mediation [Hayes, 2017] is significant for both nondisclosure and in-text disclosure compared with the branded content tool condition, but not for nondisclosure compared with in-text disclosure). This finding is in line with our prediction in H_{8b} that the branded content tool is already such a strong signal that other inferences are not necessary. However, for "weak" disclosures, consumers use such information to form expectations, which then influence their perceptions of advertising and influencer trustworthiness. We again performed the serial mediation analyses with a reversed sequence of mediators but did not find significant indirect effects, providing evidence for the postulated sequence of the mediation process.

6.4. Discussion

In line with Study 1, the use of the branded content tool significantly increases perceptions that posts are advertising. However, in contrast with Study 1, in which we do not find a significant effect of the "#advertising" disclosure, in this study, we find a small significant effect of in-text disclosures on the perception that a post is advertising, though significantly weaker than the effect of the branded content tool. In turn, increased perceptions that a post is advertising relate negatively to the perceived trustworthiness of the influencer. Disclosure using Instagram's branded content tool clearly enhances the noticeability of commercial intent, and in-text disclosure is a much weaker signal. However, explicit disclosures may not be necessary to make consumers aware of commercial intents; our results indicate that MPE increases expectations that the influencer will post advertising, which then relates positively to perceptions that the post is advertising. Consumers appear to infer a general commercial intent by using the influencer's prior activities: The more the influencer has posted previously

about products, the more consumers perceive the influencer's subsequent post is advertising. We find similar evidence that consumers have higher expectations of advertising—and thus higher perceptions that a post is advertising—for macro influencers compared with micro influencers. However, if a post features a prominent disclosure, such as by using the branded content tool, expectations of advertising do not further increase perceptions that a post is advertising.

7. Study 3

As previously explained, consumers' perceptions of the commercial intent of Instagram posts have increased, due to the enormous expansion in brand-sponsored posts (Statista, 2019) and media reports about non-appropriate disclosure of commercial content. Thus, consumers now often suspect "sponsorship even under circumstances when the influencer promotes a brand without disclosing sponsorship" (Stubb et al., 2019, p. 210), indicating a high general awareness for sponsored content on Instagram that arguably might alter the role of disclosure. If the disclosure reveals the post as easily identifiable as advertising, it might also have positive effects. Clearly disclosing sponsored posts increases advertising transparency and signals the influencer's openness and honesty, which consumers might appreciate. When consumers expect to see sponsored content and know that disclosure is required (e.g., through public media coverage of legal disputes), failures to disclose clearly and transparently might backfire and reduce trustworthiness perceptions. In Study 3, we set out to investigate this alternative positive outcome of disclosure, which, combined with the previously identified negative outcome via perception of advertising, leads to a "double-edged sword" character of disclosing sponsored content.

Advertising transparency in this context refers to "the extent to which a sponsored communication message makes noticeable to the consumer its paid nature" (Wojdynski et al., 2018, p. 118), by intentionally sharing the commercial purpose of a message. According to

the persuasion knowledge model, consumers use different kinds of information to determine if specific communication is advertising or not (Friestad & Wright, 1994). Based on their experience, they might be able to use several information cues, such as previous endorsements or the follower count, to infer the advertising nature of a post (see Study 2). However, disclosures offer specific, unambiguous information about the commercial intent, so they should result in higher perceptions of advertising transparency (Campbell & Evans, 2018).

H_9: Disclosure increases perceived advertising transparency.

This advertising transparency in turn might evoke distinct consumer evaluations. On the one hand, advertising transparency clearly communicates the advertising nature of a message, so consumers are more likely to perceive it as advertising, which could relate negatively to trustworthiness perceptions, as predicted in H_3. On the other hand, advertising transparency enables consumers to identify the commercial intent easily, which might be positively received and appreciated as a signal of influencers' honesty and morality. Transparency through disclosure might thus be appreciated by consumers (Stubb et al., 2019) and thereby result in a "transparency bonus". In the latter case, a positive evaluation should increase trustworthiness perceptions, because consumers in general are willing to rely more on exchange partners who provide truthful information (Moorman et al., 1993).

H_{10}: Advertising transparency relates positively to (a) the perception that the post is advertising and (b) a transparency bonus.

H_{11}: The "transparency bonus" relates positively to perceived influencer trustworthiness.

In summary, we postulate a parallel serial mediation process, reflected in the combination of H_9, H_{10a}, H_{10b}, and H_{11} with H_3 and H_4. In addition, we expect the effects to be stronger for the branded content tool than an in-text disclosure, due to the stronger signal that the branded content tool provides.

With an exploratory approach, focusing on different types of disclosure, we also strive to

test whether the branded content tool elicits distinct perceptions of the relationship between an influencer and a brand. The wording of the branded content tool ("paid partnership with…") might lead to inferences of a long(er)-term partnership (MarketingDive, 2021).[11] These inferences might work in the influencer's (and sponsor's) favor, as a longer relationship speaks for an influencer's more sincere and credible opinion of the brand (Woisetschläger et al., 2017). Identifying such a "positive" side effect of this disclosure option in turn might increase influencers' willingness to use disclosure tools, in line with regulatory efforts.

Finally, as brand collaborations gradually become influencers' main source of income (e.g., Stubb et al., 2019) and consumers become increasingly aware of this development, consumers might become more likely to make inferences about monetary motives for posts. Therefore, we also explore consumers' general perceptions of influencers' motivations to post, especially focusing on financially-driven motivations.

7.1 Method

We employed a 3 (disclosure type: nondisclosure, in-text disclosure, branded content tool) between-subjects factorial design (see Figure A1 in the Web Appendix). We pretested the stimulus material. For the main study, we collected data in Germany through Clickworker, using an online questionnaire. Participants were randomly assigned to the treatments. They viewed a female influencer's post for at least 20 seconds, followed by the variables of interest and a debriefing at the end. We again varied the product (backpack; gender-neutral). A total of 179 participants completed the questionnaire; applying the exclusion restrictions previously described resulted in a final sample of 166 participants (99 women; M_{age} = 36.3 years).

7.2 Measures

In addition to the measures applied in the previous studies, we measured *perceived length*

[11] We thank an anonymous reviewer for this suggestion.

of the cooperation between influencer and brand (M = 4.94, SD = 1.42) and an item pertaining to inferences of the *monetary compensation of the influencer* (M = 5.81, SD = 1.34). Participants additionally indicated their opinion of the motivation of the influencer, in response to an open question. We measured *perceived advertising transparency* (M = 4.16, SD = 2.15; adapted from Wojdynski et al., 2018) and used one item to measure the "*transparency bonus*", as an appreciation of the openness of the influencer regarding advertising disclosure (M = 3.69, SD = 1.73; see Table A9 in the Web Appendix). We also measured Instagram account ownership, Instagram usage intensity, and participants' demographics (age, gender) as control variables.

7.3 Results

7.3.1 Manipulation checks. Participants indicated whether the post was disclosed as advertising by selecting from three options. In turn, 86.3% of participants correctly recognized nondisclosure, 66.1% noted the in-text disclosure, and 88.1% identified the branded content tool disclosure. According to a binomial test, all percentages significantly ($p < .001$) differ from guessing, so the disclosure manipulation is successful.

