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What makes a super influencer? Testing the origin of fame theory in China

<https://doi.org/10.1515/omgc-2024-0032>

Received July 1, 2024; accepted October 18, 2024

Abstract

Study purpose: Social media influencers in China have significantly influenced public political and social attitudes and behaviors. Based on the origin of fame theory, this study explores which type of influencers – originals, celebrities, or journalists – are most effective in driving changes in their followers’ attitudes and behaviors.

Methodology: An online experiment used a 3 (type of influencer: original, celebrity, journalist) $\times$ 2 (message context: policy-based, social modeling) design. A total of 627 responses were collected to assess how participants evaluate social media influencers and to examine their attitudes and behaviors toward the issues supported by these influencers.

Main findings: The findings reveal that the effects of social media influencers depend on both their identity and the type of message they promote. Journalist influencers have the greatest effects on participants’ attitudes toward policy-based messages compared to original and celebrity influencers. By contrast, original influencers are more effective at shaping attitudes when sharing social modeling messages. Additionally, the study shows that journalist influencers are perceived to have greater expertise than other influencers, regardless of the message context.

Social implications: This study shows that identity and message context jointly determine the influence of social media influencers on promoting nonprofit campaigns.

Practical implications: Communicators can apply the findings of this study to select appropriate social media influencers by considering both the origin of influencers’ fame and the context of the message they are promoting.

Article Note: This article underwent double-blind peer review.

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Originality/value: This study emphasizes the power of social media influencers to promote nonprofit campaigns and identifies the conditions that can enhance their effectiveness.

Keywords: China; Weibo; social media influencer; environmental communication

1 Introduction

Social media influencers, a new class of online opinion leaders, are rapidly emerging globally with the rise of social media (Influencer Marketing Hub 2024). For example, by the end of 2022, Weibo, one of China's most prominent social platforms, had over 162,000 influencers with more than 100,000 followers. These influencers' videos were played 3.2 billion times daily, reaching most Weibo users. The total income from sponsored product or brand endorsements by Weibo influencers reached ¥1.5 billion (National Business Daily 2023). As the number of influencers in China continues to grow, they increasingly shape the public's political and social attitudes and behaviors (Nip and Fu 2016; Xiong et al. 2018; Yang and Ha 2021).

Most studies on social media influencers focus on the factors contributing to their influence, such as perceived credibility (Lou and Yuan 2019), parasocial identification (Shan et al. 2020), and perceived interconnectedness (Abidin 2015). However, there has been less research on determining which *types* of influencers are the most effective. This crucial topic requires a deeper theoretical understanding of social media influencer classifications and guidance on how communicators can select the right influencers for collaboration.

The few studies addressing these questions focus primarily on audience perspectives, particularly metrics like follower counts (De Veirman et al. 2017; Wies et al. 2023) or the alignment between an influencer's content and audience interests (Silva et al. 2020). Research suggests that follower counts can enhance an influencer's likability, with more followers boosting their impact (Jin and Phua 2014). However, some scholars argue that high follower counts can backfire, harming brand attitudes and reducing engagement (De Veirman et al. 2017; Wies et al. 2023). Similarly, studies on the fit between influencers and brands show mixed results. While some find that congruence improves product evaluations and engagement (Silva et al. 2020), others suggest that high congruence may lead to information fatigue, negatively affecting brand perceptions (Leung et al. 2022).

The origin of fame theory offers an alternative view, focusing on the personal appeal of social media influencers (Jin et al. 2019; Piehler et al. 2022). This theory suggests that the source of an influencer's fame – or why they are known to their audience – affects their persuasive power (Djafarova and Rushworth 2017).

Generally, influencers famous primarily for their social media presence (original influencers) are seen as more effective than traditional celebrities known for achievements in fields like film, music, or sports (Jin et al. 2019; Lou and Yuan 2019). However, a recent experiment challenges this assumption, showing that effectiveness may depend on the audience's self-esteem, indicating the need for further study (Piehler et al. 2022).

Building on this research, our study aims to test the origin of fame theory in China to determine which types of social media influencers are most effective in different message contexts. While previous studies have examined the persuasive effects of original and celebrity influencers (Djafarova and Rushworth 2017; Jin et al. 2019; Piehler et al. 2022), this study will also explore the influence of journalist influencers. These influencers, who maintain close ties with the Chinese government through their employment, have gained significant attention on social media for their authority in conveying official information (Fu and Lee 2016; Zeng and Huang 2012).

Unlike most studies on social media influencers that focus on product marketing in Western nations (Vrontis et al. 2021), our research explores the lesser-studied yet promising area of nonprofit messaging (Awang et al. 2019; Bonnevie et al. 2020; Kostygina et al. 2020). We specifically examine the issue of waste sorting as the context for our experiment, selecting messages based on policy guidance and social modeling to encourage public participation. By comparing the persuasiveness of different influencers across message contexts, we aim to identify when an influencer's origin of fame becomes most effective. Our main goal is to determine which type of influencer has the most significant effect on nonprofit issues in China, while also validating the fame origin theory and offering practical insights for marketing campaigns.

2 Literature review and theory

2.1 Social media influencer

Social media influencers hold significant sway over their audiences through online platforms. Some scholars emphasize their rise as ordinary individuals who gain large followings by creating appealing content (Abidin 2015; Lou and Yuan 2019). Others take a broader view, defining influencers as anyone who can shape audience attitudes through third-party endorsements on social media (Campbell and Farrell 2020; Freberg et al. 2011). Our research focuses on identifying the most persuasive influencers, using the latter definition to include those with social media power that extends beyond mere content creation (Djafarova and Rushworth 2017; Jin et al. 2019; Piehler et al. 2022).

Recent studies highlight the significant influence of social media influencers in shaping public perceptions, attitudes, and behaviors (Hudders et al. 2021; Vrontis et al. 2021). However, there is no consensus on which influencers are the most impactful. Identifying the most persuasive influencers is essential for commercial communicators, guiding their selection based on specific objectives, such as product promotion (De Veirman et al. 2017), engagement in corporate social responsibility (Cheng et al. 2024), or promoting healthy lifestyle choices (Bonnevie et al. 2020).

Research primarily addresses this question from the audience's perspective, focusing on the effects of influencers' follower counts. Studies show that a higher follower count typically correlates with perceptions of increased physical attractiveness, trustworthiness, competence, and greater product involvement and purchase intent (Jin and Phua 2014). However, De Veirman et al. (2017) suggest that using high-follower influencers for multiple endorsements can harm brand perception. Wies et al. (2023) also found an inverted U-shaped relationship between follower counts and engagement, where higher follower counts increase reach but reduce engagement.

Another important variable under scrutiny is the congruence between influencers and brands or products. Research shows that a strong influencer-brand-product fit can positively influence consumers' product evaluations and increase engagement (Silva et al. 2020). However, some scholars argue that excessively high congruence could lead to information overload or satiation, resulting in a negative backlash (Leung et al. 2022).

