

Association for Information Systems

AIS Electronic Library (AISeL)

ICEB 2021 Proceedings (Nanjing, China)

International Conference on Electronic Business
(ICEB)

Winter 12-3-2021

Size does Matter: How do Micro-influencers Impact Follower Purchase Intention on Social Media?

Gloria H.W. Liu

Ying Li

Neil Chueh-An Lee

Follow this and additional works at: <https://aisel.aisnet.org/iceb2021>

This material is brought to you by the International Conference on Electronic Business (ICEB) at AIS Electronic Library (AISeL). It has been accepted for inclusion in ICEB 2021 Proceedings (Nanjing, China) by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Size does Matter: How do Micro-influencers Impact Follower Purchase Intention on Social Media?

Gloria H.W. Liu ¹

Ying Li ²

Neil Chueh-An Lee ^{3,*}

*Corresponding author

¹ Xi'an Jiao Tong-Liverpool University, Suzhou, China, huiwen.liu@xjtlu.edu.cn

² Xi'an Jiao Tong-Liverpool University, Suzhou, China, ying.li1702@student.xjtlu.edu.cn

³ The Department of Marketing and Tourism Management, National Chiayi University, Taiwan, Neil_lee@mtm.ncyu.edu.tw

ABSTRACT

Social media influencers have become a significant source of information for customers and a prevalent marketing tool for brands. It is crucial to explore factors that affect the follower's purchase intention of the products endorsed by social media influencers. Recently, micro-influencers have gained recognition for their authenticity and relatability when compared with their established counterparts, such as macro- or mega-influencers. Increasing organizations also see the value micro-influencers can bring to their brands via more interaction with their target customers. Based on the parasocial interaction theory, we propose that the perceived credibility and transparency of micro-influencers enhance followers' purchase intention through the mediation of parasocial interaction. Parasocial interaction is a kind of psychological relationship in which followers consider influencers as their friends, regardless of their limited interactions with those influencers. Our findings indicate that parasocial interaction between micro-influencers and their followers positively impacts purchase intentions of recommended products. It is also found that perceived micro-influencer credibility and transparency positively affect followers' parasocial interaction with micro-influencers. Implications of our findings are discussed.

Keywords: Micro-influencer credibility, micro-influencer transparency, influencer marketing, parasocial interaction, micro-influencers.

INTRODUCTION

A surge in the need and willingness for online shopping has been witnessed since the pandemic (Grashuis *et al.*, 2020; Repko, 2020). Given the unlimited online space and low entry barriers to the internet, there tends to be an unconstrained growth of options for consumers to shop on the internet (Wareham *et al.*, 2014). Further, people can easily and sometimes unconsciously contribute to the production and/or dissemination of unverified and misleading information about brands or products (e.g., fake reviews) (Wu *et al.*, 2020). This leads to consumers anxiously spending a large amount of time and effort evaluating the credibility of online information and brands struggling to reach their target audience. The emergence of social media influencers has helped both consumers and brands to address these problems.

Individual social media influencers could have different scales of followers (Britt *et al.*, 2020). The market has long been dominated by mega-influencers (>1 million followers) for the massive traffic they could generate. Yet, in recent years, more brands are reaching out to micro-influencers, who have between 10k to 100k followers (Britt *et al.*, 2020; Chen, 2016). Micro-influencers are argued to be more relatable and authentic (Britt *et al.*, 2020). They are found to generate higher follower engagement and conversion to purchase rates (Williams, 2019). Apart from this, micro-influencers can be a better option for small to medium enterprises (SMEs) who cannot afford to collaborate with commercial mega-influencers who usually charge a hefty amount of money for their endorsement of brands (Boerman, 2020).

Micro-influencers have fewer followers and less human brand equity to leverage. However, they tend to be seen as more trustworthy and relatable and engage more with their followers than celebrities or mega-influencers do (Williams, 2019). The majority of existing literature on influencer marketing has not distinguished types of influencers and the mechanisms they apply to influence their followers (Liu *et al.*, 2021; Sun *et al.*, 2019; Xue *et al.*, 2020). Hence, this study aims to bridge this gap by investigating how micro-influencers impact followers' purchase intention from the perspective of parasocial interaction. Parasocial interaction is a kind of psychological relationship in which followers consider media personalities as their friends, regardless of their limited interactions with those media personalities (Gleich, 1997; Rihl & Wegener, 2019). We propose micro-influencer credibility and micro-influencer transparency will enhance parasocial interaction between micro-influencers and their followers, leading to followers' higher purchase intention. To test this, we performed a survey on 217 followers of micro-influencers on social media platforms. Our results demonstrate the key role played by parasocial interaction in mediating the effects of micro-influencer credibility and micro-influencer transparency on followers' purchase intention.

The remainder of the paper is organized as follows. The next section reviews the literature and develops a framework that outlines why we believe parasocial interaction is the key to micro-influencers impact on follower purchase intention. We then detail our survey method. This is followed by findings and discussion. Finally, we conclude this paper.

LITERATURE REVIEW

Social media influencers are individuals who shape audience attitudes and behaviors via the use of various social media. They can prompt direct follower behaviors such as “likes”, “comments”, or “share”, and affect followers’ opinions and decisions by sharing their own thoughts, feelings, or experience on fashion, travel, fitness, or even their daily routines. Social media influencers share similarities with traditional celebrities as they have both established their image as “human brands” (Ki *et al.*, 2020). Social media influencers can steadily draw the audience’s attention and engage them in interaction to enlarge their social reach and followership (Kay *et al.*, 2020).

Brands usually invite influencers to endorse their products by inviting them to promotional events, sending free products for testing, or even providing monetary compensation. This helps build up brand reputation and image among the influencers’ followers, who are often the potential customers (De Veirman *et al.*, 2017). Because of a seemingly spontaneous flow of their persona and style on the social media platform, influencer marketing tends to be perceived as more natural, authentic, and real than branded ads (Campbell & Farrell, 2020; Evans *et al.*, 2017).