7.3.2 Replication of previous results. For the mediation analysis, we first replicate the results from Study 1, regarding the serial mediation effect of disclosure type (multicategory dummy with nondisclosure as the base), through perceptions that the post is advertising and perceived influencer trustworthiness, on intentions to like the post (model 6; see Table A10 in the Web Appendix), with age, gender, Instagram account ownership, and usage intensity as covariates. The branded content tool disclosure (1.363, $p < .001$) significantly increases consumers' perceptions that a post is advertising; in-text disclosure is marginally not significant (.620, $p = .109$). These perceptions relate negatively to consumers' perceptions of the influencer's trustworthiness (–.202, $p < .001$), which relates positively to intentions to like the post (.921, $p < .001$). The relative indirect effect of the branded content tool (–.254 [–.486; –.089])

is significant, but that for the in-text disclosure is not (–.115 [–.305; .018]). The relative indirect effect for branded content tool also is significantly stronger than that for in-text disclosure (–.138 [–.310; –.013]).

7.3.3 Inferred motivation of influencer. To explore whether disclosure types have different effects on consumers' inferences about the influencer's motives to publish a specific post, we assumed that the branded content tool could serve as an indicator of a longer-term cooperation with a brand. The post hoc tests (Tukey-HSD) reveal that the branded content tool (M = 5.32; SD = 1.29) prompts higher perceptions of a long-term cooperation than nondisclosure (M = 4.57; SD = 1.45, p = .015), but no significant differences arise in the comparison to in-text disclosure (M = 4.87; SD = 1.45, p = .202). However, this perceived length of cooperation does not exhibit any significant relation to perceptions of trustworthiness in a mediation model (model 4), nor any effects on intentions to like.

In addition, it might seem intuitive for consumers to infer that an influencer receives monetary compensation; we find evidence of this inference when we compare the branded content tool (M = 6.25; SD = .99) with the nondisclosure condition (M = 5.29; SD = 1.47, p < .001), though it is marginally not significant for the in-text disclosure condition (M = 5.80; SD = 1.39, p = .107). In line with this result, respondents' answers to an open-ended question at the beginning of the questionnaire about their beliefs regarding why the influencer had published the post, coded by a research assistant blind to the study goals, reveal that a majority of those who referred to financial compensation are from the branded content tool condition (65%), compared with just 27.5% from the in-text disclosure and 7.5% from the nondisclosure condition. That is, the branded content tool provides a strong commercial signal to consumers.

7.2.4. Two sides of disclosure. Because we predict that disclosure might result in both positive and negative effects, we test a parallel and serial mediation model (similar to model

81 in Hayes, 2017; see Tables A11 and A12 in the Web Appendix). In line with H_9, both disclosure types exhibit a significantly positive effect on advertising transparency (branded content tool: 2.891, $p < .001$; in-text: 1.539, $p < .001$), which relates positively to perceptions that the post is advertising (.341, $p < .001$). Perceptions of advertising, in turn, relate significantly negatively to trustworthiness perceptions (–.199, $p < .001$), which finally relates positively to intentions to like the post (.923, $p < 0.001$). We also find support for H_{10} and H_{11}, because advertising transparency relates significantly positively to transparency bonus (.342, $p < .001$), which relates significantly positively to perceived influencer trustworthiness (.253, $p < .001$). In the mediation model[12], the relative indirect effects show that both types of disclosure (cf. nondisclosure) have significantly negative indirect effects through advertising transparency, perceptions that the post is advertising, and trustworthiness on intention to like (branded content tool: –.181 [–.354; –.066]; in-text: –.097 [–.208; –.032]). Moreover, both types of disclosure exert significantly positive indirect effects through advertising transparency, the transparency bonus, and trustworthiness on intention to like (branded content tool: .231 [.087; .424]; in-text: .123 [.040; .248]). In both cases, the relative indirect effects for the branded content tool are stronger than those for in-text disclosure (–.085 [–.178; –.026]; .108 [.034; .216]). Finally, we compare the relative indirect effects (through perceptions that the post is advertising *versus* through the transparency bonus) using a bootstrapped-based differences test of the absolute values of the effects (Hayes, 2017, p. 166). This test allows us to assess whether one of the two paths is stronger than the other. While the positive path through transparency bonus seems slightly stronger than the negative path through advertising perceptions, the confidence intervals of the differences include zero, indicating that the differences between the two paths are not significant (branded content tool: –.050 [–.263; .170]; in-text: –.026 [–.146; .092]).

[12] Please note that only the full-length serial mediation paths are significant, and no other indirect effects are significant.

7.4 Discussion

With Study 3, we replicate the findings from the previous studies regarding the effects of the branded content tool and in-text disclosure on perceptions that a post is advertising, trustworthiness of the influencer, and intentions to like the post. Moreover, we reveal opposing outcomes of transparent, clear disclosures. On the one hand, an unambiguous disclosure makes consumers aware of the commercial nature of the post (increased perceptions that the post is advertising). On the other hand, consumers appreciate such transparency. Comparing both disclosure options to each other, again, disclosure using Instagram's branded content tool enhances the noticeability of the commercial intent more than the in-text disclosure. The branded content tool disclosure sends a stronger signal about the commercial motives for a post, so it can have both positive and negative effects on perceived influencer trustworthiness and finally on intentions to like.

8. General discussion and implications

8.1 Summary and discussion of main findings

The relevance of influencer marketing communications and questions about how commercial content should be disclosed on social media motivate our research. We investigate (1) the difference between the effects of a branded content tool and in-text disclosures on perceptions of advertising, transparency, and trustworthiness, as well as consumer engagement; (2) the underlying processes; and (3) the impact of important influencer characteristics on the proposed relationships. Our field study, the first to investigate disclosures in influencer marketing, and three online experiments provide several key findings (see Table A13 in the Web Appendix for an overview of all hypotheses and whether they are supported or not in the different studies).

First, in all four studies, the standardized branded content tool exerts a consistently strong effect (cf. nondisclosure) on consumers' perceptions that the post is advertising, which lowers

influencer trustworthiness perceptions and eventually the likelihood of engaging with the content. In contrast, in-text disclosures (e.g., using hashtags) tend to exert weaker effects on all dependent variables than the branded content tool, although this difference is significant only in Studies 2 and 3. In addition, the implications for in-text disclosures relative to nondisclosure vary across our four studies. The engagement rates are significantly lower for in-text disclosures in the field study. However, we find effects of in-text disclosures on perceptions of advertising or perceived trustworthiness only in Study 2, but not in Studies 1 and 3. Thus, the in-text disclosure and nondisclosure actually may lead to similar inferences about commercial intents. The consistent pattern is that the coefficients of in-text disclosure always lie between nondisclosure and the branded content tool, but are sometimes closer to nondisclosure and sometimes closer to the branded content tool disclosure. Whereas the perception of in-text disclosure might depend more strongly on the content of the post (such as the length or theme of the caption), the more standardized branded content tool might be less affected by these content characteristics. Hence, the branded content tool offers a better and more consistent option to help consumers identify the commercial nature of posts. These insights complement studies by Evans et al. (2017) and De Veirman and Hudders (2020) and affirm that the critical question is not just whether to disclose but also how. This evidence also addresses Boerman's (2020, p. 27) call to "compare the effects of this standardized disclosure [i.e., the branded content tool] to hashtags."

Second, we find that advertising perceptions, based on the profiles of influencers, have important implications for influencer marketing (Study 2). Consumers use influencer profiles to infer that they will confront commercial content, leveraging their previous social media experiences or knowledge gained from other sources. Macro influencers and those who have previously endorsed multiple products evoke consumers' expectations of advertising, which also increase their perceptions that posts are advertising, compared with micro influencers and

those who have not endorsed multiple products previously.

Third, by combining disclosure types and influencer characteristics, we establish a serial mediation process, from follower count and multiple product endorsements through expectations of advertising and perceptions that a post is advertising to trustworthiness of the influencer. It is significant only for the nondisclosure and in-text conditions. That is, the strong disclosure signal provided by the branded content tool already heightens consumers' perceptions of advertising, so follower count or number of endorsed products do not provide any additional information. Influencer characteristics and advertising disclosures thus appear to serve complementary functions for the relatively weaker in-text disclosures.

