



Parasocial relationships with micro-influencers: Do sponsorship disclosure and electronic word-of-mouth disrupt?

Journal:	<i>Internet Research</i>
Manuscript ID	INTR-12-2021-0903.R3
Manuscript Type:	Research Paper
Keywords:	Micro-influencer, Parasocial relationship, Sponsorship disclosure, Electronic word-of-mouth, Customer engagement, Brand preferences, Purchase intention

SCHOLARONE™
Manuscripts

1
2
3 **Parasocial relationships with micro-influencers: Do sponsorship disclosure and**
4
5 **electronic word-of-mouth disrupt?**
6
7
8
9

10 **Abstract**

11
12 **Purpose**

13
14 This study examines whether and how the effect of intimate relationships with micro-
15 influencers on customer behaviour is interrupted by external cues such as sponsorship
16 disclosures and negative electronic word-of-mouth (eWOM).
17
18
19
20

21 **Design/methodology/approach**

22
23 The study worked with Instagram micro-influences to conduct a vignette survey with four
24 experimental scenarios.
25
26
27

28 **Findings**

29
30 The benefits of parasocial relationships in enhancing customer engagement, brand preference,
31 and purchase intention cannot be sustained in the presence of external interruptive cues. For
32 micro-influencers, while sponsorship disclosures do not moderate the influence of parasocial
33 relationships, customers are considerably sensitive to negative eWOM or when the two cues
34 co-occur.
35
36
37
38
39
40
41

42 **Originality**

43
44 This study focuses on micro-influencers and investigates whether the follower–micro-
45 influencer bond can be moderated by external cues including sponsorship disclosure and
46 negative eWOM.
47
48
49
50
51

52
53 **Keywords:** Micro-influencer; Parasocial relationship; Sponsorship disclosure; Electronic
54 word-of-mouth; Customer engagement; Brand preferences; Purchase intention
55
56
57
58
59
60

1 Introduction

Influencers are online celebrities and opinion leaders on digital media, who, by sharing knowledge in specific areas such as their personal life and others, can shape the perception and behaviour of a group of followers in their virtual networks (Erz *et al.*, 2018). Influencer marketing has become prevalent, in which social media influencers promote brands to their followers in exchange for monetary or non-monetary compensation (Erz *et al.*, 2018). Establishing connections between brands and customers through social media influencers and leveraging influencer-generated content are cost-effective marketing strategies, meaning that influencer marketing is an essential channel for achieving marketing goals (Lou and Yuan, 2019).

Marketing scholars have identified that the parasocial relationship is one of the dominant factors in the success of influencer marketing (Breves *et al.*, 2019). In the new media era, parasocial relationships refer to the social–emotional bond between media performers and their audience (Yuan and Lou, 2020). Extensive evidence has indicated that parasocial relationships with influencers can affect customers' evaluation of brands (Yuan *et al.*, 2016), online engagement (Hughes *et al.*, 2019; Labrecque, 2014) and purchase intentions (Chung and Cho, 2017; Hwang and Zhang, 2018). Established parasocial relationships appear to be relatively stable without external interruptions whose impact is yet to be fully unfold. For instance, regulations have been recently implemented to protect customers by asking for sponsorship disclosures in influencers' product endorsements (Boerman, 2020); however, the evidence on whether disclosure increases or decreases followers' online behaviour is mixed. Another external information cue is negative electronic word-of-mouth (eWOM), which is widely acknowledged as harmful to marketing (Chen *et al.*, 2011; Chevalier and Mayzlin, 2006); however, its role in altering the meaning of parasocial relationships for customers remains to be studied.

1
2
3 This study, therefore, aims to explore how external cues moderate the impact of parasocial
4 relationships on customer behaviour. Particular attention is paid to micro-influencers, a rising
5 group that is highly valued by marketers. Micro-influencers, by nature, cannot compete with
6 macro-influencers in terms of visibility and reach, but they are likely to surpass others in
7 prompting engagement and purchases (Chang *et al.*, 2019). With a manageably-sized group of
8 followers, micro-influences have the opportunity to establish close connections and
9 engagement with individual followers. Such intimacy results in a trustworthy relationship in
10 which the information distributed is regarded as authentic and reliable and is less likely to be
11 perceived as an attempt to convince or persuade (Audrezet *et al.*, 2020; De Veirman *et al.*, 2017;
12 Kay *et al.*, 2020). Product endorsements by micro-influencers are more convincing than
13 endorsements by traditional celebrities and brand advertising; this is because they establish
14 emotional trust and psychological satisfaction through dyadic communication (Jin *et al.*, 2019).
15
16 Nevertheless, the reliance on the close relationship developed between micro-influencers and
17 their followers is vulnerable to the commercialisation of social media posts and the
18 unfavourable eWOM associated with these posts. Customers may well expect celebrities and
19 macro-influencers to create sponsored content and receive diverse feedback from viewers, but
20 customers may find it difficult to accept such behaviour of micro-influencers, possibly because
21 of the greater intimacy and trust. It could be possible that parasocial relationships with micro-
22 influencers are sufficiently strong to withstand external interruptions. The exact impact is yet
23 to be explored in the current literature.

24
25
26 This paper studies these moderating factors through a vignette survey with four scenarios to
27 measure, firstly, the effect of sponsorship disclosure marked by hashtags and, secondly, users'
28 negative comments on the impact of parasocial relationships with micro-influencers on
29 customer behaviour. The findings reveal that sponsorship and negative eWOM adversely affect
30
31

1
2
3 followers' behaviours, such as engagement (e.g., likes, comments), brand preference, and
4
5 purchase intention; in particular, unfavourable eWOM negatively moderates the impact of
6
7 parasocial relationships. The conclusion is that audience factors (i.e., the follower–micro-
8
9 influencer parasocial relationship [Gong and Li, 2017]) cannot fortify micro-influencers
10
11 against disruptive informational cues.
12
13

14
15 This study extends the research on parasocial relationships by exploring micro-influencers'
16
17 power over their followers in the face of external interruptions. Sponsorship disclosure and
18
19 negative eWOM are considered to be additional information cues that can moderate the effect
20
21 of parasocial relationships on customer behaviour. For sponsorship disclosure, empirical
22
23 evidence of its impact is lacking, especially regarding micro-influencers. Understanding
24
25 whether sponsorship works for micro-influencers is vital in determining marketing strategies
26
27 (Appel *et al.*, 2020). In addition, this study explores the role of eWOM in altering followers'
28
29 perceptions and behaviour in a close parasocial relationship, which has been overlooked in
30
31 previous literature (see a comprehensive review by Vrontis *et al.*, 2021). The findings echo the
32
33 importance of managing customer comments on open platforms, which is significant not only
34
35 in marketing but also in information system research. The findings will help brands to
36
37 implement a data-driven approach in screening suitable influencers by integrating external
38
39 information cues into scoring metrics.
40
41
42
43
44
45

46
47 The paper begins with a review of the literature on parasocial relationships and the development
48
49 of hypotheses, followed by a description of the methods. The results and findings are presented
50
51 and discussed in later sections.
52
53

54 55 **2 How Parasocial Relationship Affects Consumers**

56
57 Social media has radically transformed the one-way communication system of traditional
58
59 media into a two-way communication system, which allows parasocial relationships to be
60

1
2
3 supported and intensified. The parasocial relationship, originally described in the mass media
4 field, refers to the stable and long-term relationship that forms between media performers and
5 their audience through repeated contact and communication (Horton and Wohl, 1956; Yuan *et*
6 *al.*, 2016). In the context of social media, parasocial relationships comprise a social-emotional
7 bond connecting media performers and audiences (Yuan and Lou, 2020). The development of
8 parasocial relationships is deeply grounded in the interactions between performers (i.e.,
9 influencers) and their audience (i.e., followers). Especially with micro-influencers, they are
10 considered familiar, real-life friends by their followers, although this may be unilateral and
11 imaginary. Establishing and maintaining a close relationship with followers is a valuable asset
12 for accumulating attention and creating unique values for the followers and brands involved.
13
14
15
16
17
18
19
20
21
22
23
24
25
26

27 Existing literature has widely acknowledged that parasocial relationships engender cognitive,
28 emotional and behavioural responses in the audience through viewing and beyond; such
29 interactions with influencers, in turn, further strengthen the parasocial relationship (Tsiotsou,
30 2015). Corresponding to marketing funnels, parasocial relationships with influencers and the
31 content created in these interactions play an important role in customer journeys, particularly
32 at the awareness, consideration and purchase intent stages (Colicev *et al.*, 2019). Research has
33 confirmed that there are three main positive impacts that parasocial relationships in social
34 media have on customers.
35
36
37
38
39
40
41
42
43
44
45
46

47 First, social media, through its interactive nature, makes customer engagement in parasocial
48 relationships particularly relevant. Customer engagement as a multidimensional concept
49 comprises psychological aspects including emotion, cognition and intention (Solem and
50 Pedersen, 2016). It is described as the customers' willingness to provide information about
51 themselves and their needs (Labrecque, 2014) by liking content or contributing relevant
52 comments (Hughes *et al.*, 2019). The motivational drivers for customers to engage on social
53
54
55
56
57
58
59
60

1
2
3 media are related to the benefits derived from these interactions, which can include utilitarian,
4 relational, social and hedonic benefits (McAlexander *et al.*, 2002; Hennig-Thurau *et al.*, 2004).