However, social media influencers can differ in their scale of followership. Prior studies suggest a two-level (i.e., mega- and micro-influencer) (Britt *et al.*, 2020; Schouten *et al.*, 2020), three-level (i.e., mega-, macro- and micro-influencer) (Porteous, 2018), four-level (i.e., mega-, macro-, micro- and nano-influencer) (Isyanto *et al.*, 2020), and even five-level classification (i.e., celebrity, mega-, macro-, micro- and nano-influencer) (Campbell & Farrell, 2020). For example, according to Campbell and Farrell (2020), celebrity influencers who gain public recognition outside of social media normally have over a million followers; mega-influencers who have experienced significant follower growth on social media because of established expertise have 1m+ followers; macro-influencers own 100k to 1m followers; micro-influencers have between 10k – 100k followers; and nano-influencers has less than 10k audience who are mainly families, friends, and acquaintances.

Influencers with a larger scale of followers attract brands for their large reach, fame, and leadership in expressing opinions (De Veirman *et al.*, 2017). They typically charge a higher price for endorsement. In comparison, micro-influencers (with 10k-100k followers), which are the focus of this study, have gained the attention of brands and scholars recently for that they show even a higher level of engagement rate with audiences (6.3% vs. 3.6%) (Williams, 2019) and charge much less than influencers with larger followership (Britt *et al.*, 2020). Some micro-influencers even accept the exchange of their endorsement for free products and gifts (Kay *et al.*, 2020). Britt *et al.* (2020) found that micro-influencers are more likely to engage in direct, two-way dialogue with their followers. Therefore, they are more likely to disseminate valued product information to their followers and persuade them to purchase products endorsed by them.

Parasocial Interaction

Para-social interaction describes a kind of relationship between the audience and media figures in which the audience develops an illusion of perceived intimacy with the figures (Gleich, 1997). This relationship is self-established, and the other person may not know it and impact it (Horton & Richard Wohl, 1956). Parasocial interaction is not a mutual relationship, but the audiences interact with the personas as if they are with them and as if it is based on two-way communication. This kind of relationship can even develop to the degree to which the audience starts to view the performer as “real friends”, fostering through multiple interactions in the long term (Russell *et al.*, 2006).

Users of social media sites can establish a parasocial relationship with influencers through subscribing to their accounts or channels and constantly keeping themselves updated with influencers’ posts on social networking sites (Rihl & Wegener, 2019). As a result, followers can know the influencer, engage with the influencer, form attachment toward the influencer, and generate feelings of closeness (Boerman, 2020).

Micro-influencers are considered to be more authentic and trustworthy than their celebrity or popular counterparts, who are increasingly prone to consumer skepticism about the sincerity of their endorsements and their intention to manipulate the follower (Britt *et al.*, 2020; Chen, 2016). Micro-influencers can adopt specific strategies or take advantage of their attributes to induce positive emotions (e.g., perceived intimacy) within their followers to further influence their purchase intention. For example, celebrities or popular influencers who have a long history of interaction with their followers can use affective content to arouse followers’ positive emotional reactions (Britt *et al.*, 2020). However, unlike their popular counterparts, it is found such an emotion-laden message can be detrimental for micro-influencers. Instead, followers tend to be drawn to micro-influencers initially for the credible and professional content they provide (Britt *et al.*, 2020; Djafarova & Trofimenko, 2019).

Furthermore, the prevalent practice of sponsored endorsements makes it crucial to investigate whether clear disclosure of endorsement relationships with brands (i.e., transparency) can stimulate social media influencers’ interaction with their followers. Prior studies found disclosure by mega-influencers could stimulate more liking, sharing, and comments on the posts (Boerman, 2020). However, the effect of disclosure on micro-influencers is inconclusive (Boerman, 2020; Evans *et al.*, 2017;

Johnson *et al.*, 2019). We thus argue micro-influencer credibility and micro-influencer transparency are key factors contributing to followers' parasocial interaction with micro-influencers. Figure 1 is our conceptual research model:

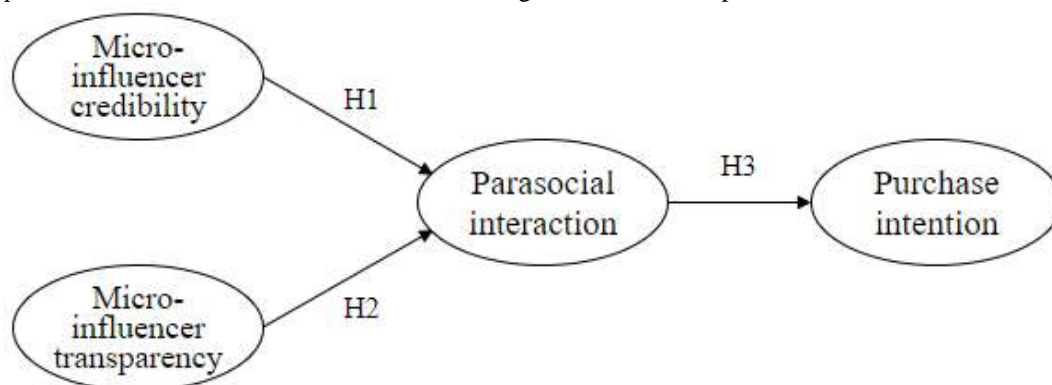


Figure 1: Conceptual research model

Micro-influencer Credibility

Micro-influencer credibility refers to the level of trustworthiness and reliability of the micro-influencer as perceived by its followers (Sokolova & Kefi, 2020). It involves the recognition of a micro-influencer on whether a claim s/he makes is true, genuine, and unprejudiced (Chetioui *et al.*, 2020). Perceived credibility has been found to play a vital role in explaining the effects of influencer marketing, and it is likely to affect the audience's attitudes and behaviors (Schouten *et al.*, 2020). Several studies examined the effects of influencer credibility on consumers' attitudes towards the brand and the influencer. For instance, Chetioui, Benlafqih, and Lebdaoui (2020) investigated the contribution of fashion influencers to consumers' purchase intention. They found that perceived credibility was the most conclusive factor among a set of influencer characteristics. They also found that when a brand is recommended by credible influencers, customers are more willing to recommend the brand to others.