Fourth, moving beyond an exclusively negative disclosure effect, we show that consumers appreciate advertising transparency (Study 3). Both influencers and brands benefit from a transparency bonus, in terms of greater trustworthiness and intentions to like. Transparency also relates positively to our central construct, perception that the post is advertising. Thus, two parallel, opposing mechanisms appear to be at play, highlighting the double-edged sword character and nontriviality of influencer marketing disclosures.

8.2 Implications for public policy makers

Public policy makers involved in developing regulations or guidelines for influencer marketing can feel confident about the necessity of their actions. Our field study affirms that engagement rates with a post substantially decrease with advertising disclosures. That is, disclosure has an effect, and policy makers should introduce rules for influencers and companies (brand owners, agencies). However, some regulators in the United States (FTC, 2019) and Germany (Medienanstalten, 2018) recommend not to rely *only* on standardized branded content tools, arguing that a disclosure placed above the image in a post, which is the focus of attention on a photo-dominated platform like Instagram, might easily be missed (FTC, 2017). Our findings contest this position, because among the disclosure options tested in our studies,

the branded content tool provides the clearest signal of the commercial nature of sponsored influencer posts. We also challenge court rulings that suggest macro influencers do not have to disclose, because consumers infer a commercial intent from their large follower count (*Zeit Online*, 2019a). Our findings related to the effect of follower count on expectations of advertising align with this reasoning, but this effect only evokes stronger perceptions that a specific post is advertising if combined with in-text disclosures or nondisclosures. The branded content tool, which is preferable from a public policy perspective, offers such a strong signal that indirect inferences of commercial intent obtained from cues such as follower count are no longer necessary.

8.3 Implications for managers and influencers

We also derive several implications for managers. In their influencer selection decisions, managers should not only distinguish between micro and macro influencers (Appel et al., 2020; Haenlein et al., 2020) but also between influencers with small and large portfolios of previous product endorsements. We find the highest levels of trustworthiness associated with micro influencers with limited brand relationships. If managers must decide between two influencers with similar numbers of followers, the number of previous product endorsements offers another effective, simple selection criterion. This information can be somewhat more cumbersome to access than simple follower count, but an influencer's post history is publicly available on platforms such as Instagram, and data-driven agencies (e.g., Reachbird, CreatorIQ) specialize in analyzing influencers' past cooperation partners and "brand affinity."

With regard to disclosure decisions, we show that in-text disclosures entail a relatively smaller loss of trustworthiness and engagement than branded content tools, through perceptions that the post is advertising. However, as 98% of firms identify transparency as a top priority (Linqia, 2020), influencer marketing managers should consider the branded content tool as a standard for campaigns. This approach offers several benefits: First, it leads to higher

transparency perceptions than in-text disclosure, which, according to our Study 3, triggers a positive parallel mechanism that can be as strong as the negative path through perception of advertising. Second, brands and agencies do not have to monitor the disclosure practices of influencers they hire. Third, brands automatically receive information about post performance metrics, such as reach and interactions (Instagram, 2021).

The implications for influencers parallel these recommendations for companies. Influencers should resist the temptation to increase their followers and cooperate with brands at all costs; both can lead to consumers perceiving them as "human ad spaces." Unlike the conventional wisdom that "The more sponsors you have, the more credibility you have" (Lorenz, 2018), our research offers a first indication that large brand portfolios can undermine influencers' trustworthiness through higher advertising expectations. Disclosure that a post is advertising can have a similar negative effect, because it increases perceptions of monetary motivations. Yet we still advise influencers to use, at a minimum, some legally permitted disclosure. As anecdotal evidence indicates (The Fashion Law, 2017), the long-term reputation loss due to being caught not disclosing is worse than the engagement loss related to an individual post. In addition, using disclosures can also improve trustworthiness due to a perceived transparency bonus.

8.4. Research agenda

Despite testing multiple key aspects of influencer marketing disclosure, this study can only cover some of the relevant research questions within this domain. Table 5 contains a selection of potential research questions, representing a research agenda that distinguishes among three stakeholder groups that are predominantly affected: public policy makers, brands, and influencers.

[Insert Table 5 about here]

For public policy makers, inconsistencies in disclosure policies across international markets deserve special attention. What are the impacts of this tangle of rules, and how might policies be streamlined? This consideration is especially important as social media channels are not restricted to local markets but are consumed across country borders. In a similar manner, the question of when (i.e., which kinds of influencer-brand relationships) to disclose warrants further investigation and streamlining. Ongoing legal disputes in Germany show that there is no standardized approach to that question (*Spiegel,* 2021), as some courts oblige influencers to disclose all brand-related posts as advertising, even if the influencer did not receive any compensation for it (*Zeit Online,* 2019b). Another interesting question pertains to the impact of explicitly disclosing content as not sponsored (De Veirman & Hudders, 2020). A follow-up study might undertake an experimental analysis of combinations of the branded content tool with in-text disclosures, a practice we observed in our field study. A more thorough examination of different types of in-text disclosures (e.g., hashtag versus no hashtag, position within a post caption) is also warranted. Such positioning effects of disclosures can also be analyzed using eye-tracking methods (e.g., Van Reijmersdal et al., 2020). Those analyses would allow a deeper examination of social media users' visual processing of posts and help to understand our finding that the effects of different disclosure types vary. Finally, broader policy-related research topics include disclosure effects across different social media platforms (e.g., Instagram, TikTok, YouTube) and how to deal with sponsored advertising in livestreaming social media content, such as on Instagram Live or Clubhouse. As the content becomes more complex and less standardized (e.g., live videos), the benefits of standardized platform-initiated disclosure tools might even increase.

From a brand perspective, continued research is needed to determine if the transparency bonus associated with clear disclosure practices spills over to overall ethical perceptions of the brand. Further research could also concentrate on the difference between the transparency

path and the perception-of-advertising path. In our Study 3, the two alternative paths did not differ significantly in strength. However, it is likely that industry-specific factors (e.g., the intensity of using influencers or the involvement and price level of the product category) and consumer-specific factors (e.g., prior experience with [misleading] disclosures or personal attachment to the influencer) act as contingencies within the framework that may lead to a dominance of one of the two paths. Further, it is worthwhile to investigate how consumers perceive inconsistencies in disclosing practices within one campaign (i.e., some influencers disclose, others do not) and how the overall influencer marketing process can be managed to avoid such inconsistencies. A question that we address marginally with our study stimuli pertains to whether consumers' expectations of influencer marketing disclosure transparency are lower for unknown brands. Continued studies might investigate the impact of disclosure practices (including fraud) and their media coverage on additional key metrics, such as product sales or stock returns. For example, event studies using publicized influencer disclosure misconduct as the focal event could add to the knowledge on endorser scandals (e.g., Hock and Raithel, 2020). An attribution-related question that relates equally to brands and influencers is whether consumers blame the endorsed brands or the influencer for not disclosing advertising.

Predominantly influencer-related questions that could be addressed in a longitudinal study design are whether long-term follower-influencer relationships, long-term influencer-brand relationships, or long-term disclosure consistency have an impact on the disclosure-trustworthiness relationship, and whether in the long run the positive effects of disclosing outweigh the negative effects. An interesting extension of our study with additional field experiments might rely on the random manipulations of the disclosure behavior of real influencers. Such a research design could overcome the limitation of our online studies, in which participants did not necessarily follow the influencers. Multiple product endorsements also deserve a

more thorough investigation. Specifically, is there a threshold effect for multiple product endorsements, above which influencers' trustworthiness suffers particularly? In addition, considerations of effects of varied versus consistent categories or brands endorsed should receive more attention in future influencer marketing research. Tackling these last two issues would contribute to solving the highly relevant question on how influencers can integrate (disclosed) commercial relationships in an ongoing narrative that remains authentic and engaging.