5
6
7 Regular interactions with micro-influencers allow followers to gain psychological satisfaction
8 (Jin *et al.*, 2019). Such positive feedback can be viewed as a form of recognition, which
9 provides customers with a sense of confidence and meaningful participation (Liu *et al.*, 2019a).

10
11
12 This, therefore, imposes a positive effect on customer engagement by inspiring positive
13 emotions and maintaining customers' enthusiasm for interacting with influencers.
14

15
16
17 The second key impact of parasocial relationships is on consumer preferences, in other words,
18 the willingness to make specific choices among alternatives (Oliver and Swan, 1989). Brand
19 recommendations by influencers may successfully sway customers' brand evaluations.
20
21
22 Celebrity or influencer endorsement guides customers' behavioural decisions, with individual
23 followers forming a positive attitude and desiring to mimic the consumption behaviour of their
24 role models on social media (Ki and Kim, 2019). In a parasocial relationship, followers would
25 align their thoughts, attitudes and behaviours with their adored influencers, likely leading to
26 preferences for the endorsed brand (Liu *et al.*, 2019b). This contributes to a sense of
27 connectedness with their favoured influencers, which can generate positive attitudes and
28 behavioural intentions towards the endorsed brand or product (Tran *et al.*, 2019).
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43

44
45 This leads to the next phase, where purchasing the recommended products is driven by the
46 emotions and perceptions that have developed in parasocial interactions (Sokolova and Kefi,
47 2020). Having a parasocial relationship with micro-influencers may promote purchase
48 intentions, given that followers treat micro-influencers as close friends. The communications
49 from influencers are informative and persuasive and are more effective than marketers'
50 attempts at persuasion (Goh *et al.*, 2013). Followers believe that purchasing endorsed products
51
52
53
54
55
56
57
58
59
60

1
2
3 will bring hedonic values, while affirming their intimate relationship with their adored
4 influencers.
5
6
7

9 **3 When External Cues Interrupt Parasocial Relationships**

10
11 The previous survey of the literature reveals that existing research advocates the positive
12 influence of parasocial relationships on customer behaviour. However, influencers and
13 followers do not exist in a vacuum. There are information cues external to the parasocial
14 relationship that can moderate the bond and its consequences. Considering the relevant
15 literature and content of influencer posts in practice, two interruptive factors – sponsorship and
16 negative eWOM – are identified (see the research model in **Figure 1**).
17
18
19
20
21
22
23
24
25

26 **3.1 Effect of sponsorship disclosure on customer behaviour**

27
28 Advertising regulatory agencies in various countries have regulated ethical standards for
29 influencer marketing by requesting disclosures of sponsorship (Boerman *et al.*, 2017; De Jans
30 and Hudders, 2020). The evidence on sponsorship disclosure and its impact on customer
31 behaviour has been mixed. On the one hand, prior studies demonstrate that customers' attitudes
32 towards their influencers' opinions can change when the influencers reveal that they are
33 sponsored by brands (Boerman *et al.*, 2012; Hwang and Zhang, 2018; van Reijmersdal *et al.*,
34 2020). On the other hand, an increased level of advertising recognition caused by sponsorship
35 disclosure may lead to a reversed situation where a positive impact is anticipated (Evans *et al.*,
36 2017; Boerman, 2020; Hwang and Jeong, 2016).
37
38
39
40
41
42
43
44
45
46
47
48
49

50 The positive attitudinal and behavioural reaction is more significant for micro-influencers than
51 for macro-influencers (Kay *et al.*, 2020). As discussed earlier, micro-influencers are more
52 familiar and have a closer relationship with followers. When followers have established a
53 strong sense of connection, they tend to trust the influencer unconditionally, despite
54 recognising the existence of advertisement and the influencers' intentions to persuade (Isaac
55
56
57
58
59
60

1
2
3 and Grayson, 2017).

4
5
6 Attribution theory explains how individuals interpret available information to infer dispositions
7 about an actor and the causes of an actor's behaviour (Kelley and Michela, 1980). In the context
8 of influencer endorsement, making an endorsement transparent increases its perceived
9 credibility (Evans *et al.*, 2017). In the eyes of followers, disclosing that a post is sponsored is
10 respected as an honest and forthright action (Boerman, 2020), particularly when the disclosure
11 is made by influencers (e.g., with hashtags such as #sponsored, #paidad [De Jans and Hudders,
12 2020]). When honest opinions are emphasised in a sponsored post (Hwang and Jeong, 2016),
13 followers may interpret the motivation of influencers' self-disclosure to be in the followers'
14 best interest, instead of for the influencers themselves. Accordingly, with the parasocial
15 relationship as an antecedent to followers' online behaviours, sponsor disclosure is an
16 intervention that could moderate the relational influence of micro-influencers on followers. It
17 is hypothesised that the disclosure of sponsorship will amplify the impact of parasocial
18 relationship on followers' behaviours, leading to a higher level of online engagement, brand
19 preference and purchase intention.
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39

40 *Hypothesis 1. Sponsorship disclosure strengthens the positive effects of parasocial relationship*
41 *with micro-influencers on a) customer engagement, b) brand preference and c) purchase*
42 *intention.*
43
44
45
46
47

48 **3.2 Effect of negative electronic word-of-mouth on customer behaviour**

49

50 It is widely acknowledged in literature and practice that eWOM is a determinant of customer
51 perception and decision-making; negative eWOM has a greater impact on customer preference
52 and purchase than positive eWOM (Hennig-Thurau *et al.*, 2015; Liu, 2006; Chen *et al.*, 2011;
53 Chevalier and Mayzlin, 2006). However, despite the prevalence of online comments, there has
54 been little discussion about the role of eWOM in the context of influencer endorsement. To the
55
56
57
58
59
60

1
2
3 best of our knowledge, only a handful of studies explore the effect of audience comments in
4 influencer marketing. Studying user comments, Silva *et al.* (2020) find that negative comments
5 are often questions or criticism about the endorsed brand or product, the endorsement message
6 or the endorser, and visible disagreements negatively affect influencers' credibility and brand
7 images. Reinikainen *et al.* (2020) studied YouTube influencers to understand how comments
8 affect influencer credibility. The results find that when the audience can view positive
9 comments of other viewers, people in a parasocial relationship with the influencer experience
10 a stronger influence on perceived credibility, thereby increasing the likelihood of purchases.
11 However, the impact of negative eWOM remains unknown, especially regarding how it
12 performs as a moderator in the influencer context.
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27

28 This leaves an important question to answer: how do customers react to the uncertainty around
29 the co-existence of conflicting information? Consumer inference theory states that consumers
30 make inferences and form if-then linkages between the information present and conclusions
31 (Kardes *et al.*, 2004). Such information can be obtained from promotions, advertising and
32 eWOM communications. It is understood that the valence of audiences' attitudes towards
33 endorsement messages affects consumers' information processing and judgement (Munnukka
34 *et al.*, 2019). Negative peer comments create inconsistency, and reading such comments can
35 make other followers doubt whether the endorsement is biased or credible. Although followers
36 in a solid parasocial relationship may dismiss negative comments, it is possible that competing
37 messages will lead to customers perceiving the endorsement as inauthentic and merely posted
38 for commercial purposes (Audrezet *et al.*, 2020), resulting in a reduced interest in responding
39 to the post. Negative attitudes towards the endorsement further activate customers' cognitive
40 responses, resulting in lower levels of brand preference and purchase intention (Torres *et al.*,
41 2019). Thus, under the condition of negative eWOM, it is predicted that the influence of
42 parasocial relationships on customers' attitudes and behavioural intentions will be weakened.
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Hypothesis 2. Negative eWOM weakens the positive effects of parasocial relationship with micro-influencers on a) customer engagement, b) brand preference and c) purchase intention.