Perceived credibility has also been recognized to be one of the most significant factors when selecting which influencers to follow and interact with (Nam & Dân, 2018). Xiao, Wang, and Chan-Olmsted (2018) argued that influencers do not only have the power to directly influence the purchase decisions of a large audience, but their followers also judge them to be reliable information sources to interact with. Chapple and Cownie (2017) also found consumers regularly follow lifestyle vloggers' product recommendations because they considered these vloggers as credible sources of information.

People used to follow influencers with greater followership because of their attractiveness and assumingly more trustworthy (Kay *et al.*, 2020). Yet, as the number of followers increases, the engagement for those influencers tends to drop. Chen (2016) describes the scale of followership of micro-influencers (between 10k-100k followers) as the "sweet spot" in which micro-influencer can afford better engagement in direct and two-way communication and build a greater personal connection with their followers (Sokolova & Perez, 2021). Increasingly people and brands have turned to micro-influencers over celebrities and commercial influencers for that micro-influencers are more interactive and responsive to their followers. Djafarova and Trofimenko (2019) found that people tend to follow and interact with micro-influencers on Instagram who post credible blogs or videos to engage them.

Consequently, we suppose that followers who regard micro-influencers as a source of reliable information are more likely to build and engage in a parasocial relationship with them. Hence:

H1: Micro-influencer credibility is positively correlated with followers' parasocial interaction with micro-influencers.

Micro-influencer Transparency

Micro-influencer transparency refers to followers' perceptions of whether the micro-influencer is honest about the products s/he recommends (Woodroof *et al.*, 2020). Influencer marketing is tightly connected with native advertising, in which micro-influencers imitate the form and flow of content on social media platforms so that consumers cannot easily detect their persuasive intentions. Prior studies about the effect of disclosures on advertising performance are inconclusive. For example, Boerman (2020) found that disclosure could generate positive effects, leading to followers' positive interpretation, more liking, sharing, or commenting on influencers' posts. In contrast, Evans *et al.* (2017) discovered a negative impact of disclosure, and Johnson, Potocki, and Veldhuis (2019) found no effect. However, Evans *et al.* (2017) and Johnson, Potocki, and Veldhuis (2019) do not differentiate types of influencers and examine their followers' reactions to well-known brands.

With customers' increasing knowledge about paid endorsements on social networking sites, they are more cognizant of influencers' persuasion languages and intentions. Indeed, Woodroof *et al.* (2020) found that when consumers are more knowledgeable about a paid endorsement, they are less likely to perceive the influencer as transparent or genuine if the influencer uses ambiguous disclosure language. They also noted that consumers tend to be confident that the quality of the promoted product is high and have more intention to purchase when they believe the influencer is transparent. Clear disclosure of the endorsement

relationship is an essential basis and value for building positive and interactive relationships between micro-influencers and followers. Thus, we propose the following hypothesis to be tested:

H2: Micro-influencer transparency is positively correlated with followers' parasocial interaction with micro-influencers.

Purchase Intention

Purchase intention refers to the probability that a customer has the plan or willingness to buy a specific product or brand (Huang *et al.*, 2011). Prior studies found influencer marketing has a positive impact on consumer behaviors due to influencers' personal attributes, such as perceived credibility, physical attractiveness, or similarity (Chapple & Cownie, 2017; Djafarova & Trofimenko, 2019; Isyanto *et al.*, 2020; Sokolova & Kefi, 2020). However, it is unclear how those attributes lead to followers' purchase intention. Little literature has investigated the mediating effect of parasocial interaction (Hwang & Zhang, 2018; Rihl & Wegener, 2019; Sokolova & Kefi, 2020).

Social media platforms are perfectly suited for micro-influencers to develop parasocial interaction with their followers. On social media platforms, micro-influencers can constantly update their thoughts and feelings through blogs, videos, or other forms of content. In return, their followers can regularly view those contents and engage in imagined and effective interaction with the micro-influencers. As a result, followers will see micro-influencers as reliable friends and are willing to take their advice. In addition, parasocial interaction can create a halo effect (Liu *et al.*, 2021). Therefore, followers tend to see products endorsed by micro-influencers as reliable and authentic. Thus, we hypothesize:

H3: Parasocial interaction is positively correlated to follower purchase intention.

METHODOLOGY

This study conducted a survey to investigate the impacts of micro-influencer credibility and transparency on their followers' purchase intention, which are mediated through followers' parasocial interaction with micro-influencers. We chose the food and beverage industry as the research context because the COVID-19 pandemic largely increased the online purchase of said product categories (Redman, 2021). Although small brands are more likely to choose micro-influencers to endorse their products (Bagby, 2018; Rannard, 2021), the food and beverage industry simultaneously has many big players and SMEs and their associated emerging new products and brands (Cruz, 2021; Frąckiewicz, 2018). This industry, therefore, is suitable for conducting our study.

The questionnaire consisted of two parts. The first part asked the questions regarding demographic variables of the respondents, including their gender, age, daily usage of social media, and monthly consumption level. The second part asked the respondents with 18 measurement items in terms of their perceived micro-influencer credibility, micro-influencer transparency, parasocial interaction with a micro-influencer, and purchase intention (see Appendix A). Respondents were asked to recall their favorite or most familiar micro-influencer who has only 10k – 100k followers and who they recently interacted with or watched on a social media platform. All items were measured on a five-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Micro-influencer credibility was measured by four items adapted from Yang, Kim and Yoo (2013). It assesses the extent to which the respondent perceives that the micro-influencer is trustworthy and credible.