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Table 1. Disclosure regulations[a]

		Influencer Marketing				Product Placement/*Sponsoring*		
Regulatory bodies		**Federal Trade Commission (FTC)**		**Self-Regulatory Bodies Wettbewerbszentrale & Deutscher Werberat**	**• Committee of Advertising Practice (CAP) • Advertising Standards Authority (ASA)**	**Federal Communication Commission (FCC)**	**Medienstaatsvertrag**	**Office of Communication (Ofcom)**
Country/Region		USA	Europe	EU (exemplary): Germany	Non-EU (exemplary): UK	USA	Germany	UK
Published rules		Endorsement guide (based on Section 5 of the FTC Act)[b]	Best practice recommendations	Recommendations by public broadcasting organizations[c]	Influencer guide (ASA, 2018)			Broadcasting code, Ofcom guidance notes
When to disclose?	**Monetary payment**	✓	✓	✓	✓	• Reception of anything of value (direct or indirect) for material broadcast • Even without compensation for placed products, some reference to the provider is required	If value of product > € 100 and 1% of production costs, or if > €10,000	Any broadcast on an Ofcom licensed channel must include the product placement logo where necessary
	(Discounted/free) products	✓	✓	✓	✓			
	Employment	✓	Other reciprocal arrangements	✓	✓		*A sponsorship must be clearly indicated, including a clear reference to the sponsor's identity and sponsored offer.*	
How to disclose?	**General rules**	• Clear language • Disclosure hard to miss and recognizable • Disclosure in same language as endorsement	• Recognizable (easily identifiable & distinguishable) • Disclosure should appear instantly	• Clear language • Visible, readable	• Clear language • Disclosure hard to miss and recognizable	• Minimal disclosure required when products are placed in TV shows and radio broadcasts; a simple statement at the end of the broadcast stating the broadcast was sponsored by a particular brand suffices	• Clear disclosure (start/end/after) by explanatory note (or insertion of "P" symbol for at least 3 secs) • *Reference to the sponsor at the start or end of the broadcast* • *Permitted before/after each ad break or alternatively in the title of broadcast*	• Clear disclosure at the beginning and end of a broadcast (at least 3 secs), as well as during its continuation after each interruption • *Reference to sponsor at start, during, or end of broadcast* • *Free to use different messages, such as "sponsored by...," "in association with...," or "brought to you by..."*
	Terms	• Advertisement (#advertisement) • Ad (#ad) • Sponsored (#sponsored)	Need to be defined at the national level	• Werbung (#werbung) • Anzeige (#anzeige)	• e.g., Ad, Advert (ising/isement) • Paid partnership tool on Instagram in addition to hashtags			
	Not sufficient	• Disclosure tools provided by platform • No misleading, vague, confusing, or abbreviated terms (e.g., sp, spon, collab)	Not specified	• Disclosure tools provided by the platform • No foreign language terms (sponsored by, PRsample, ad)	No misleading or abbreviated terms			
Miscellaneous		• Disclosure not hidden in hashtags • Likes, tags, pins, or similar behavior can be classified as endorsements[b]	• Editorial control by advertiser over the message • Annex lists national self-regulatory guidelines	• Disclosure not hidden among other info • Caution if commercial intent can be suspected • Affiliate links, discount codes need disclosure (in close proximity to the link/code)	Disclosure not hidden in a "sea of hashtags"	FCC considers product placement "embedded advertising," subject to its "sponsorship identification" rule		

[a]Guidelines are from winter 2020/2021 and are subject to continuous updates. [b]U.S. laws also apply when the creator is posting from abroad, but the post likely affects U.S. consumers. [c]Based on Gesetz gegen unlauteren Wettbewerb, Rundfunkstaatsvertrag, Telemediengesetz.

Table 2. Literature on influencer marketing in online social networks

		Research design		**Independent variables**[a]					**Dependent variables**			
				Disclosure types								
Authors	Social network	Lab experiment	Field study	Non-disclosure	In-text/ Hashtag	Branded content tool	Number of followers	Multiple product endorsements	Attitude	Purchase intention	Engagement	Trustworthiness
Evans et al. (2017)	Instagram	✓		✓	✓				✓	✓		
Boerman et al. (2017)	Facebook	✓		✓	✓						✓	
De Jans et al. (2018)	YouTube			✓	✓					✓		✓
De Veirman & Hudders (2020)	Instagram	✓		✓	✓				✓			
Boerman (2020)	Instagram	✓		✓		✓	✓				✓	
Kay et al. (2020)	Instagram	✓		✓	✓		✓			✓		
Van Reijmersdal et al. (2020)[b]	YouTube	✓		✓	✓				✓	✓		
This study	Instagram	✓	✓	✓	✓	✓	✓	✓			✓	✓

[a] These studies investigate various other independent variables that capture influencer, post, product, brand, network, and audience characteristics.
[b] Study uses eye-tracking to identify consumers' (in this case, children's) reactions.

Table 3. Descriptive statistics field study

	Mean	Median	Min.	25% Quantile	75% Quantile	Max.
Number of posts per influencer	58.9	59	9	35	77	130
Follower count	768,986	263,200	6,130	103,400	790,300	6,700,000
Number of likes per post	27,207	9,251	88	3,551	27,684	471,617
Number of comments per post	985	143	0	73	273	216,000
Likes rate (likes/follower count) per post	3.91	3.06	.24	2.11	4.40	62.31
Comments rate (comments/follower count) per post	.09	.04	0	.03	.08	3.22
Engagement rate ([likes + comments]/follower count) per post	4.00	3.12	.24	2.16	4.50	63.81

Table 4. Results of field study with engagement rate as dependent variable

Predictors	Engagement rate			Likes rate	Log likes	Comments rate	Log comments
Constant	**12.208**** (4.271)	**12.480**** (4.261)	**12.580**** (4.259)	**12.148**** (4.155)	**-3.488***** (.688)	**.446**** (.161)	**-3.662***** (.859)
In-text disclosure	**-.295**** (.106)	**-.311**** (.109)	**-.303**** (.109)	**-.286**** (.105)	**-.073***** (.019)	-.016 (.010)	-.068 (.046)
BCT disclosure	**-.640**** (.222)	**-.657**** (.223)	**-.638**** (.224)	**-.591**** (.215)	**-.090**** (.039)	**-.047**** (.020)	**-.198**** (.095)
Both disclosures	**-.712***** (.150)	**-.742***** (.156)	**-.739***** (.156)	**-.704***** (.150)	**-.166***** (.027)	**-.035**** (.014)	**-.211**** (.067)
Influencer Characteristics	Included	Included	Included	Included	Included	Included	Included
Post Characteristics		Included	Included	Included	Included	Included	Included
Time and Day Characteristics			Included	Included	Included	Included	Included
Random Effects							
σ^2	2.14	2.14	2.14	1.98	.07	.02	.39
$\sigma^2_{influencer}$	14.59	14.46	14.44	13.75	.38	.02	.55
ICC	.87	.87	.87	.87	.85	.53	.59