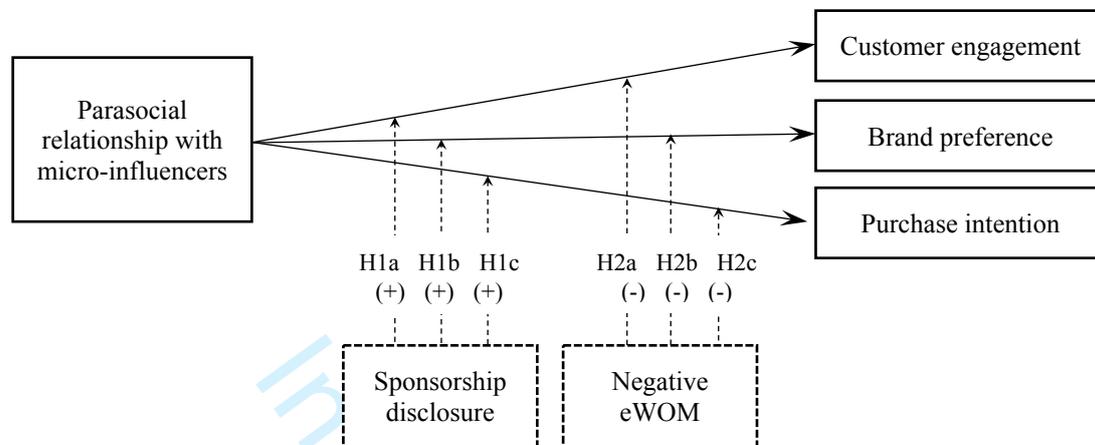


Figure 1. Research model

4 Methods

4.1 Sample and procedure

The current study is conducted in collaboration with three female Instagram lifestyle micro-influencers. Collecting data from real-world influencers allows actual parasocial relationships and behaviours to be observed. To that end, micro-influencers were carefully shortlisted. According to statistics (Statista, 2020), Instagram is the most popular social media platform with one billion monthly active users. In the global market, the Instagram usage rate is significantly higher in females than males, and the age group of 25 to 34 constitutes the largest proportion of active Instagram users. Therefore, several basic requirements were considered to ensure that candidate influencers were females aged between 25 and 34 years old with 1,000–100,000 followers and some experience of product endorsement. The researchers searched on Instagram based on the selection criteria and found twelve candidate influencers who met the research needs and were open to collaboration. Eventually, three micro-influencers agreed to participate, with 45,000, 28,000 and 25,000 followers, respectively.

1
2
3 A questionnaire was designed and provided to the three micro-influencers. Voluntary sampling
4 was implemented, in which the micro-influencers shared a link to the online questionnaire with
5 their followers. Data was collected between 10 July and 23 July 2020. A total of 729 individuals
6 completed the questionnaire, of which 623 responses passed the initial screening (participants
7 should be over 18 years old). Invalid responses with identical answers to all questions were
8 excluded, leading to a final sample of 596 responses retained for data analysis.
9
10
11
12
13
14
15
16
17

18 ***4.2 Experimental design and procedure***

19
20 An online within-subject vignette survey is applied to test the effect of parasocial relationships
21 on customer behaviour according to the constructed research model. Four experimental
22 scenarios are created to verify the effect and the moderating role of sponsorship disclosure and
23 negative eWOM on micro-influencer endorsement effectiveness (see Appendix A). The first
24 scenario is the benchmark condition without sponsorship disclosure or negative eWOM. The
25 second and third conditions are sponsorship disclosure and negative eWOM, respectively. The
26 fourth scenario has both sponsorship disclosure and negative eWOM present. Sponsorship
27 disclosure is manipulated by showing hashtag text (#sponsored) in the second and fourth
28 conditions to allow participants to recognise the advertising (Boerman, 2020). Negative eWOM
29 is manipulated by allowing participants to observe and read two negative comments included
30 in the third and fourth conditions.
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46

47 Participants first signed informed consent and were then asked to provide demographic
48 information (i.e., gender and age) and their usage frequency and habits on Instagram. The
49 majority of the participants were aged between 18 and 34 (92.6%) and were female users
50 (68.5%). Most participants used Instagram several times a day (95.5%) for browsing (37.5%),
51 following a celebrity or influencer (19.7%), liking (18.5%), posting (10.3%), following brands
52 (9.15%) and commenting (3.6%). There were 65.3% of the participants who confirmed their
53
54
55
56
57
58
59
60

1
2
3 experience of purchasing or other follow-up behaviours (e.g., searching for information about
4 the product/brand, visiting physical stores) after viewing influencers' posts. Following this
5 initial qualification process, the respondents were required to reflect on the parasocial
6 relationship with the micro-influencer they follow. The questionnaire proceeded with the four
7 experimental conditions. Respondents were required to answer questions for each condition
8 regarding engagement, brand preference and purchase intention if the influencer endorsed a tea
9 drink brand and product on Instagram.
10
11
12
13
14
15
16
17
18
19

20 4.3 Measures

21 To measure the parasocial relationship (*PSR*), participants are asked to indicate on a five-point
22 Likert scale (1 = Strongly disagree, 5 = Strongly agree) the extent they agree with the seven
23 statements adapted from the existing scale (Hwang and Zhang, 2018; Kim *et al.*, 2015; Lee and
24 Watkins, 2016; Reinikainen *et al.*, 2020). The three indicators of customer behaviour are
25 customer engagement (*CE*, four items, scale adapted from Solem and Pedersen, 2016;
26 Labrecque, 2014), brand preference (*BP*, three items, scale adapted from Chen and Chang,
27 2008; Jalilvand *et al.*, 2016), and purchase intention (*PI*, three items, scale adapted from Lee
28 and Watkins, 2016; Hwang and Zhang, 2018; Kim *et al.*, 2015). **Table 1** presents the items for
29 each construct.
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44

45 **Table 1.** Confirmatory factor analysis

47 Measures and Items	48 Label	49 Factor loading	AVE	CR	Cronbach's Alpha
50 <i>Parasocial Relationship (PSR)</i>			0.473	0.860	0.859
51 I look forward to watching her on Instagram.	PSR1	0.56			
52 When I see her posts, I feel as if I am part of her life	PSR2	0.70			
53 I think she is like an old friend.	PSR3	0.77			
54 She makes me feel comfortable as if I am with friends.	PSR4	0.78			
55 I would like to meet her in person.	PSR5	0.67			
56 I can rely on the information I get from her.	PSR6	0.66			

When she shows me how she feels about the brand, it helps me make up my mind about the brand.	PSR7	0.65			
<u>Customer Engagement (CE)</u>			0.514	0.801	0.772
This brand/product will evoke my feelings.	CE1	0.88			
This brand/product will evoke my interest.	CE2	0.82			
I would click the 'heart' to express 'like'.	CE3	0.51			
I would actively participate in discussions related to the brand/product.	CE4	0.59			
<u>Brand Preference (BP)</u>			0.695	0.872	0.867
I like this brand more than other similar tea drink brands.	BP1	0.85			
If I want to buy tea products, if other conditions are the same, I prefer to choose this product/brand.	BP2	0.83			
I think this brand is superior to other competing brands.	BP3	0.82			
<u>Purchase Intention (PI)</u>			0.652	0.849	0.842
I think I might buy this product.	PI1	0.77			
If I buy a tea drink brand, my willingness to buy this product will be very high.	PI2	0.85			
I want to buy the tea drink products that she likes.	PI3	0.80			

Note: CR, composite reliability; AVE, the average variance extracted.