2.2 The origin of fame theory

The origin of fame theory presents an alternative perspective, focusing on the personal appeal of social media influencers (Jin et al. 2019; Piehler et al. 2022). This approach classifies influencers based on how they first gained recognition among online audiences (Djafarova and Rushworth 2017; Piehler et al. 2022). Scholars typically distinguish between two main types of influencers. The first type includes original influencers, who gained fame primarily through their social media activities (Jin et al. 2019). These influencers are often ordinary individuals who build fame by creating and sharing content on social media platforms. The second type consists of celebrity influencers – well-known film or music stars, artists, or athletes – who leverage their fame to enhance their social media presence and often engage in brand partnerships to support their careers (Campbell and Farrell 2020).

Djafarova and Rushworth (2017) explored how the origin of an influencer's fame affects users through in-depth interviews with female Instagram users. They found that influencers who gained popularity without prior fame (i.e., original influencers) had a stronger influence than traditional celebrities. Building on this, Jin et al. (2019)

conducted quantitative research, confirming that a strong social presence – defined as the audience's perception of the influencer as psychologically present and relatable – is crucial for amplifying the impact of original influencers. Exposure to advertisements through these influencers increases participants' perception of social presence, enhancing trustworthiness and fostering more favorable attitudes toward endorsed brands.

However, a recent study by Piehler et al. (2022) challenged the idea that original influencers consistently surpass celebrity influencers in driving user engagement. Their research showed that this effect is more pronounced among social media users with high self-esteem. Due to their widely recognized achievements, celebrity influencers tend to resonate more with users with lower self-esteem, acting as aspirational figures and prominent cues that evoke admiration and identification.

2.3 Social media influencers in environmental communication

Previous studies have demonstrated that social media influencers can significantly enhance audiences' understanding, awareness, attitudes, and involvement in environmental issues (Awang et al. 2019; Bolsen et al. 2019; Cattapan et al. 2023; Dekoninck and Schmuck 2023). They achieve this by seamlessly integrating ecological themes into diverse content on their platforms, such as discussing environmental policies, promoting pro-environmental behaviors, and showcasing eco-friendly lifestyles (Cattapan et al. 2023; Dekoninck and Schmuck 2023; Okuah et al. 2019).

However, the effectiveness of different types of influencers in environmental campaigns remains unclear, as most existing research focuses on influencers in commercial marketing contexts (Hudders et al. 2021; Rahman 2022; Vrontis et al. 2021). As a result, scholars have called for more research on social media influencers involved in nonprofit-oriented social marketing, acknowledging their growing role in addressing urgent environmental issues (Awang et al. 2019; Bonnevie et al. 2020; Kostygina et al. 2020).

Our research addresses this challenge by using environmental themes as the foundational context for our experiments. Building on prior research on for-profit concerns, we apply source credibility theory (Hovland et al. 1953; Ohanian 1990) to the nonprofit sector. This approach allows us to identify the most effective types of social media influencers across different message contexts.

Two prevalent models assess the persuasiveness of influencers as credible sources of information. One is the credibility model proposed by Hovland et al. (1953), which suggests that a message source's perceived trustworthiness and expertise enhance its influence. Expertise refers to the source's competence and knowledge, while trustworthiness relates to perceived honesty and integrity (Elliott and Ward

1980). Ohanian (1990) expanded this model by adding attractiveness – defined as physical appeal or likability – as a third component of credibility. However, recent studies show significant variability in the perception of attractiveness among influencers (Jin et al. 2019). As a result, our study adopts Hovland et al.'s (1953) classic credibility model, focusing on trustworthiness and expertise.

Another model examines audience responses to issues endorsed by influencers, focusing on outcomes such as brand attitudes, purchase intentions, and campaign engagement (Ki and Kim 2019; Kostygina et al. 2020; Torres et al. 2019). The most commonly discussed indicators in environmental communication are attitudes and behavioral intentions toward pro-environmental actions (Ertz et al. 2016; Liu et al. 2020). Previous studies show that the more persuasive influencers are, the more supportive and willing their audiences become to engage in the pro-environmental initiatives these influencers promote (Awang et al. 2019; Huang et al. 2023).

2.4 The origin of fame theory and different types of influencers

According to the origin of fame theory, the influence of social media personalities is tied to how they achieve recognition (Djafarova and Rushworth 2017; Jin et al. 2019). Influencers, known for engaging in social media activities, foster a sense of intimacy with their followers, leading to followers imitating the influencers' promoted styles (Abidin 2015; Casalo et al. 2020). By contrast, traditional celebrities, famous for their achievements outside social media, maintain influence over audiences with low self-esteem by representing the audience's ideal self (Piehler et al. 2022).

This perspective allows for categorizing influencers based on their sources of fame. Notably, two distinct types emerge: original influencers, who gained prominence through their presence on social media platforms, and celebrity influencers, recognized for accomplishments outside social media (Jin et al. 2019; Piehler et al. 2022).

However, this classification primarily reflects the cultural norms of individualism and liberalism in Western societies, suggesting that its applicability may vary in collectivist or authoritarian contexts. In China, for example, where the government and news media are closely interconnected (Hassid 2011; Long and Shao 2023), journalists often attract significant attention on social media due to their roles in conveying official viewpoints through traditional news outlets and online platforms (Fu and Lee 2016; Zeng and Huang 2012; Zhang and Wei 2021; Zhang et al. 2023). China's journalists also play a crucial role in environmental communication, raising public awareness about offline and online ecological issues (Huang 2022). Therefore, we propose journalists as a third category of social media influencers in our study, recognized for their influential dissemination of official messages through social

media and other online platforms. Given the context-sensitive nature of social media, our research focuses on exploring the differential impact of each influencer type within specific message contexts. We therefore ask:

RQ1: Who is more influential in conveying diverse environmental messages in China – original, celebrity, or journalist influencers?

2.5 Policy-based and social modeling messages

Previous research has explored messages encouraging pro-environmental behavior, including feedback mechanisms and participation incentives (Abrahamse and Steg 2013; Nomura et al. 2011). According to a survey on the public's exposure to pro-environmental messages conducted in China, policy-based and social modeling messages are the two types of content the public most often encounters on social media (Huang et al. 2023). Similarly, a content analysis of the Chinese government's strategy for mobilizing people's waste-sorting behavior showed that the central government usually highlighted the importance of waste sorting by citing policies, while local governments often adopted the method of praising social models (Ji et al. 2020). These strategies are also frequently used by journalists in environmental coverage (Shao and Xie 2020). Both types of messages dominate pro-environmental communication and have been shown to strengthen attitudes toward adopting environmentally friendly, low-carbon behaviors (Huang et al. 2023; Pan et al. 2020; Varotto and Spagnolli 2017).

Policy-based messages emphasize official guidance on environmentally friendly behavior, with social media influencers serving as spokespersons for these policies. According to Kim and Kim (2021), aligning influencers and their messages can significantly improve public attitudes and intentions to act environmentally friendly by fostering stronger emotional connections. As a result, journalists who maintain close professional ties with the Chinese government (Hassid 2011; Long and Shao 2023) are likely to exert the greatest influence over online users regarding policy-based messages. In contrast, celebrities or original influencers may have less impact, as their endorsements could be perceived as biased promotion (Huang et al. 2018). We therefore propose that:

H1: Journalist influencers will have greater effects on perceptions of waste sorting with policy-based messages than original or celebrity influencers. Specifically, journalist influencers will be perceived as (a) more trustworthy, (b) having more expertise, and (c) holding greater sway over the public's attitudes and (d) behavioral intentions regarding pro-environmental actions.