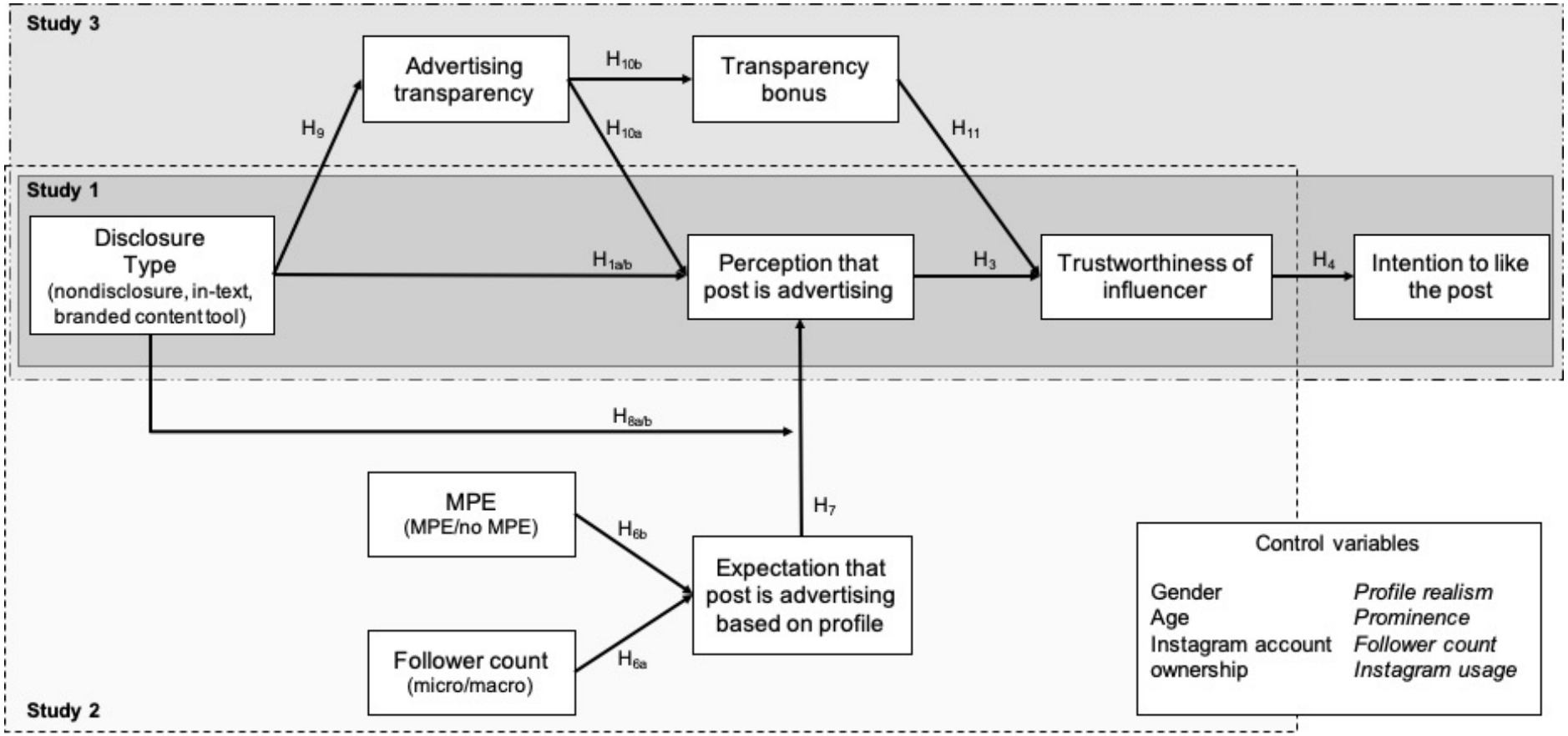
Notes: BCT: branded content tool. Standard errors in parentheses; significant coefficients at $p < .05$ in bold.
*$p < .05$, **$p < .01$, ***$p < .001$.

Table 5. Research agenda

Research question	Research question also relevant[a] for		
	Public policy makers	Brands	Influencers
Stakeholder group public policy makers			
How does the inconsistency among international disclosure policies affect disclosure practices? How can disclosure policies be unified?			
Should all brand-related content be disclosed as advertising, or only content for which monetary or in-kind compensation is offered?		✓	✓
What effects do impartiality disclosures ("this is not sponsored content") have on consumer perceptions?		✓	✓
What effect does combining the branded content tool with in-text disclosure have?		✓	✓
What are reasons for the differential effects of the branded content tool and in-text disclosures (e.g., analyses using eye-tracking)?		✓	✓
What are the effects of different types of in-text disclosures (wording, position)?		✓	✓
Do advertising disclosures work differently on various social media platforms (e.g., Instagram, TikTok, YouTube)? How should platform-initiated disclosure tools be designed on these platforms?		✓	✓
How can disclosure occur in live social media content (e.g., Instagram Live, Clubhouse, Stereo)?		✓	✓
Stakeholder group brands			
Does the transparency bonus associated with clear advertising disclosure spill over to ethical perceptions of a brand? When does transparency dominate advertising perception and vice versa?			✓
How are disclosure inconsistencies within campaigns (some influencers disclose, others not) perceived by consumers?			✓
What are optimal ways to manage the influencer marketing process (e.g., monitoring disclosure, controversies)?			✓
How do disclosure effects differ for well-known versus new brands? Are consumers more forgiving when it comes to unknown brands?			✓
What impacts do disclosure practices have on other performance metrics such as saves and shares (posts), swipe-ups (stories), or sales conversions?			✓
What is the financial impact of disclosure fraud for the brand owner?			
Is a lack of disclosure attributed to the endorsed brand or the influencer?			✓
Stakeholder group social-media influencers			
Are negative effects of disclosure, in terms of lower engagement rates, weaker for long-term partnerships?		✓	
Do influencers benefit from consistent disclosure practices over time (e.g., because followers do not pay attention to disclosure any more)?		✓	
Can field experiments overcome the limitation of lab experiments that users do not self-select to become followers?			
Is there a threshold for multiple endorsements, above which trustworthiness suffers particularly? What role do diversity and consistency within and across product categories play?		✓	

[a] We categorize research questions to the stakeholder group for which they are most crucial. However, some of the questions could also be relevant for the other stakeholder groups, which is indicated by a ✓.

Figure 1. Conceptual framework for Studies 1, 2 and 3



Notes: MPE: Multiple product endorsements. Because of the study design, control variables in italics are either included in Study 1 (prominence and follower count), in Study 2 (profile realism and Instagram usage), or in Study 3 (Instagram usage). The control variables gender, age and Instagram account ownership are included in all three studies.

How, Why, and When Disclosure Type Matters for Influencer Marketing

Web Appendix

In this Web Appendix we provide the following information:

Table A1. Variable description and operationalization for the field study

Variable	Description	Operationalization
Dependent variables		
Number of likes	Popular measure of engagement; number of likes each post has received	Count: Total number of likes per post
Likes rate	Ratio of likes to follower count (influencers with higher numbers of followers also receive more likes)	Quantitative: Number of likes per post divided by number of followers per influencer
Number of comments	Another typical measure of engagement; number of comments each post has received	Count: Total number of comments per post
Comments rate	Ratio of comments to follower count	Quantitative: Number of comments per post divided by number of followers per influencer
Engagement rate	Primary measure of engagement; sum of likes and comments relative to the follower count	Quantitative: Number of likes plus number of comments per post divided by number of followers per influencer
Independent variables		
Disclosure type		
In-text	Indicates whether post was disclosed using text or hashtag in caption only (e.g., "Advertisement", "Paid", "#ad", etc.).	Dummy: 1 if only in-text disclosure used, 0 otherwise
Branded content tool	Indicates whether post was disclosed using branded content tool only (i.e., "paid partnership with…").	Dummy: 1 if only branded content tool used, 0 otherwise
Both disclosures	Indicates whether post was disclosed using both disclosure types (i.e., in-text and the branded content tool)	Dummy: 1 if both disclosures used, 0 otherwise
Controls		
Follower count	Total number of followers per influencer	Count: Total number of followers per influencer at time of data collection
Gender	Gender of influencer	Categorical: Female or male
Date of posting	Day of posting	Multiple dummies: 1 for each day of the week from Monday–Saturday, 0 if Sunday
Time of posting	Time of the posting	Dummy: 1 if afternoon (4 p.m.–10 p.m.) or night (10 p.m.–7 a.m.), 0 otherwise (7 a.m.–4 p.m.)
Number of hashtags	Number of hashtags in caption of post; hashtags function as keywords and make post accessible and searchable on platform	Count: Total number of '#' symbols
Number of mentions	Number of mentions using @ symbol in caption of post that link to other Instagram accounts	Count: Total number of '@' symbols
Number of characters	Number of characters in caption of post; the more characters in the caption, the more effort required to process the message, but it may contain more information	Count: Total number of characters in post