Cronbach's alpha and composite reliability are used to assess the constructs' reliability. As shown in **Table I**, the Cronbach's alpha of the four constructs is between 0.772 and 0.867. The composite reliability of the measurements is between 0.801 and 0.872, all exceeding the acceptable standard of 0.7 (Bagozzi and Yi, 1988). Therefore, the constructs present reasonable internally consistent reliability.

Confirmatory factor analysis is conducted using IBM SPSS Amos 26.0 (see results in **Table I**). Factor loadings of the items range from 0.51 to 0.88, all exceeding the expected value of 0.5 (Harrington, 2009). The average variance extracted (AVE) of each construct is checked, and AVEs varied between 0.473 and 0.695. Although the AVE of *PSR* is lower than the recommended value of 0.5, individual factor loadings and composite reliability are sufficiently

high, hence no factors are excluded (Fornell and Larcker, 1981).¹ Overall, the measurement items exhibit adequate construct and convergent validity. In addition, the discriminant validity is assessed against the Fornell–Larcker criterion. Results in **Table II** show that each construct's square root of AVE is higher than its correlations with other latent constructs (Hair *et al.*, 2012).

Table II. Inter-construct correlations

Measures	Mean	SD	PSR	CE	BP	PI
PSR	3.816	0.619	0.688			
CE			0.630*	0.717		
BP			0.549*	0.675*	0.834	
PI			0.571*	0.679*	0.736*	0.808

Note: PSR = Parasocial Relationship, CE = Customer Engagement, BP = Brand Preference, PI = Purchase Intention. * denotes significance at 0.001 level. Square roots of AVE values are bolded. The reported statistics in this table is based on the benchmark condition without sponsorship disclosure and negative eWOM. Other experimental scenarios are checked, including the condition with sponsorship disclosure, the condition with negative eWOM, and the condition with both sponsorship disclosure and negative eWOM. All results meet the Fornell-Larcker criterion.

5 Results

5.1 Descriptive statistics and analysis of variance

The overall level of parasocial relationships in the sample has a mean value of 3.816 (SD = 0.619). The means and standard deviations for the variables of customer behaviour across four experimental scenarios are shown in **Table III**. This study involved within-subjects analysis of an outcome with four conditions, and the Greenhouse–Geisser correction is used to account for violation of the assumption of sphericity. A repeated measure multivariate analysis of variance (MANOVA) test is conducted to check whether the composite variable of customer behaviour differs significantly in the four settings. The analysis includes customer engagement,

¹ In addition, we consider a higher threshold of factor loading (>0.6) which resulted in the exclusion of PSR1, CE3 and CE4. The re-estimated results (untabulated) remain consistent with our main analysis.

brand preference and purchase intention as dependent variables. The one-way MANOVA result reveals customer behaviour significantly differs among the four conditions (Wilks' Lambda = 0.022, $F_{4, 592} = 6474.867$, $p < 0.001$, Partial $\eta^2 = 0.978$).

Table III. Descriptive statistics

Dependent variables	No disclosure nor negative eWOM		Sponsorship disclosure		Negative eWOM		Both disclosure and negative eWOM	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
CE	3.728	0.567	3.400	0.648	3.385	0.612	3.163	0.747
BP	3.402	0.695	3.258	0.723	3.084	0.771	2.952	0.830
PI	3.750	0.683	3.540	0.707	3.277	0.767	3.126	0.817

Note: N = 596. CE = Customer Engagement, BP = Brand Preference, PI = Purchase Intention. Means and standard deviations are reported with Greenhouse-Geisser corrections.

Given the MANOVA significance, it is deemed necessary to determine where the differences lay between the four conditions. A follow-up repeated measures ANOVA is conducted on each dependent variable using the Bonferroni method. The results of the pairwise comparison are reported in **Table IV**. For customer engagement ($F = 184.326$, $p < 0.001$), there are significant differences in the means between experiments, except for between the second and third conditions. Within brand preference ($F = 97.733$, $p < 0.001$) and purchase intention ($F = 206.259$, $p < 0.001$), significant differences are observed in the means between the four conditions.

Table IV. ANOVA pairwise comparison

Experiment conditions		Dependent variables								
		Customer engagement			Brand preference			Purchase intention		
(I)	(J)	Mean diff. (I-J)	SE	Sig.	Mean diff. (I-J)	SE	Sig.	Mean diff. (I-J)	SE	Sig.
1	2	0.328*	0.019	0.000	0.144*	0.021	0.000	0.210*	0.020	0.000
	3	0.343*	0.023	0.000	0.317*	0.030	0.000	0.474*	0.029	0.000
	4	0.565*	0.029	0.000	0.450*	0.034	0.000	0.624*	0.033	0.000

2	3	0.015	0.025	0.542	0.174*	0.028	0.000	0.264*	0.027	0.000
	4	0.237*	0.026	0.000	0.306*	0.030	0.000	0.414*	0.029	0.000
3	4	0.222*	0.022	0.000	0.133*	0.025	0.000	0.150*	0.024	0.000

Note: Four experimental scenarios are: 1) benchmark condition without sponsorship disclosure and negative eWOM, 2) condition with sponsorship disclosure, 3) condition with negative eWOM, and 4) condition with both sponsorship disclosure and negative eWOM. * The mean difference is significant at 0.001 level. Means and standard deviations are reported with Greenhouse-Geisser corrections.

The data on parasocial relationships is analysed with a one-way ANOVA to evaluate whether the degree of parasocial relationship is sensitive to individual micro-influencers and participants' demographics (summated scales are used). First, regarding the three micro-influencers (labelled as Influencer A, B, and C), the means and standard deviations of the parasocial relationship indicated by their followers are similar (A: N = 364; M = 26.96, SD = 4.04; B: N = 217; M = 26.27, SD = 4.69; C: N = 15; M = 27.00, SD = 5.54, all at summated scale) and there is no significant difference in parasocial relationship levels ($F = 1.749$, $p = 0.175 > 0.05$). Second, a small variation is observed for parasocial relationships in different age groups, with the mean value ranging from 26.49 to 29.00, and they are not significantly different ($F = 0.525$, $p = 0.665 > 0.05$). Third, for different genders, females demonstrate a slightly higher level of parasocial relationship (M = 26.83, SD = 4.18) than males (M = 26.47, SD = 4.65) but the difference is not significant ($F = 0.851$, $p = 0.357 > 0.05$). Moreover, when considering participants' experiences of buying driven by influencer endorsement, the mean of parasocial relationship level in the group with prior purchase experience (M = 26.97, SD = 4.28) is higher than the group without such experience (M = 25.09, SD = 4.33), and the difference is significant at 0.001 level ($F = 13.730$, $p = 0.000 < 0.001$).

5.2 Hypothesis testing

To test the potential moderating effects of sponsorship disclosure and negative eWOM, a multilevel model is examined with parasocial relationship and its interactions with sponsorship

disclosure and negative eWOM being independent variables. Two dummy variables are generated to represent the two cues (*Disclose*, yes = 1, no = 0; *eWOM*, yes = 1, no = 0). *PSR* is centralised and used to generate interaction terms with the sponsorship disclosure and eWOM indicators. Several control variables, including gender (*Gender*, female = 1, male = 0), age (*Age*, age group 1 to 4, from young to old), Instagram usage (*Usage*, frequency indicated in five groups 1 to 5, from low to high frequency), prior purchase experience driven by influencers (*Purchase*, yes = 1, no = 0), experience of engaging on Instagram (*Engage*, count of engagement actions, ranging between 0 and 6), and individual influencer (*Influencer*, three influencers A, B, and C, Influencer A as baseline), are included in the models to account for possible effects on customer behaviour. VIF scores are below 2.01 across models, so multicollinearity is not a concern.

As shown in **Table V**, having a parasocial relationship positively correlates with customer engagement, brand preference and purchase intention. Sponsorship disclosure and negative eWOM by themselves have negative impacts on customer behaviour. Nevertheless, it is evident that sponsorship disclosure does not moderate the effect of parasocial relationships on customer engagement, brand preference or purchase intention (no significance across models, $p > 0.1$), while negative eWOM has a strongly negative moderating effect on the influential power of parasocial relationships (high significance across models, $p < 0.05$). When both sponsorship disclosure and negative eWOM exist, the effect of a parasocial relationship on brand preference is negatively moderated by both cues ($p < 0.1$). Hence, H2a, H2b and H2c are supported, but no evidence is found for H1a, H1b and H1c.