Micro-influencer transparency was measured by four items adapted from Woodroof *et al.* (2020). It assesses the extent to which the respondent perceives the micro-influencers dependability, honesty, and believability.

Parasocial interaction was measured by seven items adapted from Russell, Stern, and Stern (2006). It evaluates the extent to which the respondent feels emotionally attached to the micro-influencer.

Purchase intention was measured by three items adapted from Evans *et al.* (2017). It assesses the respondent's intention and willingness to try the brands and related product lines endorsed by the micro-influencer.

We controlled for age, gender, and monthly spending to rule out rival explanations for our results. First, mature consumers mostly have a stronger purchasing power (Law *et al.*, 2016). As a result, they are more willing and capable to purchase products that they do not usually consume or experiment with new products or brands suggested by social media influencers. Second, prior studies suggest that there are gender differences in online participation and social media interaction (Morante *et al.*, 2017; Zhou *et al.*, 2014). Finally, high monthly spending means consumers are willing to spend and purchase more.

A link was published on popular Chinese social media platforms, including WeChat, QQ, and Weibo, to collect data. In total, 217 valid responses were received. Table 1 shows the characteristics of the respondents. About 87% of the respondents were between 18 and 31 years old. They are Generation Z (born between 1995 and 2009) and Generation Y (born between 1980 and 1994), who are the most active users of social media sites (Lissitsa & Kol, 2016; Priporas *et al.*, 2020; Sokolova & Kefi, 2020). About 70% of the respondents are female, which is aligned with many previous studies on influencer marketing (Sokolova & Kefi, 2020; Sun *et al.*, 2019; Xue *et al.*, 2020). For instance, 61.1% of the respondents were female in Sun *et al.* (2019) that

investigates the influences of live-streamers on viewers' purchase intentions. In Xue *et al.* (2020), the percentage of female respondents even reached 89.7% as females prefer to follow influencers on social media platforms and engage in online shopping. 43% of respondents reported that their daily usage was between two to four hours a day, accounting for the largest proportion in the survey, 35% for more than 4 hours per day, 18% for one to two hours, and 4% indicating they use social media less than one hour every day. Finally, 72.5% of participants reported that they had the experience of purchasing food and beverage products recommended by micro-influencers on social media.

Table 1: Characteristics of Respondents (N=217)

	Categories	Frequency	%
Gender	Male	66	30.4
	Female	151	69.6
Age	Under 18	2	0.9
	18-25	148	68.2
	26-31	39	18.0
	Above 31	28	12.9
Monthly Spending (USD)	Under 300	56	25.8
	301-600	108	49.8
	601-900	29	13.4
	Above 901	24	11.1
Daily Time Spent on Social Media	less than 1 hour	8	3.7
	1-2 hours	39	18.0
	2-4 hours	94	43.3
	above 4 hours	76	35.0

DATA ANALYSIS AND RESULTS

A partial least squares (PLS) using SmartPLS 3.3.3 was conducted for measurement validation and hypothesis testing. PLS is appropriate for our study because it is recommended for the more exploratory foci of research objectives (Hair *et al.*, 2017a). This study explores influencer marketing which is still in its infancy (Britt *et al.*, 2020). In particular, we investigate consumer engagement with an emerging type of influencers (i.e., micro-influencers).

Measurement Model

We assessed the reliability and validity based on the guidelines by (Hair *et al.*, 2017a; Hair *et al.*, 2017b). Outer loadings for all items were higher than 0.7 and significant at a 1% level except for one item of influencer transparency. We deleted such items from the research model. The rho_A, composite reliability (CR), and Cronbach's alpha estimates (see Appendix B) were above 0.7, indicating good internal consistency and the reliability of all the scales. We further examined convergent validity using the average variance extracted (AVE) criterion (Hair *et al.*, 2017a). The AVEs of all constructs exceeded the minimum threshold value of 0.5 (see Appendix B), demonstrating sufficient convergent validity.

Discriminating validity was established by (1) the items loaded higher on the construct that they were intended to measure than those on other constructs; (2) the square root of the AVE by each construct was higher than the inner construct correlations; and (3) the heterotrait-monotrait ratio of correlation (HTMT) was significantly smaller than 1 (Henseler *et al.*, 2015). Our data showed that all the items loaded higher on their own construct than those on other constructs (due to page limit, cross-loading table provided by request). As shown in Appendix B, the square roots of AVE of all first-order constructs were greater than the absolute values of the correlation coefficient between the constructs. The HTMT values presented in the parentheses of Appendix B were significantly lower than 1, with a 95% confidence interval. These results indicated discriminant validity.

Common method variance (CMV) was tackled by two approaches. First, we used Harmon's single-factor test to assess CMV (Podsakoff *et al.*, 2003). Three factors with eigenvalue >1 were extracted and collectively accounted for 62.697% of the variances in the data, with the first factor accounting for 48.735% of the variances. No factors accounted for more than 50%. Second, we incorporated the measured latent marker variable (MLMV) in our survey to correct for CMV when using PLS (Chin *et al.*, 2012). This approach requires collecting multiple items that have no nomological relationship with the research items. We followed the guidelines introduced by Chin *et al.* (Chin *et al.*, 2012). We adopted the items used to measure "computer software usage habits" (Chin *et al.*, 2012) as marker variables. We then could conduct the construct level correction (CLC) to partial out the CMV effects at the structural model in our data analysis (Chin *et al.*, 2012). CLC involves creating as many CMV control constructs as there are constructs in the research model. Each CMV control uses the same entire set of MLMV items. CMV construct was modeled as impacting each model construct (Chin *et al.*, 2012). The results indicated that no change in the correlation signs of path coefficients and significances in our structural model. We thus concluded that CMV was not a serious problem.