Table A2. Detailed results for the field study

Predictors	*Engagement rate*			*Likes rate*	*Log likes*	*Comments rate*	*Log comments*
Constant	**12.208**** (4.271)	**12.480**** (4.261)	**12.580**** (4.259)	**12.148**** (4.155)	**-3.488***** (.688)	**.446**** (.161)	**-3.662***** (.859)
In-text disclosure	**-.295**** (.106)	**-.311**** (.109)	**-.303**** (.109)	**-.286**** (.105)	**-.073***** (.019)	-.016 (.010)	-.068 (.046)
Branded content tool disclosure	**-.640**** (.222)	**-.657**** (.223)	**-.638**** (.224)	**-.591**** (.215)	**-.090**** (.039)	**-.047**** (.020)	**-.198**** (.095)
Both disclosures	**-.712***** (.150)	**-.742***** (.156)	**-.739***** (.156)	**-.704***** (.150)	**-.166***** (.027)	**-.035**** (.014)	**-.211**** (.067)
Gender	-1.340 (1.007)	-1.334 (1.003)	-1.332 (1.002)	-1.289 (.978)	-.132 (.162)	-.041 (.037)	-.083 (.199)
Follower count	-.590 (.334)	-.610 (.333)	-.610 (.333)	-.587 (.325)	**1.013***** (.054)	**-.025*** (.013)	**.711***** (.067)
Number of #		-.014 (.010)	-.015 (.010)	-.011 (.010)	-.003 (.002)	**-.003***** (.001)	**-.042***** (.004)
Number of characters in text		.018 (.019)	.019 (.019)	.018 (.018)	**.007*** (.003)	.001 (.002)	**.034***** (.008)
Number of @		.012 (.033)	.011 (.033)	-.010 (.032)	**-.013*** (.006)	**.022***** (.003)	.016 (.014)
Weekday [Mon]			-.107 (.113)	-.124 (.109)	-.032 (.020)	.018 (.010)	.025 (.048)
Weekday [Tue]			-.097 (.111)	-.085 (.106)	-.036 (.019)	-.012 (.010)	-.060 (.047)
Weekday [Wed]			**-.248*** (.111)	**-.232*** (.107)	**-.061**** (.019)	-.015 (.010)	-.086 (.048)
Weekday [Thu]			-.107 (.112)	-.090 (.107)	**-.050*** (.020)	-.016 (.010)	**-.140**** (.048)
Weekday [Fri]			-.126 (.114)	-.118 (.110)	-.039 (.020)	-.007 (.010)	-.069 (.049)
Weekday [Sat]			-.101 (.115)	-.086 (.110)	-.036 (.020)	-.015 (.010)	**-.135**** (.049)
Time night [22pm – 7am]			.121 (.326)	.131 (.313)	.010 (.057)	-.006 (.029)	-.136 (.140)
Time afternoon [4pm – 22pm]			.004 (.076)	.003 (.073)	-.004 (.013)	.002 (.007)	.016 (.033)
Random Effects							
σ^2	2.14	2.14	2.14	1.98	.07	.02	.39
$\sigma^2_{influencer}$	14.59	14.46	14.44	13.75	.38	.02	.55
ICC	.87	.87	.87	.87	.85	.53	.59

Notes: Standard errors in parentheses; significant coefficients at $p < .05$ in bold. *$p < .05$, **$p < .01$, ***$p < .001$.

Table A3. Measures of field study supplement

Variable	Item(s)	Scale points and labels
Perception that a post is advertising	I think the presented post is advertising.	7-point Likert scale with "1 = completely disagree" to "7 = completely agree"
Motivation	What do you think is the influencer's motivation to share this post? • Because he/she receives money for it. • Because he/she receives products in return. • Because he/she wants to share things from his/her life with his/her followers. • Because he/she wants to inform his/her followers about a product. • Because he/she wants to portray himself/herself in a positive way. • Because he/she wants to meet the expectations of his/her followers.	7-point Likert scale with "1 = completely disagree" to "7 = completely agree"

Table A4. Results of field study supplement

Predictors	***Perception of Advertising***	***Money***	***Gifts***	***Share life***	***Inform products***	***Self-presentation***	***Meet expectations***
Disclosed	5.74***	5.34**	5.26**	4.41***	5.06**	5.32	4.65*
Nondisclosed with commercial intention (*reference category*)	4.36	4.73	4.63	4.97	4.33	5.50	4.97
Nondisclosed without commercial intention	2.64***	3.46***	3.48***	5.53***	3.46**	5.63	5.25
Random Effects							
σ^2	2.10	1.80	1.90	1.48	2.18	1.19	1.19
$\sigma^2_{respondent}$	.56	.72	.79	.71	.42	.76	.79
σ^2_{post}	.56	.20	.24	.03	.28	.02	.06
ICC	.35	.34	.35	.33	.24	.40	.42

Notes: Significance indicates deviation from the reference category (i.e., "nondisclosed with commercial intention"): *p < .05, **p < .01, ***p < .001.

Table A5. Measurement appendix for Studies 1 and 2

	Study 1		Study 2	
Variable	Item(s)	Scale points and labels	Item(s)	Scale points and labels
Intention to like	How likely is it that you would click the like button for the Instagram post?	5-point Likert scale with "1 = very unlikely" to "5 = very likely"	NA	NA
Perception that a post is advertising	To what extent do you think that the presented Instagram post contains advertising?	5-point Likert scale with "1 = very unlikely" to "5 = very likely"	I think the presented post is advertising.	7-point Likert scale with "1 = completely disagree" to "7 = completely agree"
Perception that the influencer is trustworthy	Undependable; Dependable Dishonest; Honest Unreliable; Reliable Insincere; Sincere Untrustworthy; Trustworthy	5-point semantic differential	Undependable; Dependable Dishonest; Honest Unreliable; Reliable Insincere; Sincere Untrustworthy; Trustworthy	7-point semantic differential
Expectation of advertising	NA	NA	For this type of Instagram profile, I expect to see advertising for products.	7-point Likert scale with "1 = completely disagree" to "7 = completely agree"
Manipulation checks				
Disclosure type	Was the previously presented Instagram post disclosed as advertising?	Indication how it was marked; 3 options	Was the post disclosed as advertising?	Indication how it was marked; 4 options
Multiple product endorsement	NA	NA	I perceive the number of products on the profile as:	7-point Likert scale with "1 = very low" to "7 = very high"
Follower count	I think that the number of followers of the presented person is.	5-point Likert scale with "1 = very low" to "5 = very high"	How do you perceive the number of followers of the profile?	7-point Likert scale with "1 = very low" to "7 = very high"

Table A6. Detailed results of regression and mediation analysis (Study 1)