Table V. Moderating effects of sponsorship disclosure and negative eWOM

Dependent variable	CE			BP			PI		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Fixed effect</i>									
PSR	0.486****	0.558****	0.556****	0.558****	0.652****	0.624****	0.565****	0.640****	0.622****

1									
2									
3		(0.03)	(0.03)	(0.04)	(0.03)	(0.04)	(0.04)	(0.03)	(0.04)
4	Disclose	-0.275****	-0.275****	-0.275****	-0.138****	-0.138****	-0.138****	-0.180****	-0.180****
5									
6		(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
7	eWOM	-0.290****	-0.290****	-0.290****	-0.312****	-0.312****	-0.312****	-0.444****	-0.444****
8									
9		(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
10	PSR×Disclose		0.003	0.007		-0.042	0.015		-0.024
11			(0.03)	(0.04)		(0.03)	(0.05)		(0.03)
12	PSR×eWOM		-0.146****	-0.142****		-0.147****	-0.090**		-0.126****
13			(0.03)	(0.04)		(0.03)	(0.05)		(0.03)
14	PSR×Disclose			-0.008			-0.114*		-0.069
15	×eWOM			(0.06)			(0.06)		(0.06)
16	Gender	-0.018	-0.018	-0.018	-0.079	-0.079	-0.079	-0.116**	-0.116**
17									
18		(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
19	Age	0.126****	0.126****	0.126****	0.121***	0.121***	0.121***	0.096**	0.096**
20									
21		(0.04)	(0.04)	(0.04)	(0.05)	(0.05)	(0.05)	(0.04)	(0.04)
22	Usage	-0.018	-0.018	-0.018	-0.056	-0.056	-0.056	-0.074	-0.074
23									
24		(0.05)	(0.05)	(0.05)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
25	Purchase	0.109**	0.109**	0.109**	0.027	0.027	0.027	0.130**	0.130**
26									
27		(0.05)	(0.05)	(0.05)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
28	Engage	0.037***	0.037***	0.037***	0.008	0.008	0.008	0.021	0.021
29									
30		(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
31	Influencer B	-0.124**	-0.124**	-0.124**	0.089	0.089	0.089	0.015	0.015
32									
33		(0.05)	(0.05)	(0.05)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
34	Influencer C	0.108	0.108	0.108	0.138	0.138	0.138	0.137	0.137
35									
36		(0.12)	(0.12)	(0.12)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
37	_cons	1.623****	1.349****	1.356****	1.349****	0.988**	1.097***	1.712****	1.427****
38									
39		(0.28)	(0.29)	(0.29)	(0.33)	(0.34)	(0.35)	(0.33)	(0.34)
40	<i>Random effect</i>								
41	Respondent	0.369****	0.370****	0.370****	0.447****	0.448****	0.448****	0.440****	0.441****
42									
43		(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
44	Response	0.419****	0.416****	0.416****	0.486****	0.483****	0.483****	0.471****	0.469****
45									
46		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
47	<i>N</i>	2384	2384	2384	2384	2384	2384	2384	2384
48	<i>AIC</i>	3487.554	3463.569	3465.548	4232.877	4214.196	4213.003	4095.204	4082.305
49	<i>BIC</i>	3562.649	3550.217	3557.973	4307.972	4300.844	4305.427	4170.299	4168.953
50	Log likelihood	-1730.777	-1716.785	-1716.774	-2103.439	-2092.098	-2090.501	-2034.602	-2026.153
51	Chi-square	894.116	930.861	930.889	603.686	630.260	634.028	950.654	973.489
52	<i>p</i>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note: *PSR* = Parasocial Relationship, *CE* = Customer Engagement, *BP* = Brand Preference, *PI* = Purchase Intention, *Disclose* = Sponsorship Disclosure, *eWOM* = Negative eWOM. *Gender*, *Age*, *Usage*, *Purchase*, *Engage*, *Influencer* are included as controls. Centralised *Disclose* and *eWOM* are used in interaction terms. Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$, **** $p < 0.001$

6 Discussions and Conclusions

The present study constructs and tests an extended model of parasocial relationship effectiveness to examine how the presence of sponsorship disclosure and negative eWOM associated with an endorsement affects followers' responses. Experiments with four conditions are designed and implemented with the support of three Instagram influencers. The empirical results lead us to the following major findings.

First, the results support the understanding that followers' engagement with micro-influencers and responses to the endorsed brand or product are more substantial when the parasocial relationship is more intense. This result is consistent with prior literature on parasocial relationships and followers' cognitive and behavioural reactions (e.g., Solem and Pedersen, 2016; Tsiotsou, 2015). Unlike celebrities and macro-influencers, micro-influencers are more relatable as ordinary people in everyday life and their content is often in a niche area in which viewers have a genuine interest. On the grounds that the following is likely to be associated with a strong interest in and feeling for the micro-influencers, a robust parasocial relationship is anticipated. This leads to a willingness to interact, which, coupled with the easy accessibility of micro-influencers, contributes significantly to the inflation of the engagement rate.

The results also reveal that sponsorship disclosure has a negative impact on customer behaviour. This finding contradicts Boerman (2020), who claimed that standardised sponsorship disclosures had a positive impact on advertisement recognition and online engagement behaviour. Our results support the idea that observing sponsorship is more likely to change the meaning of posts and the perceived credibility of influencers, leading to an adverse effect on followers' engagement with influencers and the sponsored content (Friestad and Wright, 1994; Boerman *et al.*, 2017; De Veirman and Hudders, 2020). Cues of sponsorship disclosure, such as hashtags like #sponsored, increase advertisement recognition and remind viewers that the

1
2
3 endorsed product is not a natural recommendation. The commercialisation of Instagram posts
4 provokes customers to be more critical of the endorsed product or brand, thereby reducing
5 confidence in the brand and behavioural intention to purchase (Campbell *et al.*, 2013; Hwang
6 and Jeong, 2016).
7
8
9
10
11

12
13 Regarding negative eWOM, the results demonstrate a detrimental impact on customer
14 behaviour. Extant research has extensively detailed the adverse effect of negative eWOM in
15 various digital marketing cases (e.g., Chen *et al.*, 2011; Cheung and Lee, 2008; Chevalier and
16 Mayzlin, 2006). In the context of micro-influencer marketing, the negatives arise from a
17 reduced level of source credibility. Influencers' recommendations are regarded as sincere and
18 trustworthy by followers (Audrezet *et al.*, 2020; De Veirman *et al.*, 2017; Kay *et al.*, 2020);
19 however, the incompatibility between the endorsement and associated comments from peers in
20 the community breeds suspicions of the distributed information (Cheung and Lee, 2008) and
21 thus a distrust of influencers. Followers' reactions to the endorsed posts will be changed given
22 the altered mentality (De Veirman and Hudders, 2020).
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37

38 In addition to the direct impacts of the two external cues on customer behaviour, an important
39 focus of this study is to assess how the effects of parasocial relationships on customer behaviour
40 are likely to change in response to sponsorship disclosure and negative eWOM.
41 Notwithstanding the unfavourableness of sponsorship disclosure, no evidence is found on its
42 role in moderating the effect of parasocial relationships on customer behaviour. This implies
43 that parasocial relationships do not benefit from nor be undermined by disclosed sponsorships.
44 One possible explanation is that sponsored posts and their standardised disclosure on Instagram
45 are increasingly becoming common practice (Boerman, 2020). Customers are likely to accept
46 commercial blog posts by admired micro-influencers and are less motivated to apply the
47 knowledge of their persuasion, even if it is activated (Janssen *et al.*, 2016). Being exposed to
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 sponsorship decreases the likelihood for customers to engage, appreciate and purchase products,
4
5 but it does not counterbalance the positive effect caused by the established parasocial
6
7 relationship.
8
9