By contrast, messages rooted in social modeling often depict influencers actively practicing the behaviors they promote (Varotto and Spagnolli 2017). The effectiveness

of these messages is based on Bandura's (1977: 22) social learning theory, which posits that individuals learn by observing others' behaviors. Among different types of social media influencers, original influencers tend to build the strongest rapport with the public through parasocial interaction, a critical factor in building reputational capital (Hess et al. 2022; Yuan and Lou 2020). By consistently engaging with their followers, these influencers boost their perceived credibility and subtly influence their audience's views and actions (Kim 2022; Su et al. 2021). Additionally, original influencers are often seen as more authentic and relatable, further amplifying their persuasive power (Campbell and Farrell 2020; Vrontis et al. 2021). We therefore posit that:

H2: Original influencers will have greater effects on perceptions of waste sorting with social modeling messages than celebrity or journalist influencers. Specifically, original influencers will be perceived as (a) more trustworthy, (b) having more expertise, and (c) holding greater sway over the public's attitudes and (d) behavioral intentions regarding pro-environmental actions.

3 Methods

3.1 Design and sample

To test our research questions and hypotheses, we conducted a randomized between-subjects online experiment in May 2024, employing a 3 (original, celebrity, and journalist influencers) $\times$ 2 (policy-based messages, social modeling messages) factorial design. A total of 660 participants were initially recruited through a professional survey organization with access to representative online panels in China. After excluding 33 participants who failed attention checks or exceeded the 20-min study completion time, 627 valid responses remained. Of these, 318 (50.7 %) were exposed to policy-based messages, with 114 (18.2 %) attributed to journalist influencers, 100 (15.9 %) to original influencers, and 104 (16.6 %) to celebrity influencers. Similarly, 309 (49.3 %) participants were exposed to social modeling messages, with 106 (16.9 %) attributed to journalist influencers, 99 (15.8 %) to original influencers, and 104 (16.6 %) to celebrity influencers.

The participants were almost evenly split between women (49.4 %) and men (50.6 %), with an average age of 33.5 years. Most had completed high school (40.0 %) or college (37.0 %) and reported a median monthly income between ¥6,000 and ¥10,000. Overall, the group closely mirrored the gender distribution from the 2020 China population census, though participants were generally younger and had slightly higher income and education levels. This demographic profile aligns closely with social media users in China, who tend to be younger, more affluent, and better educated.

3.2 Manipulation and procedure

The experiment focuses on waste sorting (i.e., recycling) for two reasons. First, waste sorting is more cost-effective and widespread than other environmental actions, such as purchasing energy-efficient vehicles or planting trees. It is an activity accessible to all, which helps minimize the influence of external factors like cost on participants' environmental attitudes, thereby improving the internal validity of the results. Second, waste sorting is a highly debated issue in China, especially with the involvement of influencers, as noted by Wang and Xu (2020).

The study was conducted on Weibo, one of China's most popular social media platforms. As mentioned earlier, the experiment featured profiles of three types of social media influencers: original, celebrity, and journalist. The original influencer was portrayed as having a large follower count and a strong advocate for environmentally friendly lifestyles. According to a recent report by Topklout (2024), about 70 % of the top 20,000 influencers on Weibo have follower counts ranging from 1 to 3 million as of 2024. Thus, the original influencer in our experiment was described as having over 10 million followers, emphasizing their significant popularity. An Olympic champion was chosen as the celebrity influencer, recognized for their active involvement in environmental advocacy. Successful athletes enjoy widespread recognition and favorable evaluations in China, which helps unify public opinion and reduce polarization. Lastly, the journalist influencer was characterized by their role in mainstream Chinese media and their focus on environmental issues.

Messages about waste sorting formed the second component of our study materials. To ensure participants fully grasped the focus on waste sorting, we carefully controlled the framing and modality of these messages. Research shows that using a gain frame is especially effective when appealing to altruistic motives (Sheng et al. 2019). Thus, we emphasized the benefits of waste sorting in all communications. For modality, we used a combination of visual content and text, consistent with Weibo's platform functionality. Text alone communicated the influencer's endorsement of waste sorting across all experimental conditions, while variations in both images and accompanying text constituted our experimental manipulations.

Participants in the experimental group were exposed to policy-based messages and viewed two images from the State Council of China centered on household waste sorting policies. One image provided detailed guidelines for waste sorting, along with the corresponding signage. The second image emphasized the benefits of household waste sorting, focusing on reduced land use, environmental pollution mitigation, and the transformation of waste into valuable resources.

The social modeling message featured two images: the first was a selfie showing the influencer actively depositing sorted waste into designated bins, accompanied by

a caption expressing a personal commitment to waste sorting. The second image depicted others participating in waste sorting, with a caption celebrating the increasing community involvement in waste management efforts.

The study was conducted online, and participants were informed that the message had been shared on Weibo by either an original influencer, a celebrity influencer, or a journalist influencer. A brief profile of the influencer was provided as well. Participants then completed a series of questions designed to measure the influencers' persuasiveness, our experiment's primary focus. As discussed earlier, the indicators used to assess the influencers' impact include their perceived trustworthiness and expertise, as well as participants' attitudes and behavioral intentions toward waste sorting.

3.3 Manipulation check

A key requirement for the design of this study was to accurately manipulate both the messages and the social media influencer's source of fame. We established two variables to verify this manipulation: perceived origin of fame and perceived message attributes.

Perceptions of the origin of fame were assessed using a seven-point scale across three dimensions, yielding significant differences among conditions as determined by one-way ANOVA. Specifically, perceptions varied regarding whether influencers gained fame through (1) authoritative representation ($F_{(2,624)} = 18.76$, $p < 0.001$, $\eta^2 = 0.06$), (2) their presence on social media ($F_{(2,624)} = 69.62$, $p < 0.001$, $\eta^2 = 0.18$), or (3) achievements outside of social media ($F_{(2,624)} = 17.16$, $p < 0.001$, $\eta^2 = 0.05$).

Post hoc analysis indicated that journalist influencers ($M = 5.75$, $SD = 0.93$) were perceived to derive fame more from authority compared to original ($M = 5.10$, $SD = 1.20$, $p < 0.001$) and celebrity influencers ($M = 5.31$, $SD = 1.25$, $p < 0.001$). Similarly, original influencers ($M = 5.84$, $SD = 1.06$) were seen as gaining fame predominantly from their social media presence compared to journalist ($M = 4.57$, $SD = 1.06$, $p < 0.001$) and celebrity influencers ($M = 5.30$, $SD = 1.21$, $p < 0.001$). Celebrity influencers ($M = 5.77$, $SD = 1.22$), on the other hand, were perceived to achieve fame more through their accomplishments compared to journalist ($M = 5.22$, $SD = 1.12$, $p < 0.001$) and original influencers ($M = 5.13$, $SD = 1.30$, $p < 0.001$).