Structural Model

We first assessed multicollinearity by examining each set of predictor constructs separately for each subpart of the research model (Hair *et al.*, 2017a). In our research model, all the VIF of endogenous constructs were less than 2, which was well below the threshold value of 5 (Hair *et al.*, 2017a). This indicated there was no multicollinearity problem in our model. To assess the

significance of the path coefficients, a bootstrapping was applied to generate 10,000 samples with a PLS algorithm, no sign changes, a path weighting scheme, and a bias-corrected and accelerated bootstrap (Hair *et al.*, 2017a). The full model had an R^2 of 50.8% for purchase intention. R^2 for parasocial interaction was 49.2%. With an omission distance equal to 5, all the cross-validated redundancy Q^2 values of endogenous constructs were higher than zero (0.288 for parasocial interaction; 0.303 for purchase intention), indicating that the exogenous constructs had predictive relevance for the endogenous constructs under consideration (Hair, *et al.*, 2017a).

As shown in Figure 2, the results demonstrate that micro-influencer credibility positively affects parasocial interaction, supporting H1 ($\beta=0.500$; $p < 0.001$). Micro-influencer transparency is positively associated with parasocial interaction, supporting H2 ($\beta=0.271$; $p < 0.001$). Parasocial interaction has a significant effect on purchase intention, thus supporting H3 ($\beta=0.582$; $p < 0.001$). Finally, about control variables, the impacts of gender on both parasocial interaction and purchase intention are insignificant. However, while age has positive effect on purchase intention ($\beta=0.125$; $p < 0.05$), the opposite result is reflected in monthly spending ($\beta= -0.152$; $p < 0.01$). This suggests that individuals who purchase more online may be immune to influencer marketing. Overall, we note support for all our hypotheses in the research model.

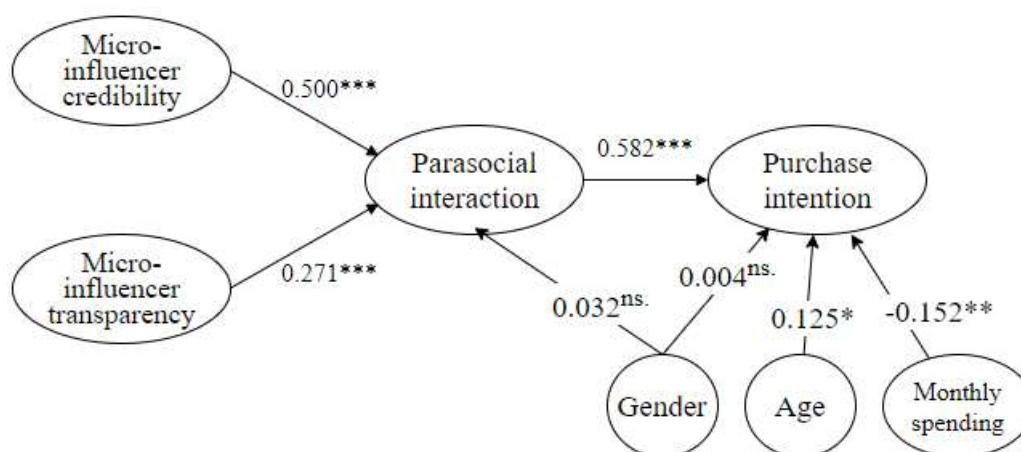


Figure 2: Structural model

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; ns. Not significant; Two-tailed test.

We further conducted a mediation test to examine the indirect effects of micro-influencer credibility and transparency on purchase intention through parasocial interaction. We followed the guidelines suggested by Hair *et al.* (Hair *et al.*, 2017a). A bootstrapping with a PLS algorithm, no sign changes, a path weighting scheme, and a bias-corrected and accelerated bootstrap were applied to generate 10,000 samples (Hair *et al.*, 2017a). The results are shown in Appendix C, and all the indirect effects are significant at the $p < 0.01$ level. Because of the significance of the direct effect of micro-influencer credibility on purchase intention ($\beta=0.308$; $p < 0.001$), parasocial interaction partially mediates such a relationship. This suggests that without building up a high level of parasocial interaction, micro-influencers are still able to increase their followers' purchase intention by enhancing their credibility. Of course, such direct effect can also complement parasocial interaction to provide a stronger positive effect on followers' purchase intention. However, due to the insignificance of the direct effects of micro-influencer transparency ($\beta=0.143$; $p > 0.05$) on purchase intention, parasocial interaction fully mediates such a relationship.

DISCUSSION AND IMPLICATIONS

Our findings provide support for the hypothesized research model and hypotheses. Our findings suggest that micro-influencer credibility and transparency encourage followers' parasocial interaction with the micro-influencers, which further leads to follower purchase intention. Prior studies focus on influencer attributes in influencing follower purchase intention (Isyanto *et al.*, 2020; Sokolova & Kefi, 2020). This study extends prior literature by demonstrating how those attributes may lead to followers' purchase intention through followers' parasocial interaction with micro-influencers. In mediated relationships, micro-influencer transparency is fully mediated by parasocial interaction, and micro-influencer credibility is partially mediated by parasocial interaction.

This study also suggests that micro-influencer credibility and micro-influencer transparency can be the key factors that followers are initially attracted to micro-influencers for developing parasocial interaction with them. Unlike their popular counterparts, who are naturally considered credible and honest, micro-influencers need to first earn and establish their credibility and transparency by demonstrating their expertise in specific domains and self-disclosure of endorsement relationships. As a result, viewers or potential followers will continue to follow the micro-influencers to further develop a parasocial relationship.