10
11 In sharp contrast, the presence of negative eWOM is disadvantageous to micro-influencers and
12
13 brands. The results indicate that negative eWOM has a significant moderating effect on the
14
15 impact of parasocial relationships on customer behaviour. When there are negative comments
16
17 about an endorsed product or brand displayed under a post, the parasocial relationship becomes
18
19 vulnerable to the voice of the crowd. While the followers have cultivated a friend-like virtual
20
21 relationship or a sense of dependence with the micro-influencer, the negative words are hardly
22
23 ignored in the viewers' eyes. Extensive research has proven that negative comments tend to
24
25 attract more attention than positive ones (Chen *et al.*, 2011) and they considerably lower
26
27 customers' interests and desire to engage (Verhagen *et al.*, 2013). Analogously, the influencing
28
29 power of parasocial relationships to affect brand preference and purchase intention is weakened.
30
31
32
33

34
35 Furthermore, the co-existence of negative eWOM and sponsorship disclosures exacerbates the
36
37 situation, particularly in relation to brand preference. In processing competing information
38
39 offered by different parties, individual judgement can be shaped by manifold factors (Hong and
40
41 Sternthal, 2010). Compared with opinions from peers based on real experience, the credibility
42
43 of endorsed messages from influencers may be seen as less valid, especially when the post is
44
45 sponsored. Coupled with the added uncertainty caused by inconsistent clues, recognising the
46
47 post as an advertisement further raises the level of distrust, which hinders the emotional
48
49 excitement towards the product or brand (Huang, 2015). The dual effect of two stimuli, driven
50
51 by negative eWOM, once established, can be hard to shift the impression and attitude towards
52
53 being positive. However, in the cases where the parasocial relationship is sufficiently strong,
54
55 the damaging impact of negative comments can be somewhat alleviated. Yet, its effectiveness
56
57
58
59
60

1
2
3 is expected to be hinge on the relative power of the parasocial relationship against one or more
4
5 external disruptive factors.
6
7

8 9 **6.1 Implications for micro-influencers**

10
11 The findings from this study suggest several implications for both research and practice
12
13 regarding micro-influencers. First, this study is underpinned by the concept of parasocial
14
15 relationships. Although the concept is widely used in research on influencers, there has been
16
17 no study investigating whether parasocial relationships are unbeatable by external factors, such
18
19 as sponsorship disclosure and negative eWOM. Deviating from prior studies that tend to use
20
21 parasocial relationships as a mediator (e.g., De Jans *et al.*, 2018), this study considers parasocial
22
23 relationships as the motivational factor for customer behaviour and then introduces the external
24
25 cues, which help to enlighten how the bond between micro-influencers and followers is
26
27 moderated. To be precise, while there was no evidence demonstrating that parasocial
28
29 relationships are sensitive to sponsorship disclosure, a considerable disruption to the efficacy
30
31 for parasocial relationships caused by negative eWOM is discovered, and the situation is
32
33 worsened when the post is recognised as an advertisement. In this regard, novel insight into the
34
35 relative power of the voice of influencers and the crowd is offered, suggesting that the
36
37 parasocial relationship produced between followers and micro-influencers appears to be deep
38
39 but is by no means invincible.
40
41
42
43
44
45

46
47 Along the line, our study contributes to the ongoing research on sponsorship disclosure, on
48
49 which mixed evidence has been presented about its influence on customers. Extant research on
50
51 influencers tends to focus on celebrities and macro-influencers (e.g., Knoll and Matthes, 2017),
52
53 given their capability to reach audiences, or considers influencers without discerning the
54
55 distinct features of influencers in various statuses (Lanz *et al.*, 2019). The results of this study
56
57 contribute new evidence to the literature by focusing on micro-influencers, alerting the
58
59
60

1
2
3 potential adverse effects of the commercialisation of social media posts (e.g., Martínez-López
4 *et al.*, 2020). Moreover, it is surprising that the unfavourable impact of negative eWOM has
5
6 not been examined in the context of micro-influencers. To the best of our knowledge, this study
7
8 is among the first to explore the role of eWOM in altering followers' perceptions and
9
10 behaviours in a close parasocial relationship. The present study describes the serious damage
11
12 to influencers caused by negative eWOM (Reinikainen *et al.*, 2020) and the endorsement being
13
14 compelling.

15
16
17
18
19
20 The findings lead to important practical implications. Micro-influencers prove their value since
21
22 they are capable of producing competitive advantages for brands through inspiring customer
23
24 engagement, brand preference and purchase intention. However, it is important to realise that
25
26 followers remain rational and are unlikely to be blinded by their intimate relationship with
27
28 micro-influencers. The parasocial relationship can be strong, but it is still hard to compete with
29
30 user comments. Negative comments are destructive to an influencer's reputation, and
31
32 customers' antipathy towards a sponsored post with negative comments is obvious. Marketers
33
34 should therefore be alerted and act appropriately to ensure eWOM is carefully managed to
35
36 maintain a consistency of the information presented to customers and prevent a ripple effect of
37
38 negative reviews from turning into a vicious cycle. In searching for potential micro-influencers,
39
40 one critical factor to be borne in mind is the strength of parasocial relationships that the micro-
41
42 influencer can cultivate with their followers. This appears to be intuitive advice, but when
43
44 disruptive cues come into existence, a strong sense of connection could mitigate, though not
45
46 eliminate, some of the risks and negative impacts on customers' cognitive and behavioural
47
48 intentions.

49
50
51
52
53
54
55
56 The practical relevance of this study can also be applied by adopting a data-driven approach to
57
58 influencer management. To assist brands in screening suitable influencers, there are already
59
60

1
2
3 organisations in the market that have developed information systems that allow brand owners
4 to use data-based methods to find suitable candidates. Information collected may include, for
5 instance, an influencer's follower numbers, posting frequency and quantities of comments or
6 likes per post. However, there are only a few organisations in influencer management that
7 analyse the content of or gauge sentiment from comments. The results of our study highlight
8 that the comments of other users are one of the important factors affecting the efficacy of
9 influencer endorsement. Therefore, it is recommended that organisations should build a more
10 effective comprehensive information system that incorporates interruptive factors into the
11 scoring metrics.
12
13
14
15
16
17
18
19
20
21
22
23
24

25 **6.2 Limitations and future research directions**

26
27 This study has certain limitations; addressing these will lead to more fruitful future research
28 opportunities. First, the current study specifically examines micro-influencers without
29 considering other types of influencers, such as nano-, meso- or macro-influencers. It is
30 presumed that the formation and degree of parasocial relationships are different for influencers
31 of various statuses and therefore the mechanism of contending with unfavourable information
32 cues can vary (Boerman, 2020). It would be useful to extend the current study by evaluating
33 and comparing how parasocial relationships can sustain against disruptions across different
34 types of influencers.
35
36
37
38
39
40
41
42
43
44
45
46

47 Second, a direct relationship between parasocial relationships and customer behaviour is
48 assumed, and the possible intermediary factors, such as trust and credibility of influencers, are
49 discussed. This study can be extended by introducing and measuring potential mediation effects
50 to determine where the disruption happens along the influential paths. Besides, although these
51 results indicate that the discovered effects do not differ across influencers, future studies may
52 link influencer-specific factors (e.g., engagement rate, personal traits, experience) to the
53
54
55
56
57
58
59
60

1
2
3 examination (Appel *et al.*, 2020).
4
5

6
7 Moreover, this study operates in a specific context involving female Instagram micro-
8
9 influencers and a low-involvement product. The setting is deemed appropriate for the purpose
10
11 of the current study, though a concern of selection bias potentially introduced by employing
12
13 female influencers can be further addressed in future studies by cooperating with influencers
14
15 of different genders and types. In addition, the experimental setting can be adjusted with
16
17 alternative or multiple social media to compare effectiveness across platforms (Ledbetter and
18
19 Meisner, 2021), real or fictitious materials in the stimuli to imitate the actual sites, or a high-
20
21 involvement product.
22
23
24
25

26 Furthermore, in this study, sponsorship disclosure is represented by influencer-generated
27
28 hashtags, and negative comments are represented by two examples. The manipulation can be
29
30 modified using other disclosure formats (e.g., platform-generated disclosure), displaying both
31
32 negative and positive eWOM and specifying the proportion of certain types of comments.
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Reference