The *perceived message attributes* were measured using two items rated on a seven-point scale. One item gauged whether the message provided policy-based guidance, while the other examined if it depicted others engaging in waste sorting (i.e., social modeling). A one-way ANOVA revealed significant differences in these attributes across conditions. Participants perceived the policy-based message

($M = 5.51$, $SD = 1.40$) as significantly stronger in policy guidance compared to the social modeling message ($M = 4.52$, $SD = 1.88$, $F_{(1,625)} = 56.93$, $p < 0.001$, $\eta^2 = 0.08$). Conversely, the social modeling message ($M = 6.13$, $SD = 1.04$) was perceived as portraying more instances of others participating in waste sorting than the policy-based message ($M = 5.08$, $SD = 1.49$, $F_{(1,625)} = 102.61$, $p < 0.001$, $\eta^2 = 0.14$).

3.4 Measurement

To determine the comparative influence of different types of social media influencers, we assessed four indicators as outcome measures: perceived trustworthiness and perceived expertise of the influencer, as well as attitudes toward and intentions to engage in waste sorting activities.

Perceived trustworthiness was measured using five items based on Ohanian's credibility model (1990), focusing on qualities such as dependability, honesty, reliability, sincerity, and trustworthiness, rated on a seven-point scale (1 = "strongly disagree"; 7 = "strongly agree"). Responses were aggregated to form a composite trustworthiness index ($\alpha = 0.79$, $M = 5.79$, $SD = 0.67$).

Perceived expertise was similarly assessed using five items, encompassing traits such as expertise, experience, knowledge, qualification, and skill, also rated on a seven-point scale (1 = "strongly disagree"; 7 = "strongly agree"). Participant responses were summed into an expertise index ($\alpha = 0.70$, $M = 5.48$, $SD = 0.73$).

Attitudes toward waste sorting were assessed using six items adapted from Zhang et al. (2019) and Ha and Janda (2012) and rated on a seven-point scale (1 = "strongly disagree"; 7 = "strongly agree"). These items included statements such as (1) the importance of waste sorting, (2) the benefits of waste sorting, (3) the urgency of waste sorting, (4) the convenience of waste sorting, (5) satisfaction in observing others participate in waste sorting, and (6) increased personal support for waste sorting. The items demonstrated high internal consistency and were added into an index ($\alpha = 0.72$, $M = 6.08$, $SD = 0.55$).

Participants' willingness to engage in waste sorting was measured using a set of six items based on research by Fan et al. (2019) and Huang et al. (2023). Participants were asked to indicate their level of agreement with the following six statements on a seven-point scale (1 = "strongly disagree"; 7 = "strongly agree"): (1) I intend to start sorting waste; (2) I aim to sort waste more accurately; (3) I plan to increase the frequency of waste sorting; (4) I intend to improve the effectiveness of waste sorting; (5) I am willing to allocate time for waste sorting; and (6) I will encourage others to participate in waste sorting. As before, responses to the six items were combined into an index ($\alpha = 0.78$, $M = 5.83$, $SD = 0.61$).

4 Findings

Our study suggests that the effects of social media influencers vary depending on who they are and what messages they post. We propose that journalist influencers have a greater influence on the public’s perceptions, attitudes, and behaviors when conveying policy-related messages than original and celebrity influencers. Conversely, original influencers will exert more influence than celebrity and journalist influencers with messages based on social modeling.

To test these hypotheses, we conducted a between-subjects analysis of variance (ANOVA) using SPSS 29.0, with the type of social media influencer and type of message as independent variables. We measured four dependent variables: perceived trustworthiness and expertise of the influencer, as well as attitudes and behavioral intentions regarding waste sorting (please see Tables 1 and 2 for details).

The analysis of the model using credibility factors as dependent variables revealed significant interactive effects on perceived trustworthiness ($F_{(2,621)} = 14.18, p < 0.001, \eta^2 = 0.04$) and expertise ($F_{(2,621)} = 3.03, p < 0.05, \eta^2 = 0.01$). Further examination via simple main effect analysis indicated that the journalist influencer was perceived as significantly more trustworthy ($M = 6.02, SD = 0.58, F_{(2,621)} = 15.26, p < 0.001, \eta^2 = 0.05$) and having more expertise ($M = 5.71, SD = 0.52, F_{(2,621)} = 8.41,$

Table 1: Effects of influencer types, message contexts and their interactions on perceived trustworthiness, expertise, and attitudes toward waste sorting.

Independent variable	Factor	df	F	P	η^2
Perceived trustworthiness	Influencer types × message contexts	2	14.178	<0.001	0.044
	Influencer types	2	7.181	<0.001	0.023
	Message contexts	1	2.155	0.143	0.003
Perceived expertise	Influencer types × message contexts	2	3.033	0.049	0.010
	Influencer types	2	8.442	<0.001	0.026
	Message contexts	1	0.036	0.849	0.000
Attitude toward waste sorting	Influencer types × message contexts	2	9.302	<0.001	0.029
	Influencer types	2	4.929	0.008	0.016
	Message contexts	1	0.811	0.368	0.001
Intention to participate in waste sorting	Influencer types × message contexts	2	6.450	0.002	0.020
	Influencer types	2	2.024	0.133	0.006
	Message contexts	1	0.160	0.689	0.000

Table 2: Simple main effects of influencer types on perceived trustworthiness, expertise, and attitudes toward waste sorting.

Independent variable	Factor	df	F	P	η^2
Perceived trustworthiness	Policy-based message	2	15.259	<0.001	0.047
	Social modeling message	2	6.444	<0.002	0.020
Perceived expertise	Policy-based message	2	8.414	<0.001	0.026
	Social modeling message	2	3.212	<0.041	0.010
Attitude toward waste sorting	Policy-based message	2	7.669	<0.001	0.024
	Social modeling message	2	6.689	0.001	0.021
Intention to participate in waste sorting	Policy-based message	2	1.186	0.306	0.004
	Social modeling message	2	7.222	<0.001	0.023

$p < 0.001$, $\eta^2 = 0.03$) than the original influencer ($M_{\text{trustworthy}} = 5.58$, $SD_{\text{trustworthy}} = 0.69$, $p_{\text{trustworthy}} < 0.001$; $M_{\text{expert}} = 5.41$, $SD_{\text{expert}} = 0.68$, $p_{\text{expert}} < 0.01$) and the celebrity influencer ($M_{\text{trustworthy}} = 5.63$, $SD_{\text{trustworthy}} = 0.64$, $p_{\text{trustworthy}} < 0.001$; $M_{\text{expert}} = 5.33$, $SD_{\text{expert}} = 0.84$, $p_{\text{expert}} < 0.001$) when endorsing the policy-based message, thereby confirming H1(a) and H1(b).

In terms of social modeling messages, the original influencer exhibited significantly higher perceived trustworthiness ($M = 6.00$, $SD = 0.68$, $F_{(2,621)} = 6.44$, $p < 0.01$, $\eta^2 = 0.02$) than the celebrity influencer ($M = 5.68$, $SD = 0.60$, $p < 0.05$). However, no statistically significant difference was observed between the original and journalist influencers, partially supporting H2(a). Additionally, the original influencer was perceived as having less expertise ($M = 5.33$, $SD = 0.81$, $F_{(2,621)} = 3.21$, $p < 0.05$, $\eta^2 = 0.01$) than the journalist influencer ($M = 5.57$, $SD = 0.72$, $p < 0.01$), contradicting H2(b).