Moreover, our results suggest that micro-influencer credibility is more influential than their transparency. Statistically, micro-influencer credibility had a larger standardized path coefficient (0.500 vs. 0.271). Unlike celebrity or mega influencers who have a greater history of interaction with their followers, micro-influencers have to first establish their niches of impact in the already overcompetitive influencer marketing landscape. Therefore, micro-influencers need to initially rely on the credibility of messages to attract followers to form their niches of impact. This finding is congruent with Britt et al. (Britt *et al.*, 2020), in which they found that micro-influencers rely on the use of information-based messages (vs. emotion-laden ones) to establish a relationship with their followers. Subsequently, micro-influencer transparency can help followers navigate through the prevalent practice of mixing sponsored content with non-sponsored content by social media influencers.

Congruent with Boerman (2020) and Britt *et al.* (2020), our study demonstrates that micro-influencer transparency can create a positive effect on followers' reactions. Our study further indicates that the effect of micro-influencer transparency on follower purchase intention is fully mediated by followers' parasocial relationship with micro-influencers.

CONCLUSIONS AND LIMITATIONS

This paper has demonstrated that micro-influencers can attract and engage their followers in parasocial interaction to influence their purchase intention. This study articulated and tested a conceptual model that posits micro-influencer credibility and transparency can help engage followers in parasocial interaction with micro-influencers to influence their purchase intention. We found that micro-influencer credibility is more influential than micro-influencer transparency in engaging followers in parasocial interaction with micro-influencers. Our study reveals the importance of parasocial interaction in influencer marketing effectiveness that involves micro-influencers rather than well-established social media influencers.

However, this paper has several limitations. First, our sample mainly comprises users of social media platforms in China, such as WeChat, Weibo, Xiaohongshu, and Bilibili. Thus, the generalizability of our model and findings on other social media platforms in different cultural contexts may require further investigation. Second, we only examined micro-influencers in the food and beverage industry. Future studies should investigate those in different industries, such as fashion or tourism, to see if our results hold. Third, our study relies on self-reports as the single data source. This may create common method bias. We thus tested for common method bias, and there was no statistical evidence of severe bias. Finally, our data were cross-sectional. Therefore, all the relationships in our study can only be tentatively concluded.

REFERENCES

- Bagby, D. (2018). How to make a big impact with a small influencer marketing budget. *MarTech*. Retrieved from <https://martech.org/how-to-make-a-big-impact-with-a-small-influencer-marketing-budget/>
- Boerman, S. C. (2020). The effects of the standardized Instagram disclosure for micro- and meso-influencers. *Computers in Human Behavior*, 103, 199-207. <https://doi.org/https://doi.org/10.1016/j.chb.2019.09.015>
- Britt, R. K., Hayes, J. L., Britt, B. C., & Park, H. (2020). Too big to sell? A computational analysis of network and content characteristics among mega and micro beauty and fashion social media influencers. *Journal of Interactive Advertising*, 20(2), 111-118. doi: 10.1080/15252019.2020.1763873
- Campbell, C., & Farrell, J. R. (2020). More than meets the eye: The functional components underlying influencer marketing. *Business Horizons*, 63(4), 469-479. <https://doi.org/10.1016/j.bushor.2020.03.003>
- Chapple, C., & Cownie, F. (2017). An investigation into viewers' trust in and response towards disclosed paid-for-endorsements by YouTube lifestyle vloggers. *Journal of Promotional Communications*, 5(2), 110-136.
- Chen, Y. (2016). The rise of 'micro-influencers' on Instagram. Retrieved from <https://digiday.com/marketing/micro-influencers/>
- Chetioui, Y., Benlafqih, H., & Lebdaoui, H. (2020). How fashion influencers contribute to consumers' purchase intention. *Journal of Fashion Marketing and Management: An International Journal*, 24(3), 361-380. Retrieved from <https://doi.org/10.1108/JFMM-08-2019-0157>
- Chin, W. W., Thatcher, J. B., & Wright, R. T. (2012). Assessing common method bias: Problems with the ULMC technique. *MIS Quarterly*, 36(3), 1003-1019. <https://doi.org/10.2307/41703491>
- Cruz, M. (2021). SMEs: Business dynamics in the food and beverage industry. *Hospitalitynet*. Retrieved from <https://www.hospitalitynet.org/opinion/4104848.html>
- De Veirman, M., Cauberghe, V., & Hudders, L. (2017). Marketing through Instagram influencers: the impact of number of followers and product divergence on brand attitude. *International Journal of Advertising*, 36(5), 798-828. Doi: 10.1080/02650487.2017.1348035
- Djafarova, E., & Trofimenko, O. (2019). 'Instafamous'—credibility and self-presentation of micro-celebrities on social media. *Information, Communication & Society*, 22(10), 1432-1446. Doi: 10.1080/1369118x.2018.1438491
- Evans, N. J., Phua, J., Lim, J., & Jun, H. (2017). Disclosing Instagram influencer advertising: The effects of disclosure language on advertising recognition, attitudes, and behavioral intent. *Journal of Interactive Advertising*, 17(2), 138-149. Doi: 10.1080/15252019.2017.1366885
- Frąckiewicz, E. (2018). Small and medium enterprises in the food and beverage sector – The potential of the European market. In E. Rudawska (Ed.), *The Sustainable Marketing Concept in European Smes* (Pp. 141-163). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-78754-038-520180007>
- Gleich, U. (1997). Parasocial interaction with people on the screen. In *New Horizons in Media Psychology* (Pp. 35-55). Springer.