- 1
2
3
4
5
6 Appel, G., Grewal, L., Hadi, R. and Stephen, A.T. (2020), “The future of social media in
7 marketing”, *Journal of the Academy of Marketing Science*, Vol. 48 No. 1, pp.79-95.
8
9
10
11 Audrezet, A., De Kerviler, G. and Moulard, J.G. (2020), “Authenticity under threat: When
12 social media influencers need to go beyond self-presentation”, *Journal of Business*
13 *Research*, Vol. 117, pp.557-569.
14
15
16
17
18 Bagozzi, R.P. and Yi, Y. (1988), “On the evaluation of structural equation models”, *Journal of*
19 *the Academy of Marketing Science*, Vol. 16 No. 1, pp.74-94.
20
21
22
23 Boerman, S.C. (2020), “The effects of the standardized Instagram disclosure for micro-and
24 meso-influencers”, *Computers in Human Behavior*, Vol. 103, pp.199-207.
25
26
27
28 Boerman, S.C., van Reijmersdal, E.A. and Neijens, P.C. (2012), “Sponsorship disclosure:
29 Effects of duration on persuasion knowledge and brand responses”, *Journal of*
30 *Communication*, Vol. 62 No. 6, pp.1047-1064.
31
32
33
34 Boerman, S.C., Willemsen, L.M. and Van Der Aa, E.P. (2017), ““This post is sponsored”:
35 Effects of sponsorship disclosure on persuasion knowledge and electronic word of mouth
36 in the context of Facebook”, *Journal of Interactive Marketing*, Vol. 38, pp.82–92.
37
38
39
40
41 Breves, P.L., Liebers, N., Abt, M. and Kunze, A. (2019), “The perceived fit between Instagram
42 influencers and the endorsed brand: How influencer–brand fit affects source credibility
43 and persuasive effectiveness”, *Journal of Advertising Research*, Vol. 59 No. 4, pp.440-
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

- 1
2
3 *Marketing Science*, Vol. 47 No. 6, pp.1027-1045.
4
5
6 Chen, C.F. and Chang, Y.Y. (2008), "Airline brand equity, brand preference, and purchase
7 intentions—The moderating effects of switching costs", *Journal of Air Transport*
8 *Management*, Vol. 14 No. 1, pp.40-42.
9
10
11
12 Chen, Y., Wang, Q. and Xie, J. (2011), "Online social interactions: A natural experiment on
13 word of mouth versus observational learning", *Journal of Marketing Research*, Vol. 48
14 No. 2, pp.238-254.
15
16
17
18
19 Cheung, C.M. and Lee, M.K. (2008), "Online consumer reviews: Does negative electronic
20 word-of-mouth hurt more?", *Americas Conference on Information Systems (AMCIS) 2008*
21 *Proceedings*, 143.
22
23
24
25
26 Chevalier, J.A. and Mayzlin, D. (2006), "The effect of word of mouth on sales: Online book
27 reviews", *Journal of Marketing Research*, Vol. 43 No. 3, pp.345-354.
28
29
30
31 Chung, S. and Cho, H. (2017), "Fostering parasocial relationships with celebrities on social
32 media: Implications for celebrity endorsement", *Psychology & Marketing*, Vol. 34 No. 4,
33 pp.481-495.
34
35
36
37
38 Colicev, A., Kumar, A. and O'Connor, P. (2019), "Modeling the relationship between firm and
39 user generated content and the stages of the marketing funnel", *International Journal of*
40 *Research in Marketing*, Vol. 36 No. 1, pp.100-116.
41
42
43
44
45 De Jans, S. and Hudders, L. (2020), "Disclosure of vlog advertising targeted to children",
46 *Journal of Interactive Marketing*, Vol. 52, pp.1-19.
47
48
49
50 De Jans, S., Cauberghe, V. and Hudders, L. (2018), "How an advertising disclosure alerts
51 young adolescents to sponsored vlogs: The moderating role of a peer-based advertising
52 literacy intervention through an informational vlog", *Journal of Advertising*, Vol. 47 No.
53 4, pp.309-325.
54
55
56
57
58 De Veirman, M. and Hudders, L. (2020), "Disclosing sponsored Instagram posts: The role of
59
60

- 1
2
3 Harrington, D. (2009), *Confirmatory Factor Analysis*, Oxford University Press, New York, NY.
4
5 Hennig-Thurau, T., Gwinner, K.P., Walsh, G. and Gremler, D.D. (2004), “Electronic word-of-
6
7 mouth via consumer-opinion platforms: What motivates consumers to articulate
8
9 themselves on the internet?”, *Journal of Interactive Marketing*, Vol. 18 No. 1, pp.38-52.
10
11
12 Hennig-Thurau, T., Wiertz, C. and Feldhaus, F. (2015), “Does twitter matter? The impact of
13
14 microblogging word of mouth on consumers’ adoption of new movies”, *Journal of the*
15
16 *Academy of Marketing Science*, Vol. 43 No. 3, pp.375–394.
17
18
19 Hong, J. and Sternthal, B. (2010), “The effects of consumer prior knowledge and processing
20
21 strategies on judgments”, *Journal of Marketing Research*, Vol. 47 No. 2, pp.301-311.
22
23
24 Horton, D. and Richard Wohl, R. (1956), “Mass communication and para-social interaction:
25
26 Observations on intimacy at a distance”, *Psychiatry*, Vol. 19 No. 3, pp.215-229.
27
28
29 Huang, L.S. (2015), “Trust in product review blogs: The influence of self-disclosure and
30
31 popularity”, *Behaviour & Information Technology*, Vol. 34 No. 1, pp.33-44.
32
33
34 Hughes, C., Swaminathan, V. and Brooks, G. (2019), “Driving brand engagement through
35
36 online social influencers: An empirical investigation of sponsored blogging campaigns”,
37
38 *Journal of Marketing*, Vol. 83 No. 5, pp. 78-96.
39
40
41 Hwang, K. and Zhang, Q. (2018), “Influence of parasocial relationship between digital
42
43 celebrities and their followers on followers’ purchase and electronic word-of-mouth
44
45 intentions, and persuasion knowledge”, *Computers in Human Behavior*, Vol. 87, pp.155-
46
47 173.
48
49
50 Hwang, Y. and Jeong, S. H. (2016), “This is a sponsored blog post, but all opinions are my
51
52 own”: The effects of sponsorship disclosure on responses to sponsored blog
53
54 posts”, *Computers in Human Behavior*, Vol. 62, pp.528-535.
55
56
57 Isaac, M.S. and Grayson, K. (2017), “Beyond skepticism: Can accessing persuasion knowledge
58
59 bolster credibility?”, *Journal of Consumer Research*, Vol. 43 No. 6, pp.895–912.
60

- 1
2
3 Jalilvand, M.R., Pool, J.K., Nasrolahi Vosta, S. and Kazemi, R.V. (2016), “Antecedents and
4
5 consequence of consumers’ attitude towards brand preference: Evidence from the
6
7 restaurant industry”, *Anatolia*, Vol. 27 No. 2, pp.167-176.
8
9
- 10 Janssen, L., Fransen, M.L., Wulff, R. and Van Reijmersdal, E.A. (2016), “Brand placement
11
12 disclosure effects on persuasion: The moderating role of consumer self-control”, *Journal*
13
14 *of Consumer Behaviour*, Vol. 15 No. 6, pp.503-515.
15
16
- 17 Jin, S.V., Muqaddam, A. and Ryu, E. (2019), “Instafamous and social media influencer
18
19 marketing”, *Marketing Intelligence & Planning*, Vol. 37 No. 5, pp.567-579.
20
21
- 22 Kardes, F.R., Posavac, S.S. and Cronley, M.L. (2004), “Consumer inference: A review of
23
24 processes, bases, and judgment contexts”, *Journal of Consumer Psychology*, Vol. 14 No.
25
26 3, pp.230-256.
27
28
- 29 Kay, S., Mulcahy, R. and Parkinson, J. (2020), “When less is more: The impact of macro and
30
31 micro social media influencers’ disclosure”, *Journal of Marketing Management*, Vol. 36
32
33 No. 3-4, pp.248-278.
34
35
- 36 Kelley, H.H. and Michela, J.L. (1980), “Attribution theory and research”, *Annual Review of*
37
38 *Psychology*, Vol. 31 No. 1, pp.457-501.
39
- 40 Ki, C.W.C. and Kim, Y.K. (2019), “The mechanism by which social media influencers
41
42 persuade consumers: The role of consumers’ desire to mimic”, *Psychology & Marketing*,
43
44 Vol. 36 No. 10, pp.905-922.
45
46
- 47 Kim, H., Ko, E. and Kim, J. (2015), “SNS users’ para-social relationships with celebrities:
48
49 Social media effects on purchase intentions”, *Journal of Global Scholars of Marketing*
50
51 *Science*, Vol. 25 No. 3, pp.279-294.
52
53
- 54 Knoll, J. and Matthes, J. (2017), “The effectiveness of celebrity endorsements: A meta-
55
56 analysis”, *Journal of the Academy of Marketing Science*, Vol. 45 No. 1, pp.55–75.
57
- 58 Labrecque, L.I. (2014), “Fostering consumer–brand relationships in social media environments:
59
60