We identified significant interactive effects in our model concerning attitudes toward ($F_{(2,621)} = 9.30$, $p < 0.001$, $\eta^2 = 0.03$) and intentions to engage ($F_{(2,621)} = 6.45$, $p < 0.01$, $\eta^2 = 0.02$) in waste sorting as independent variables. Further analysis revealed statistically significant main effects of social media influencer type on supportive attitudes. These findings indicate that the impact of the influencer's fame varies depending on the message context. Specifically, posts advocating waste sorting policies by journalist influencers ($M = 6.22$, $SD = 0.49$, $F_{(2,621)} = 7.67$, $p < 0.001$, $\eta^2 = 0.02$) tended to elicit more favorable attitudes compared to those by original ($M = 6.00$, $SD = 0.48$, $p < 0.01$) or celebrity influencers ($M = 5.95$, $SD = 0.67$, $p < 0.001$). However, no significant differences were found among influencer types regarding their ability to motivate public action toward waste sorting. These findings support H1(c) but refute H1(d).

Regarding social modeling messages, participants exposed to the original influencer demonstrated significantly more positive attitudes toward waste sorting

($M = 6.25$, $SD = 0.60$, $F_{(2,621)} = 6.69$, $p < 0.001$, $\eta^2 = 0.02$) and greater willingness to participate in waste sorting ($M = 6.01$, $SD = 0.66$, $F_{(2,621)} = 7.22$, $p < 0.001$, $\eta^2 = 0.02$) compared to those exposed to a journalist ($M_{\text{attitude}} = 6.02$, $SD_{\text{attitude}} = 0.43$, $p_{\text{attitude}} < 0.01$; $M_{\text{behavior}} = 5.70$, $SD_{\text{behavior}} = 0.61$, $p_{\text{behavior}} < 0.001$) or celebrity influencer ($M_{\text{attitude}} = 6.01$, $SD_{\text{attitude}} = 0.52$, $p_{\text{attitude}} < 0.01$; $M_{\text{behavior}} = 5.76$, $SD_{\text{behavior}} = 0.52$, $p_{\text{behavior}} < 0.05$). These findings confirm H2(c) and H2(d).

Further analysis of the main effects revealed that journalist influencers increased support ($F_{(1,621)} = 7.19$, $p < 0.01$, $\eta^2 = 0.01$) and participation intentions ($F_{(1,621)} = 6.70$, $p < 0.01$, $\eta^2 = 0.01$) for waste sorting when their messages were based on policy guidance ($M_{\text{attitude}} = 6.22$, $SD_{\text{attitude}} = 0.49$; $M_{\text{behavior}} = 5.91$, $SD_{\text{behavior}} = 0.58$) rather than social modeling ($M_{\text{attitude}} = 6.02$, $SD_{\text{attitude}} = 0.43$; $M_{\text{behavior}} = 5.70$, $SD_{\text{behavior}} = 0.61$).

Conversely, original influencers were more influential in shaping attitude ($F_{(1,621)} = 11.44$, $p < 0.001$, $\eta^2 = 0.02$) and behavioral intentions ($F_{(1,621)} = 6.03$, $p < 0.05$, $\eta^2 = 0.01$) when promoting social modeling messages ($M_{\text{attitude}} = 6.25$, $SD_{\text{attitude}} = 0.60$; $M_{\text{behavior}} = 6.01$, $SD_{\text{behavior}} = 0.66$) rather than policy-based messages ($M_{\text{attitude}} = 6.00$, $SD_{\text{attitude}} = 0.48$; $M_{\text{behavior}} = 5.80$, $SD_{\text{behavior}} = 0.64$) (see Figures 1–4).

Furthermore, ANOVA results indicated significant main effects of influencer type on perceptions of trustworthiness ($F_{(2,621)} = 7.18$, $p < 0.001$, $\eta^2 = 0.02$), perceived expertise ($F_{(2,621)} = 8.44$, $p < 0.001$, $\eta^2 = 0.03$), and attitudes toward waste sorting

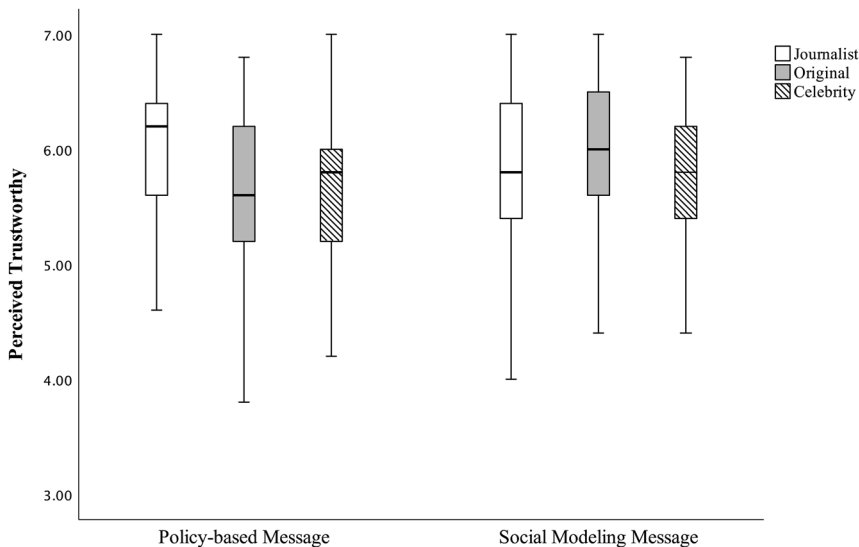


Figure 1: Perceived trustworthiness of original, celebrity, and journalist influencers in policy-based and social modeling-based message contexts.

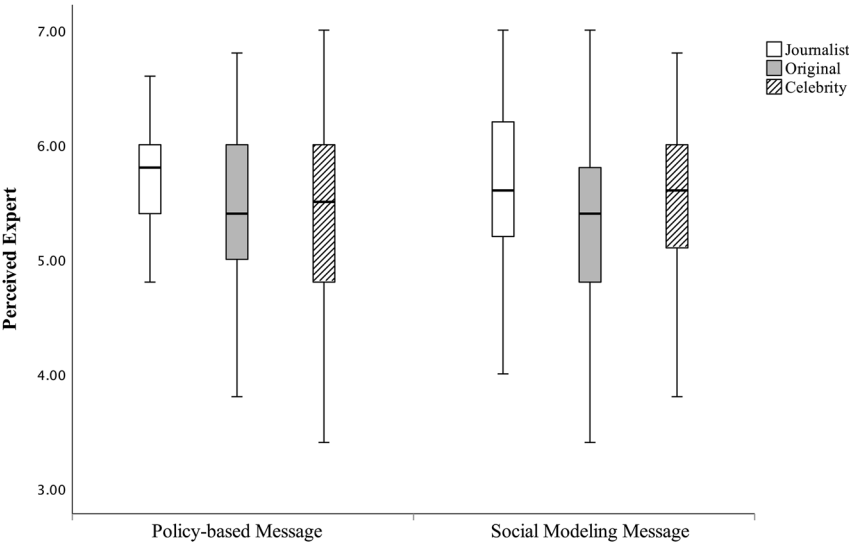


Figure 2: Perceived expertise of original, celebrity, and journalist influencers in policy-based and social modeling-based message contexts.