Regression statistics	**Perception that post is advertising**		**Perception of trustworthiness of influencer**		**Intention to like post**	
	Coefficient	$SE_{(HC4)}$	*Coefficient*	$SE_{(HC4)}$	*Coefficient*	$SE_{(HC4)}$
Constant	**4.766*****	.253	**2.849*****	.347	.845	.487
In-text disclosure	.109	.106	.077	.092	.044	.120
Disclosure with branded content tool	**.233***	.104	.038	.096	.016	.114
Perception that post is advertising			**-.146****	.055	**-.154***	.073
Trustworthiness					**.484*****	.077
Follower count	-.012	.083	.023	.073	-.034	.097
Prominence	.092	.083	.082	.073	-.087	.100
Gender	.092	.091	**.278*****	.075	**.243***	.095
Age	**-.017***	.007	.007	.006	-.002	.008
Instagram account	.113	.090	-.071	.078	**.294****	.096

Relative indirect effects

	Intention to like			
			$BootCI_{95\%}$	
	Effect	*BootSE*	*LL*	*UL*
Via perception of advertising				
In-text disclosure	-.017	.020	-.064	.014
Disclosure with branded content tool	**-.036**	**.024**	**-.092**	**-.001**
Via trustworthiness				
In-text disclosure	.037	.045	-.050	.128
Disclosure with branded content tool	.019	.047	-.073	.111
Via perception of advertising and trustworthiness				
In-text disclosure	-.008	.009	-.028	.007
Disclosure with branded content tool	**-.017**	**.011**	**-.042**	**-.001**

Notes: $N = 464$. The table depicts unstandardized coefficients; significant coefficients at $p < .05$ in bold; $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$; SE = standard error; BootSE = bootstrapped standard error; HC4 = heteroscedasticity corrected; BootCI = 95% percentile confidence intervals using 10,000 bootstrap samples and seed equal to 100.

Table A7. Detailed results of regression analysis (Study 2)

Regression statistics	**Expectation of advertising**		**Perception that post is advertising**		**Perception of trustworthiness of influencer**	
	Coefficient	$SE_{(HC4)}$	*Coefficient*	$SE_{(HC4)}$	*Coefficient*	$SE_{(HC4)}$
Constant	**.941***	.409	**.826****	.359	**3.016*****	.205
In-text disclosure			**.292***	.148	.092	.094
Disclosure with branded content tool			**.603*****	.146	-.012	.087
Expectation of advertising x in-text disclosure			.067	.077		
Expectation of advertising x branded content tool			**-.169***	.073		
Expectation of advertising			**.232*****	.059	-.033	.021
Perception that post is advertising					**-.069****	.024
Follower count	**.401****	.142	.129	.118	**-.195****	.075
MPE (base: No MPE)	**.554*****	.142	-.041	.119	**-.185***	.075
Profile realism	.016	.044	-.058	.034	**.109*****	.024
Gender	**-.359***	.156	-.130	.131	.138	.083
Age	**-.042*****	.007	**-.036*****	.007	**.018*****	.004
Instagram account	.327	.311	.256	.249	-.282	.157
Instagram usage intensity	-.049	.088	.036	.068	**.105***	.044

Notes: $N = 802$. The table depicts unstandardized coefficients; significant coefficients at $p < .05$ in bold; $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$; SE = standard error; HC4 = heteroscedasticity corrected.

Table A8. Detailed results of mediation analysis (Study 2)

(Conditional) indirect effects of follower count on trustworthiness				
	Effect	*BootSE*	*BootCI*$_{95\%}$ *LL*	*UL*
Via expectation of advertising	-.013	.010	-.036	.002
Via perception of advertising	-.009	.009	-.030	.007
Via expectation of advertising and perception of advertising				
No disclosure	**-.006**	**.004**	**-.015**	**-.001**
In-text disclosure	**-.008**	**.004**	**-.019**	**-.001**
Disclosure with branded content tool	-.002	.002	-.005	.001
Index of moderated mediation				
In-text disclosure	-.002	.003	-.008	.003
Disclosure with branded content tool	**.005**	**.003**	**.000**	**.013**

(Conditional) indirect effects of MPE on trustworthiness				
	Effect	*BootSE*	*BootCI*$_{95\%}$ *LL*	*UL*
Via expectation of advertising	-.018	.013	-.046	.003
Via perception of advertising	.003	.009	-.014	.021
Via expectation of advertising and perception of advertising				
No disclosure	**-.009**	**.005**	**-.020**	**-.002**
In-text disclosure	**-.011**	**.005**	**-.023**	**-.003**
Disclosure with branded content tool	-.002	.002	-.007	.001
Index of moderated mediation				
In-text disclosure	-.003	.003	-.010	.004
Disclosure with branded content tool	**.006**	**.004**	**.001**	**.017**

Relative indirect effects of disclosure type on trustworthiness				
	Effect	*BootSE*	*BootCI*$_{95\%}$ *LL*	*UL*
Via perception of advertising				
In-text disclosure	-.020	.013	-.049	.000
Disclosure with branded content tool	**-.042**	**.017**	**-.080**	**-.012**

Notes: $N = 802$. The table depicts the unstandardized coefficients; BootSE = bootstrapped standard errors; BootCI = 95% percentile confidence intervals using 10,000 bootstrap samples and seed equal to 100; significant effects with $p < .05$ in bold.

Table A9. Measurement appendix for Study 3

Variable	Item(s)	Scale points and labels
Intention to like	How likely is it that you would click the like button for this Instagram post?	7-point Likert scales with “1 = very unlikely“ to “7 = very likely”
Perception that a post is advertising	I perceive this post as advertising	7-point Likert scales with “1 = do not agree“ to “7 = agree very much”
Advertising transparency (α = .910)	The post made it clear that it was advertisement. The post made it clear that it was sponsored. The post was labeled as advertising.	7-point Likert scales with “1 = do not agree“ to “7 = agree very much”
Perception that the influencer is trustworthy (α = .930)	Undependable; Dependable Dishonest; Honest Unreliable; Reliable Insincere; Sincere Untrustworthy; Trustworthy	7-point semantic differential
Length of partnership	I have the impression that the influencer and brand [XYZ] already cooperate over a longer period of time.	7-point Likert scales with “1 = do not agree“ to “7 = agree very much”
Motivation of influencer	Why do you think that the influencer publishes posts like that? Because she receives money for it. Because she receives in-kind benefits for it.	7-point Likert scales with “1 = do not agree“ to “7 = agree very much”
	Why do you think the influencer published this post?	Open question
Transparency bonus	I appreciate the influencer’s handling of disclosure of advertising.	7-point Likert scales with “1 = do not agree“ to “7 = agree very much”
Manipulation check		
Disclosure type	Was the post disclosed as advertising?	Indication how it was marked; 3 options

Table A10. Replication of regression and mediation analysis from Study 1 (Study 3)

Regression statistics	**Perception that post is advertising**		**Perception of trustworthiness of influencer**		**Intention to like post**	
	Coefficient	*$SE_{(HC4)}$*	*Coefficient*	*$SE_{(HC4)}$*	*Coefficient*	*$SE_{(HC4)}$*
Constant	**4.975*****	**.850**	**5.869*****	**.597**	-1.640	.930
In-text disclosure	.620	.384	.042	.244	**.731****	**.286**
Disclosure with branded content tool	**1.363*****	**.353**	.029	.260	.028	.296
Perception that post is advertising			**-.202*****	**.056**	.076	.072
Trustworthiness					**.921*****	**.090**
Gender	.347	.291	**-.545****	**.205**	-.046	.237
Age	**-.032***	**.014**	.012	.009	-.005	.012
Instagram account	.205	.707	.020	.533	.686	.566
Instagram usage intensity	-.107	.177	-.137	.139	-.205	.136

Relative indirect effects

	Intention to like			
			$BootCI_{95\%}$	
	Effect	*BootSE*	*LL*	*UL*
Via perception of advertising				
In-text disclosure	.047	.062	-.042	.201
Disclosure with branded content tool	.103	.107	-.090	.337
Via trustworthiness				
In-text disclosure	.038	.222	-.402	.472
Disclosure with branded content tool	.026	.241	-.456	.495
Via perception of advertising and trustworthiness				
In-text disclosure	-.115	.083	-.305	.018
Disclosure with branded content tool	**-.254**	**.102**	**-.486**	**-.089**

Notes: $N = 166$. The table depicts unstandardized coefficients; significant coefficients at $p < .05$ in bold; $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$; SE = standard error; BootSE = bootstrapped standard error; HC4 = heteroscedasticity corrected; BootCI = 95% percentile confidence intervals using 10,000 bootstrap samples and seed equal to 100.