- 1
2
3 The role of parasocial interaction”, *Journal of Interactive Marketing*, Vol. 28 No. 2,
4
5 pp.134-148.
6
7
8 Lanz, A., Goldenberg, J., Shapira, D. and Stahl, F. (2019), “Climb or jump: Status-based
9
10 seeding in user-generated content networks”, *Journal of Marketing Research*, Vol. 56 No.
11
12 3, pp.361-378.
13
14
15 Ledbetter, A.M. and Meisner, C. (2021), “Extending the personal branding affordances
16
17 typology to parasocial interaction with public figures on social media: Social presence and
18
19 media multiplexity as mediators”, *Computers in Human Behavior*, Vol. 115, 106610.
20
21
22 Lee, J.E. and Watkins, B. (2016), “YouTube vloggers’ influence on consumer luxury brand
23
24 perceptions and intentions”, *Journal of Business Research*, Vol. 69 No. 12, pp.5753-5760.
25
26
27 Liu, Y. (2006), “Word of mouth for movies: Its dynamics and impact on box office
28
29 revenue”, *Journal of Marketing*, Vol. 70 No. 3, pp.74-89.
30
31
32 Liu, L., Liu, R., Lee, M. and Chen, J. (2019a), “When will consumers be ready? A
33
34 psychological perspective on consumer engagement in social media brand communities”,
35
36 *Internet Research*, Vol. 29 No. 4, pp.704-724.
37
38
39 Liu, M. T., Liu, Y. and Zhang, L.L. (2019b), “Vlog and brand evaluations: The influence of
40
41 parasocial interaction”, *Asia Pacific Journal of Marketing and Logistics*, Vol. 31 No. 2,
42
43 pp.419-436.
44
45
46 Lou, C. and Yuan, S. (2019), “Influencer marketing: how message value and credibility affect
47
48 consumer trust of branded content on social media”, *Journal of Interactive
49
50 Advertising*, Vol. 19 No. 1, pp.58-73.
51
52
53 Martínez-López, F.J., Anaya-Sánchez, R., Fernández Giordano, M. and Lopez-Lopez, D.
54
55 (2020), “Behind influencer marketing: Key marketing decisions and their effects on
56
57 followers’ responses”, *Journal of Marketing Management*, Vol. 36 No. 7-8, pp.579-607.
58
59
60 McAlexander, J.H., Schouten, J.W. and Koenig, H.F. (2002), “Building brand community”,

- 1
2
3 *Journal of Marketing*, Vol. 66 No. 1, pp.38-54.
- 4
5 Munnukka, J., Maity, D., Reinikainen, H. and Luoma-aho, V. (2019), ““Thanks for watching”.
- 6
7 The effectiveness of YouTube vlog endorsements”, *Computers in Human Behavior*, Vol.
- 8
9 93, pp.226-234.
- 10
11
12 Oliver, R.L. and Swan, J.E. (1989), “Equity and disconfirmation perceptions as influences on
- 13
14 merchant and product satisfaction”, *Journal of Consumer Research*, Vol. 16 No. 3,
- 15
16 pp.372-383.
- 17
18
19 Reinikainen, H., Munnukka, J., Maity, D. and Luoma-aho, V. (2020), “You really are a great
- 20
21 big sister’–parasocial relationships, credibility, and the moderating role of audience
- 22
23 comments in influencer marketing”, *Journal of Marketing Management*, Vol. 36 No. 3-4,
- 24
25 pp.279-298.
- 26
27
28 Silva, M.J.D.B., Farias, S.A.D., Grigg, M.K. and Barbosa, M.D.L.D.A. (2020), “Online
- 29
30 engagement and the role of digital influencers in product endorsement on
- 31
32 Instagram”, *Journal of Relationship Marketing*, Vol. 19 No. 2, pp.133-163.
- 33
34
35 Sokolova, K. and Kefi, H. (2020), “Instagram and YouTube bloggers promote it, why should I
- 36
37 buy? How credibility and parasocial interaction influence purchase intentions”, *Journal*
- 38
39 *of Retailing and Consumer Services*, Vol. 53, 101742.
- 40
41
42 Solem, B.A.A. and Pedersen, P.E. (2016), “The effects of regulatory fit on customer brand
- 43
44 engagement: an experimental study of service brand activities in social media”, *Journal*
- 45
46 *of Marketing Management*, Vol. 32 No. 5-6, pp.445-468.
- 47
48
49 Torres, P., Augusto, M. and Matos, M. (2019), “Antecedents and outcomes of digital influencer
- 50
51 endorsement: An exploratory study”, *Psychology & Marketing*, Vol. 36 No. 12, pp.1267-
- 52
53 1276.
- 54
55
56 Tran, G.A., Yazdanparast, A. and Strutton, D. (2019), “Investigating the marketing impact of
- 57
58 consumers’ connectedness to celebrity endorsers”, *Psychology & Marketing*, Vol. 36 No.
- 59
60

1
2
3 10, pp.923-935.
4

5 Tsiotsou, R.H. (2015), "The role of social and parasocial relationships on social networking
6 sites loyalty", *Computers in Human Behavior*, Vol. 48, pp.401-414.
7

8
9
10 van Reijmersdal, E.A., Rozendaal, E., Hudders, L., Vanwesenbeeck, I., Cauberghe, V. and van
11 Berlo, Z.M. (2020), "Effects of disclosing influencer marketing in videos: An eye tracking
12 study among children in early adolescence", *Journal of Interactive Marketing*, Vol. 49,
13 pp.94-106.
14
15
16

17
18
19 Verhagen, T., Nauta, A. and Feldberg, F. (2013), "Negative online word-of-mouth: Behavioral
20 indicator or emotional release?", *Computers in Human Behavior*, Vol. 29 No. 4, pp.1430-
21 1440.
22
23
24

25
26 Vrontis, D., Makrides, A., Christofi, M. and Thrassou, A. (2021), "Social media influencer
27 marketing: A systematic review, integrative framework and future research agenda",
28 *International Journal of Consumer Studies*, Vol. 45 No. 4, pp.617-644.
29
30
31

32
33 Yuan, C.L., Kim, J. and Kim, S.J. (2016), "Parasocial relationship effects on customer equity
34 in the social media context", *Journal of Business Research*, Vol. 69 No. 9, pp.3795-3803.
35
36

37
38 Yuan, S. and Lou, C. (2020), "How social media influencers foster relationships with followers:
39 The roles of source credibility and fairness in parasocial relationship and product
40 interest", *Journal of Interactive Advertising*, Vol. 20 No. 2, pp.133-147.
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Appendix A. Experimental scenarios

Scenario 1

[The name of micro-influencer] recommends a beverage brand and product in the post.



Scenario 2

[The name of micro-influencer] recommends a beverage brand and product in the post. The post is brand sponsored (with a sponsorship hashtag).



Scenario 3

[The name of micro-influencer] recommends a beverage brand and product in the post. There are negative comments to the post such as “I don’t recommend”.



Scenario 4

[The name of micro-influencer] recommends a beverage brand and product in the post. The post is brand sponsored (with a sponsorship hashtag). There are negative comments to the post such as “I don’t recommend”.



Note: “The name of the micro-influencer” in the text description of each scenario and the “accountname_12345” in the images are replaced with the real influencer’s name and Instagram handle when the scenarios are presented to participants.