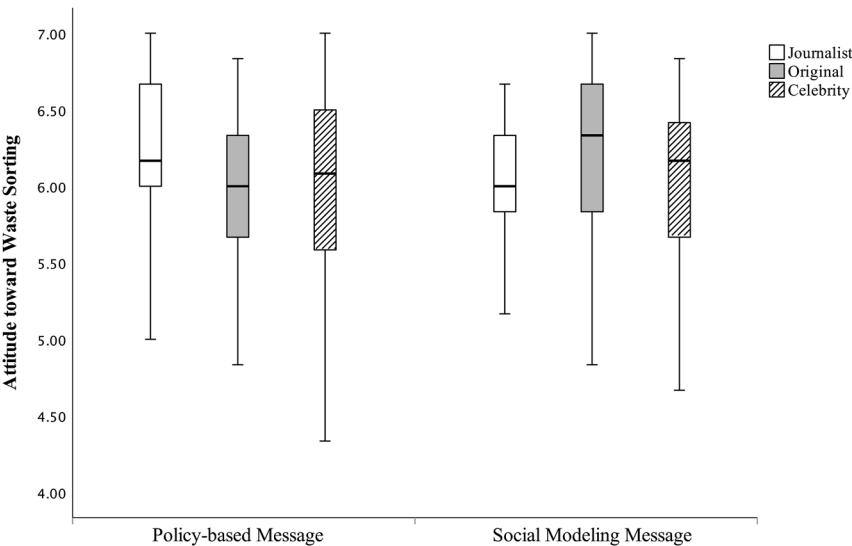


Figure 3: Effects of policy-based and social modeling-based messages by original, celebrity, and journalist influencers on attitudes toward waste sorting.

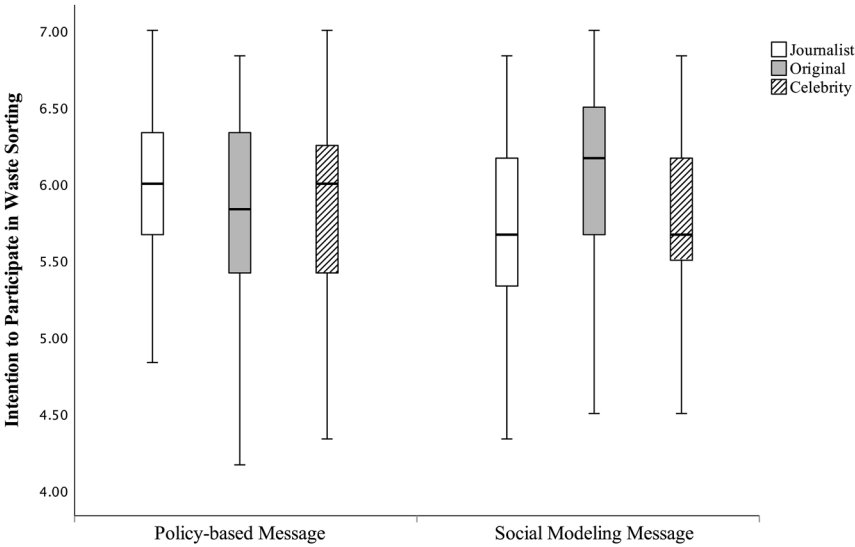


Figure 4: Effects of policy-based and social modeling-based messages by original, celebrity, and journalist influencers on intention to participate in waste sorting.

($F_{(2,621)} = 4.93, p < 0.01, \eta^2 = 0.02$). Subsequent *post hoc* analyses revealed that participants perceived journalist influencers as significantly more trustworthy ($M = 5.90, SD = 0.66, p < 0.001$), having more expertise ($M = 5.64, SD = 0.63, p < 0.01$), and capable of eliciting a more positive attitude toward waste sorting ($M = 6.12, SD = 0.47, p < 0.05$) compared to celebrity influencers ($M_{\text{trustworthy}} = 5.66, SD_{\text{trustworthy}} = 0.62; M_{\text{expert}} = 5.43, SD_{\text{expert}} = 0.79; M_{\text{attitude}} = 5.98, SD_{\text{attitude}} = 0.60$). Conversely, original influencers were perceived as having less expertise ($M = 5.37, SD = 0.75, p < 0.001$) than journalist influencers ($M = 5.64, SD = 0.63$), but also having a more positive impact on participants' attitudes toward waste sorting ($M = 6.12, SD = 0.56, p < 0.05$) compared to celebrity influencers ($M = 5.98, SD = 0.60$).

5 Discussion and conclusion

Our study explores the effectiveness of different types of social media influencers in communicating nonprofit-related messages in China, focusing on the origin of fame theory. Using a 3 (type of influencer: original, celebrity, journalist) $\times$ 2 (message context: policy-based, social modeling) experimental design on waste sorting, our findings indicate significant variations in influencer effectiveness based on their

origin of fame. However, our study also suggests that determining the ultimate “super influencer” depends on the specific context of the communication.

In a waste sorting campaign focused on social modeling, where influencers demonstrate their commitment, the original influencer was perceived as more credible than the journalist and celebrity counterparts. Participants exposed to the original influencer’s message showed stronger support and engagement regarding waste sorting. This finding aligns with prior research on the origin of fame theory, which highlights the influence of original influencers (Djafarova and Rushworth 2017; Jin et al. 2019). These influencers gain fame through their active social media presence, creating a sense of shared characteristics with their followers (Yuan and Lou 2020) and leading to parasocial identification (Shan et al. 2020). As a result, followers are more likely to adopt or emulate the influencers’ viewpoints and behaviors (Piehler et al. 2022).

In the context of waste sorting messaging driven by policy directives, the influence of original influencers decreases while that of journalists becomes more prominent. The findings also suggest that journalist influencers are perceived as more trustworthy and knowledgeable than original or celebrity influencers. Additionally, their delivery of policy-based messages has a more positive effect on public attitudes toward waste sorting. However, there was no significant difference in their ability to increase public participation compared to the other influencer types.

In our study, journalists represent a distinct type of influencer in China, differing from original or celebrity influencers, as their authority stems not from social visibility or personal achievements but from their role in conveying official perspectives (Zhang and Wei 2021; Zhang et al. 2023). The close relationship between the government and journalists in China serves as a channel for disseminating official viewpoints (Hassid 2011; Long and Shao 2023). As a result, Chinese audiences often rely on mainstream media and journalists for authoritative and accurate information, particularly when seeking policy guidance (Jia and Meng 2020; Ren et al. 2021).

Surprisingly, our findings show that journalists are perceived as more authoritative on waste sorting issues, whether they convey policy guidance or model social behaviors. This contradicts existing research, which typically favors original influencers as perceived experts (Ki and Kim 2019; Trivedi 2018). However, this discrepancy likely stems from our focus on pro-environmental concerns, which differs from prior studies in for-profit marketing. In contrast to product marketing, where original influencers naturally command expertise among their followers (Chetioui et al. 2020; Lou and Yuan 2019), this does not hold true in the nonprofit sector. Specifically regarding environmental issues in China, journalists are perceived as more credible authorities.