Table A11. Detailed results of regression analysis (Study 3)

Regression statistics	**Advertising transparency**		**Perception that post is advertising**		**Transparency bonus**		**Perception of trustworthiness of influencer**		**Intention to like post**	
	Coefficient	$SE_{(HC4)}$	*Coefficient*	$SE_{(HC4)}$	*Coefficient*	$SE_{(HC4)}$	*Coefficient*	$SE_{(HC4)}$	*Coefficient*	$SE_{(HC4)}$
Constant	**2.886*****	**.847**	**3.990*****	**.821**	**2.872*****	**.725**	**4.837*****	**.719**	-1.600	.939
In-text disclosure	**1.539*****	**.344**	.095	.415	.462	.332	-.232	.237	**.667***	**.311**
Disclosure with branded content tool	**2.891*****	**.326**	.377	.415	.351	.382	-.355	.277	-.108	.339
Advertising transparency			**.341*****	.082	**.342*****	**.078**	.014	.062	.077	.077
Perception that post is advertising							**-.199*****	**.053**	.051	.078
Transparency bonus							**.253*****	**.074**	-.039	.089
Trustworthiness									**.923*****	**.101**
Gender	.254	.285	.260	.282	**-.487***	**.238**	**-.448***	**.198**	-.006	.012
Age	-.002	.013	**-.033***	.013	.002	.011	.012	.009	-.072	.236
Instagram account	-.141*	.741	.253	.694	-.196	.607	.083	.522	.693	.561
Instagram usage intensity	-.229	.197	-.029	.175	-.021	.165	-.108	.138	-.194	.138

Notes: $N = 166$. The table depicts the unstandardized coefficients; significant coefficients at $p < .05$ in bold; *p < .05, **p < .01, ***p < .001; SE = standard error; HC4 = heteroscedasticity corrected.

Table A12. Detailed results of mediation analysis (Study 3)

Relative indirect effects of disclosure type on intention to like the post			*BootCI*$_{95\%}$	
	Effect	*BootSE*	*LL*	*UL*
Via advertising transparency, perception of advertising, and trust				
In-text disclosure	**-.097**	**.045**	**-.208**	**-.032**
Disclosure with branded content tool	**-.181**	**.074**	**-.354**	**-.066**
Via advertising transparency, transparency bonus, and trust				
In-text disclosure	**.123**	**.055**	**.040**	**.248**
Disclosure with branded content tool	**.231**	**.088**	**.087**	**.424**
Via advertising transparency only				
In-text disclosure	.119	.125	-.113	.383
Disclosure with branded content tool	.223	.224	-.218	.662
Via perception of advertising only				
In-text disclosure	.005	. 039	-.063	.107
Disclosure with branded content tool	.019	. 049	-.054	.147
Via transparency bonus only				
In-text disclosure	-.018	.052	-.150	.069
Disclosure with branded content tool	-.014	.048	-.144	.058
Via trustworthiness only				
In-text disclosure	-.214	.220	-.649	.219
Disclosure with branded content tool	-.328	.255	-.849	.173
Via advertising transparency and perception of advertising				
In-text disclosure	.027	.043	-.059	.116
Disclosure with branded content tool	.051	.079	-.109	.209
Via advertising transparency and transparency bonus				
In-text disclosure	-.021	.050	-.136	.071
Disclosure with branded content tool	-.039	.090	-.228	.136
Via advertising transparency and trustworthiness				
In-text disclosure	.020	.090	-.155	.213
Disclosure with branded content tool	.037	.166	-.279	.394
Via perception of advertising and trustworthiness				
In-text disclosure	-.017	.079	-.185	.134
Disclosure with branded content tool	-.069	.082	-.250	.076
Via transparency bonus and trustworthiness				
In-text disclosure	.108	.087	-.042	.302
Disclosure with branded content tool	.082	.095	-.088	.293

Notes: $N = 166$. The table depicts the unstandardized coefficients; BootSE = bootstrapped standard errors; BootCI = 95% percentile confidence intervals using 10,000 bootstrap samples and seed equal to 100; significant effects with $p < .05$ in bold.

Table A13. Overview of supported hypotheses

Hypothesis	Field study	Study 1	Study 2	Study 3
H_{1a}: Compared with nondisclosure, disclosure induces higher perceptions that influencers' posts are advertising.	NA	✓ (for BCT)	✓	✓(for BCT)
H_{1b}: Compared with in-text disclosures ("#advertising"), disclosures that use a branded content tool ("paid partnership with…") induce higher perceptions that influencers' posts are advertising.	NA	×	✓	✓
H_{2a}: Compared with nondisclosure, disclosure induces a lower engagement with posts.	✓	NA	NA	NA
H_{2b}: Compared with in-text disclosures ("#advertising"), disclosures using the branded content tool ("paid partnership with…") induce lower engagement with posts.	×	NA	NA	NA
H_3: The perception that a post is advertising relates negatively to perceived influencer trustworthiness.	NA	✓	✓	✓
H_4: Perceived influencer trustworthiness relates positively to engagement with the influencer's posts (e.g., liking the post).	NA	✓	NA	✓
H_5: In a three-step, serial mediation process, disclosures increase perceptions that a post is advertising, which relates negatively to perceptions that the influencer is trustworthy, which relates positively to engagement with the influencer's posts (e.g., liking the post).	NA	✓	NA	✓
H_{6a}: Expectations that posts are advertising based on influencers' profiles are higher for macro influencers than for micro influencers.	NA	NA	✓	NA
H_{6b}: Expectations that posts are advertising based on influencers' profiles are higher for influencers who endorse multiple products (MPE) rather than few products.	NA	NA	✓	NA
H_7: Expectations that posts are advertising based on influencers' profiles relate positively to perceptions of posts as advertising.	NA	NA	✓	NA
H_{8a}: Disclosure weakens the relationship between expectations that posts are advertising based on influencers' profiles and perceptions that the post is advertising.	NA	NA	✓ (for BCT)	NA
H_{8b}: This moderating effect is stronger for disclosures that use the branded content tool ("paid partnership with…") than for in-text disclosures ("#advertising").	NA	NA	✓	NA
H_9: Disclosure increases perceived advertising transparency.	NA	NA	NA	✓
H_{10a}: Advertising transparency relates positively to the perception that the post is advertising.	NA	NA	NA	✓
H_{10b}: Advertising transparency relates positively to a transparency bonus.	NA	NA	NA	✓
H_{11}: The "transparency bonus" relates positively to perceived influencer trustworthiness.	NA	NA	NA	✓

Notes: ✓ (×) = hypothesis (not) supported; NA = not available; BCT = branded content tool.