- Grashuis, J., Skevas, T., & Segovia, M. S. (2020). Grocery shopping preferences during the Covid-19 pandemic. *Sustainability*, 12(13), 5369. <https://doi.org/10.3390/Su12135369>
- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017a). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (Second Edition). Sage Publications, Inc.
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017b). *Advanced Issues in Partial Least Squares Structural Equation Modeling*. Sage Publications.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of The Academy of Marketing Science*, 43(1), 115-135. Doi: 10.1007/S11747-014-0403-8
- Horton, D., & Richard Wohl, R. (1956). Mass communication and para-social interaction: Observations on intimacy at a distance. *Psychiatry*, 19(3), 215-229. Doi: 10.1007/978-3-658-09923-7_7
- Huang, Y.-C., Wu, Y.-C. J., Wang, Y.-C., & Boulanger, N. C. (2011). Decision making in online auctions. *Management Decision*, 49(5), 784-800. Doi: 10.1108/00251741111130850
- Hustvedt, G., & Kang, J. (2013). Consumer perceptions of transparency: A scale development and validation. *Family and Consumer Sciences Research Journal*, 41(3), 299-313. Doi: 10.1111/Fcsr.12016
- Hwang, K., & Zhang, Q. (2018, 2018/10/01/). Influence of parasocial relationship between digital celebrities and their followers on followers' purchase and electronic word-of-mouth intentions, and persuasion knowledge. *Computers in Human Behavior*, 87, 155-173. <https://doi.org/10.1016/j.chb.2018.05.029>
- Isyanto, P., Sapitri, R. G., & Sinaga, O. (2020). Micro influencers marketing and brand image to purchase intention of cosmetic products focallure. *Systematic Reviews in Pharmacy*, 11(1), 601-605. Doi: 10.5530/Srp.2020.1.75
- Johnson, B. K., Potocki, B., & Veldhuis, J. (2019). Is that my friend or an advert? The effectiveness of Instagram native advertisements posing as social posts. *Journal of Computer-Mediated Communication*, 24(3), 108-125. <https://doi.org/10.1093/jcmc/zmz003>
- Kay, S., Mulcahy, R., & Parkinson, J. (2020). When less is more: The impact of macro and micro social media influencers' disclosure. *Journal of Marketing Management*, 36(3-4), 248-278. Doi: 10.1080/0267257x.2020.1718740
- Ki, C.-W., Cuevas, L. M., Chong, S. M., & Lim, H. (2020, 2020/07/01/). Influencer marketing: Social media influencers as human brands attaching to followers and yielding positive marketing results by fulfilling needs. *Journal of Retailing and Consumer Services*, 55, 102133. <https://doi.org/10.1016/j.jretconser.2020.102133>
- Law, M., Kwok, R. C.-W., & Ng, M. (2016). An extended online purchase intention model for middle-aged online users. *Electronic Commerce Research and Applications*, 20, 132-146. Doi: 10.1016/j.elerap.2016.10.005
- Lissitsa, S., & Kol, O. (2016, 2016/07/01/). Generation X vs. generation Y – A decade of online shopping. *Journal of Retailing and Consumer Services*, 31, 304-312. <https://doi.org/10.1016/j.jretconser.2016.04.015>
- Liu, G. H., Sun, M., & Lee, N. C. A. (2021). How can live streamers enhance viewer engagement in ecommerce streaming? In *Proceedings of the 54th Hawaii International Conference on System Sciences* (Pp. 3079). January
- Morante, A., Djenidi, V., Clark, H., & West, S. (2017). Gender differences in online participation: Examining a history and a mathematics open foundation online course. *Australian Journal of Adult Learning*, 57(2), 266-293. Retrieved from <https://search.informit.org/doi/abs/10.3316/Aejpt.215760>
- Nam, L. G., & Dân, H. T. (2018). Impact of social media influencer marketing on consumer at Ho Chi Minh City. *The International Journal of Social Sciences and Humanities Invention*, 5(5), 4710-4714. Doi: 10.18535/Ijsshi/V5i5.10
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. Doi: 10.1037/0021-9010.88.5.879
- Porteous, J. (2018). Micro influencers vs macro influencers, What's best for your business? Retrieved From <https://www.socialbakers.com/blog/micro-influencers-vs-macro-influencers>
- Priporas, C.-V., Stylos, N., & Kamenidou, I. (2020). City Image, city brand personality and generation Z residents' life satisfaction under economic crisis: Predictors of city-related social media engagement. *Journal of Business Research*, 119, 453-463. <https://doi.org/10.1016/j.jbusres.2019.05.019>
- Rannard, C. (2021). An influencer price calculator and how brands can leverage its potential for their next collaboration. *AiThORITY - Ai Technology Insights*. Retrieved From <https://aithority.com/technology/martech/an-influencer-price-calculator/>
- Redman, R. (2021). Online grocery shopping grows amid 'pandemic-induced channel stickiness': U.S. consumers trending toward bigger basket sizes, Coresight research finds. *Supermarket News*. Retrieved From <https://www.supermarketnews.com/online-retail/online-grocery-shopping-grows-amid-pandemic-induced-channel-stickiness>
- Repko, M. (2020). As coronavirus pandemic pushes more grocery shoppers online, stores struggle to keep up with demand. *CNBC*. Retrieved From <https://www.cnn.com/2020/05/01/as-coronavirus-pushes-more-grocery-shoppers-online-stores-struggle-with-demand.html>
- Rihl, A., & Wegener, C. (2019). YouTube celebrities and parasocial interaction: Using feedback channels in mediated relationships. *Convergence*, 25(3), 554-566. Doi: 10.1177/1354856517736976
- Russell, C. A., Stern, B. B., & Stern, B. B. (2006). Consumers, characters, and products: A balance model of sitcom product placement effects. *Journal of Advertising*, 35(1), 7-21. <https://doi.org/10.2753/Joa0091-3367350101>