Furthermore, this topic intersects with the development of environmental communication in China, where increased media coverage has raised environmental

awareness among the Chinese public (Huang 2022). This finding also challenges the assumption that digital media usage inevitably undermines journalistic integrity (Zhou 2021). One possible explanation is the growing online presence of Chinese journalists, such as Zhang Yang from the Xinhua News Agency, who actively engage with the public through their own social media platforms. This trend likely mitigates perceived biases in news reporting and enhances overall credibility (Gil de Zúñiga et al. 2016).

There are several limitations to consider in our social media influencer study. First, to avoid potential copyright issues, we used textual descriptions rather than photographs to depict different social media influencers as message sources in our experiment. Although our manipulation test confirmed the effectiveness of this approach, it may have slightly compromised internal validity.

Second, our research primarily focuses on between-group comparisons to identify the most influential “super influencer,” but does not explore the underlying mechanisms contributing to their effectiveness. Understanding these mechanisms is crucial for grasping the full impact of social media influencers, and future studies should delve into these dynamics for deeper analysis.

Lastly, our choice of waste sorting as the topic was driven by its simplicity and low cost for nonprofit initiatives, allowing us to observe the significant effects of social media influencers’ persuasive abilities. However, it remains unclear whether influencers can achieve similar results in campaigns that involve higher costs or personal inconveniences, such as promoting environmentally friendly products or advocating for certain healthcare practices. Therefore, further research into influencer dynamics within nonprofit-oriented social campaigns is highly anticipated.

References

- Abidin, Crystal. 2015. Communicative ♥ intimacies: Influencers and perceived interconnectedness. *Ada: A Journal of Gender, New Media & Technology* (8). 1–16. <https://doi.org/10.7264/N3MW2FFG>.
- Abrahamse, Wokje & Linda Steg. 2013. Social influence approaches to encourage resource conservation: A meta-analysis. *Global Environmental Change* 23(6). 1773–1785.
- Awang, Siti, Annuar Sharifah & Imelda Gisip. 2019. The effect of social media influencer attributes towards pro-environmental intention. *Romanian Journal of Information Technology and Automatic Control* 10(3). 63–68.
- Bandura, Albert. 1977. *Social learning theory*. Englewood Cliffs: Prentice-Hall.
- Bolsen, Toby, Risa Palm & Justin Kingsland. 2019. The impact of message source on the effectiveness of communications about climate change. *Science Communication* 41(4). 464–487.
- Bonnevie, Erika, Sarah Rosenberg, Caitlin Kummeth, Jaclyn Goldberg, Ellen Wartella & Joe Smyser. 2020. Using social media influencers to increase knowledge and positive attitudes toward the flu vaccine. *PLoS One* 15(10). e0240828.

- Campbell, Colin & Justine Farrell. 2020. More than meets the eye: The functional components underlying influencer marketing. *Business Horizons* 63(4). 469–479.
- Casaló, Luis, Carlos Flavián & Sergio Ibáñez-Sánchez. 2020. Influencers on Instagram: Antecedents and consequences of opinion leadership. *Journal of Business Research* 117. 510–519.
- Cattapan, Terrada, Supicha Vilaisri & Sydney Chinchanchokchai. 2023. The influence of social media influencers (SMI) on the pro-environmental behavior of Thai Generation Y regarding the purchase of electric vehicles. *ABAC Journal* 43(2). 77–91.
- Cheng, Yang, Chun-Ju Flora Hung-Baeshecke & Yi-Ru Regina Chen. 2024. Social media influencer effects on CSR communication: The role of influencer leadership in opinion and taste. *International Journal of Business Communication* 61(2). 336–359.
- Chetioui, Youssef, Hikma Benlafqih & Hind Lebdaoui. 2020. How fashion influencers contribute to consumers' purchase intention. *Journal of Fashion Marketing and Management: International Journal* 24(3). 361–380.
- Dekoninck, Heleen & Desirée Schmuck. 2023. The “greenfluence”: Following environmental influencers, parasocial relationships, and youth's participation behavior. *New Media & Society*. <https://doi.org/10.1177/14614448231156131>.
- Djafarova, Elmira & Chloe Rushworth. 2017. Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users. *Computers in Human Behavior* 68. 1–7.
- Elliott, McGinnies & Charles Ward. 1980. Better liked than right: Trustworthiness and expertise as factors in credibility. *Personality and Social Psychology Bulletin* 6(3). 467–472.
- Ertz, Myriam, Fahri Karakas & Emine Sarigöllü. 2016. Exploring pro-environmental behaviors of consumers: An analysis of contextual factors, attitude, and behaviors. *Journal of Business Research* 69(10). 3971–3980.
- Fan, Bo, Wenting Yang & Xingchen Shen. 2019. A comparison study of ‘motivation–intention–behavior’ model on household solid waste sorting in China and Singapore. *Journal of Cleaner Production* 211. 442–454.
- Freberg, Karen, Kristin Graham, Karen McGaughey & Laura Freberg. 2011. Who are the social media influencers? A study of public perceptions of personality. *Public Relations Review* 37. 90–92.
- Fu, Jiawei & Alice Lee. 2016. Chinese journalists' discursive Weibo practices in an extended journalistic sphere. *Journalism Studies* 17(1). 80–99.
- Gil de Zúñiga, Homero, Trevor Diehl & Alberto Ardèvol-Abreu. 2016. When citizens and journalists interact on Twitter: Expectations of journalists' performance on social media and perceptions of media bias. *Journalism Studies* 19(2). 227–246.
- Ha, Hong-Youl & Swinder Janda. 2012. Predicting consumer intentions to purchase energy-efficient products. *Journal of Consumer Marketing* 29(7). 461–469.
- Hassid, Jonathan. 2011. Four models of the fourth estate: A typology of contemporary Chinese journalists. *The China Quarterly* 208. 813–832.
- Hess, Alexandra, Sarah Dodds & Nadia Rahman. 2022. The development of reputational capital—How social media influencers differ from traditional celebrities. *Journal of Consumer Behaviour* 21(5). 1236–1252.
- Hovland, Carl, Irving Janis & Harold Kelley. 1953. *Communication and persuasion*. New Haven, London: Yale University Press.
- Huang, He. 2022. 走向和谐共生: 中国环境议题的多元话语建构 [Toward harmonious coexistence: The construction of multiple discourses on environmental issues in China]. Beijing: China Renmin University Press.
- Huang, He, Fangfei Wang & Li Shao. 2018. How propaganda moderates the influence of opinion leaders on social media in China. *International Journal of Communication* 12. 2599–2621.