- Schouten, A. P., Janssen, L., & Verspaget, M. (2020). Celebrity vs. influencer endorsements in advertising: The role of identification, credibility, and product-endorser fit. *International Journal of Advertising*, 39(2), 258-281. Doi: 10.1080/02650487.2019.1634898
- Sokolova, K., & Kefi, H. (2020, 2020/03/01/). Instagram and YouTube bloggers promote it, why should I buy? How credibility and parasocial interaction influence purchase intentions. *Journal of Retailing and Consumer Services*, 53, 101742. <https://Doi.Org/https://Doi.Org/10.1016/J.Jretconser.2019.01.011>
- Sokolova, K., & Perez, C. (2021). You follow fitness influencers on YouTube. But do you actually exercise? How parasocial relationships, and watching fitness influencers, relate to intentions to exercise. *Journal of Retailing and Consumer Services*, 58, 102276. Doi: 10.1016/J.Jretconser.2020.102276
- Sun, Y., Shao, X., Li, X., Guo, Y., & Nie, K. (2019). How live streaming influences purchase intentions in social commerce: An IT affordance perspective. *Electronic Commerce Research and Applications*, 37, 100886. Doi: 10.1016/J.Elerap.2019.100886
- Wareham, J., Fox, P. B., & Cano Giner, J. L. (2014). Technology ecosystem governance. *Organization Science*, 25(4), 1195-1215. <https://Doi.Org/10.1287/Orsc.2014.0895>
- Williams, R. (2019). Instagram influencer engagement hovers near all-time lows, study says. *Mobile Marketer*. Retrieved From <https://Www.Mobilemarketer.Com/News/Instagram-Influencer-Engagement-Hovers-Near-All-Time-Lows-Study-Says/558331/>.
- Woodroof, P. J., Howie, K. M., Syrdal, H. A., & Vanmeter, R. (2020). What's done in the dark will be brought to the light: Effects of influencer transparency on product efficacy and purchase intentions. *Journal of Product & Brand Management*, 29(5), 675-688. <https://Doi.Org/10.1108/Jpbm-05-2019-2362>
- Wu, Y., Ngai, E. W., Wu, P., & Wu, C. (2020). Fake online reviews: Literature review, synthesis, and directions for future research. *Decision Support Systems*, 132, 113280. Doi: 10.1016/J.Dss.2020.113280
- Xiao, M., Wang, R., & Chan-Olmsted, S. (2018). Factors Affecting YouTube influencer marketing credibility: A heuristic-systematic model. *Journal of Media Business Studies*, 15(3), 188-213. Doi: 10.1080/16522354.2018.1501146
- Xue, J., Liang, X., Xie, T., & Wang, H. (2020). See now, act now: How to interact with customers to enhance social commerce engagement? *Information & Management*, 57(6), 103324. Doi: 10.1016/J.Im.2020.103324
- Yang, B., Kim, Y., & Yoo, C. (2013). The integrated mobile advertising model: The effects of technology-and emotion-based evaluations. *Journal of Business Research*, 66(9), 1345-1352. Doi: 10.1016/J.Jbusres.2012.02.035
- Zhou, Z., Jin, X.-L., & Fang, Y. (2014). Moderating role of gender in the relationships between perceived benefits and satisfaction in social virtual world continuance. *Decision Support Systems*, 65, 69-79. Doi: 10.1016/J.Dss.2014.05.004

APPENDIX A: Constructs, Items, Means, Standard Deviations, and Sources

Constructs	Items	μ	σ	Source
Micro-influencer Credibility	I do believe that this micro-influencer is convincing	3.44	0.78	Yang, Kim and Yoo (2013)
	I do believe that this micro-influencer is credible	3.24	0.81	
	I do believe that this micro-influencer's advertising is a good reference for purchasing food and beverages	3.5	0.92	
	I find purchasing food and beverages advertised by this micro-influencer to be worthwhile	3.14	0.88	
Micro-influencer Transparency	<i>If I wanted to, I could easily find out about the endorsement relationship in the posts of this micro-influencer (deleted due to outer loading lower than 0.7)</i>			Hustvedt and Kang (2013)
	This micro-influencer would be honest and sincere in promoting a certain brand or product	3.18	0.89	
	I can rely on this micro-influencer to post only brands or products [he/she] believes in	3.14	0.96	
	I can rely on this micro-influencer to post only brands or products [he/she] personally consumes	3.11	0.92	
Parasocial Interaction	I think the micro-influencer is like an old friend;	2.99	0.93	Russell, Stern, and Stern (2006)
	This micro-influencer makes me feel comfortable as if I am with a friend;	3.19	0.93	
	This micro-influencer seems to understand the things I want to know;	3.06	1.01	
	I find this micro-influencer to be attractive;	3.32	0.9	
	I would like to meet this micro-influencer in person;	2.69	1.13	
	I like to compare my ideas with what this micro-influencer says;	3.06	1.11	
	When I am on the blog, I feel as if I am part of the group	3.22	0.99	
Purchase Intention	I would like to try the brands endorsed by this micro-influencer	3.6	0.78	Evans <i>et al.</i> (2017)
	I would buy other products of this brand because of this influencer	3.2	1.02	
	I would actively seek out the products shown by this influencer in order to purchase it	3.45	0.97	

APPENDIX B: Interconstruct correlations, Reliability measures, and HTMT

	α	ρ_A	CR.	AVE	Cred.	Tran.	Para. Inter.	Purch. Intent.	Marker
Micro-influencer credibility	0.84	0.84	0.89	0.67	0.82				
Micro-influencer transparency	0.81	0.83	0.89	0.73	0.69 (0.82)	0.85			
Parasocial interaction	0.90	0.90	0.92	0.61	0.67 (0.77)	0.61 (0.70)	0.78		
Purchase intention	0.71	0.71	0.84	0.63	0.68 (0.89)	0.61 (0.80)	0.66 (0.83)	0.79	
Marker	0.76	0.77	0.86	0.67	0.46 (0.57)	0.33 (0.40)	0.29 (0.33)	0.40 (0.53)	0.82

Note: (1) Square roots of AVE are presented on the diagonal. (2) HTMT are presented in the parentheses

APPENDIX C: Significance analysis of the Direct and Indirect Effects

Paths	Direct effect	t value	Indirect effect	t value	Mediation
Influencer credibility → Purchase intention	0.308	3.808***	0.161	3.79***	Partial mediation
Influencer transparency → Purchase intention	0.143	1.921 ^{ns.}	0.088	2.84**	Full mediation

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; ns. Not significant; Two-tailed test.