- Huang, He, Linlin Liu & Xiaohan Yang. 2023. 情感驱动的实践——城市居民绿色低碳行为促进机制的ARI模型检验 [Affect driven public engagement: An empirical study of urban residents' low-carbon behavior promotion mechanism based on ARI model]. *Global Journal of Media Studies* (02). 60–86. <https://doi.org/10.26599/gjms.2023.9330017>.
- Hudders, Lislot, Steffi De Jans & Marijke De Veirman. 2021. The commercialization of social media stars: A literature review and conceptual framework on the strategic use of social media influencers. In Nils Borchers (ed.), *Social media influencers in strategic communication*, 24–67. New York: Routledge.
- Influencer Marketing Hub. 2024. What is influencer marketing? The ultimate guide for 2024. Available at: <https://influencermarketinghub.com/influencer-marketing/>.
- Ji, Chenghao, Jia Dai & Fanxu Zeng. 2020. 环境倡导的差异:垃圾分类政策的政务微信传播策略分化研究 [Differences in environmental advocacy: An analysis of the waste classification policy promotion by the government on WeChat]. *Journalism Research* (11). 97–110.
- Jia, Zhemin & Tianguang Meng. 2020. 信息为轴:新冠病毒疫情期间的媒介使用、信息需求及媒介信任度 [Information as the axis: Media use, information needs, and media trust during the COVID-19 pandemic]. *E-Government* (05). 14–27.
- Jin, Seung-A. Annie & Joe Phua. 2014. Following celebrities' tweets about brands: The impact of Twitter-based electronic word-of-mouth on consumers' source credibility perception, buying intention, and social identification with celebrities. *Journal of Advertising* 43(2). 181–195.
- Jin, Venus, Aziz Muqaddam & Ehri Ryu. 2019. Instafamous and social media influencer marketing. *Marketing Intelligence & Planning* 37(5). 567–579.
- Ki, Chung-Wha & Youn-Kyung Kim. 2019. The mechanism by which social media influencers persuade consumers: The role of consumers' desire to mimic. *Psychology and Marketing* 36(10). 905–922.
- Kim, Hyosun. 2022. Keeping up with influencers: Exploring the impact of social presence and parasocial interactions on Instagram. *International Journal of Advertising* 41(3). 414–434.
- Kim, Do Yoon & Hye-Young Kim. 2021. Influencer advertising on social media: The multiple inference model on influencer-product congruence and sponsorship disclosure. *Journal of Business Research* 130. 405–415.
- Kostygina, Ganna, Hy Tran, Steven Binns, Glen Szczypka, Sherry Emery, Donna Vallone & Elizabeth Hair. 2020. Boosting health campaign reach and engagement through use of social media influencers and memes. *Social Media + Society* 6(2). <https://doi.org/10.1177/2056305120912475>.
- Leung, Fine, Flora Gu, Yiwei Li, Jonathan Zhang & Robert Palmatier. 2022. Influencer marketing effectiveness. *Journal of Marketing* 86(6). 93–115.
- Liu, Pihui, Minmin Teng & Chuanfeng Han. 2020. How does environmental knowledge translate into pro-environmental behaviors? The mediating role of environmental attitudes and behavioral intentions. *Science of the Total Environment* 728. <https://doi.org/10.1016/j.scitotenv.2020.138126>.
- Long, Qiang & Lingwei Shao. 2023. Beyond propaganda: The changing journalistic practices of China's party press in the digital era. *Journalism Practice* 17(4). 799–813.
- Lou, Chen & Shupe Yuan. 2019. Influencer marketing: How message value and credibility affect consumer trust of branded content on social media. *Journal of Interactive Advertising* 19(1). 58–73.
- National Business Daily. 2023. 大V的价值不再只是流量 [The value of influencers is no longer just the amount of attention]. Available at: <https://www.nbd.com.cn/articles/2023-04-16/2761438.html>.
- Nip, Joyce & King-Wa Fu. 2016. Challenging official propaganda? Public opinion leaders on Sina Weibo. *The China Quarterly* 225. 122–144.
- Nomura, Hisako, Peter John & Sarah Cotterill. 2011. The use of feedback to enhance environmental outcomes: A randomised controlled trial of a food waste scheme. *Local Environment* 16(7). 637–653.
- Ohanian, Roobina. 1990. Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising* 19(3). 39–52.

- Okuah, Obrukeywe, Brenda Scholtz & Bernadette Snow. 2019. A grounded theory analysis of the techniques used by social media influencers and their potential for influencing the public regarding environmental awareness. In *Paper presented at the conference of the South African Institute of Computer Scientists and Information Technologists 2019*. South Africa: Skukuza 17–18 September.
- Pan, Yeheng, Michaël Opgenhaffen & Baldwin Van Gorp. 2020. The use of social media by Chinese climate journalists: A case study of COP21. *Journalism Practice* 14(8). 913–932.
- Piehl, Rico, Michael Schade, Julia Sinnig & Christoph Burmann. 2022. Traditional or ‘instafamous’ celebrity? Role of origin of fame in social media influencer marketing. *Journal of Strategic Marketing* 30(4). 408–420.
- Rahman, Kazi. 2022. Influencer marketing and behavioral outcomes: How types of influencers affect consumer mimicry? *SEISENSE Business Review* 2(1). 43–54.
- Ren, Wei, Xiaowen Zhu & Yi Hu. 2021. 风险感知与防疫行为:新冠疫情背景下社交媒体与权威媒体的多元作用对比 [Risk perception and preventive behaviors: A comparison of the multifaceted effects of social media and authoritative media during the outbreak of COVID-19]. *Chinese Journal of Journalism & Communication* 43(05). 23–42.
- Shan, Yan, Kuan-Ju Chen & Jhih-Syuan Lin. 2020. When social media influencers endorse brands: The effects of self-influencer congruence, parasocial identification, and perceived endorser motive. *International Journal of Advertising* 39(5). 590–610.
- Shao, Peng & Yiran Xie. 2020. 建设性新闻视角下中国垃圾分类报道实践考察——以澎湃新闻相关新闻报道为例 [From solution to construction: A study of reporting on the practice of garbage classification from the perspective of constructive journalism]. *Journalism Research* (06). 23–35.
- Sheng, Guanghua, Beibei Yue & Siyu Gong. 2019. 绿色广告诉求与信息框架匹配效应对消费者响应的影响 [Impact of the matching effect between green advertising appeal and information framework on consumer responses]. *Chinese Journal of Management* (03). 439–446.
- Silva, Marianny Jessica de Brito, Salomão Alencar de Farias, Michelle Kovacs Grigg & Maria de Lourdes de Azevedo Barbosa. 2020. Online engagement and the role of digital influencers in product endorsement on Instagram. *Journal of Relationship Marketing* 19(2). 133–163.
- Su, Bochiuan, Li-Wei Wu, Yevon-Yi-Chi Chang & Ruo-Hao Hong. 2021. Influencers on social media as references: Understanding the importance of parasocial relationships. *Sustainability* 13(19). <https://doi.org/10.3390/su131910919>.
- Topklout. 2024. 看得见的粉丝价值:五大平台KOL粉丝分析研究报告 [Visible fan value: Report on KOL fans on five major platforms]. Available at: <https://www.topklout.com/#/home>.
- Torres, Pedro, Mário Augusto & Marta Matos. 2019. Antecedents and outcomes of digital influencer endorsement: An exploratory study. *Psychology and Marketing* 36(12). 1267–1276.
- Trivedi, Jay. 2018. Measuring the comparative efficacy of an attractive celebrity influencer vis-à-vis an expert influencer—a fashion industry perspective. *International Journal of Electronic Customer Relationship Management* 11(3). 256–271.
- De Veirman, Marijke, Veroline Cauberghe & Liselot Hudders. 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.
- Varotto, Alessandra & Anna Spagnoli. 2017. Psychological strategies to promote household recycling. A systematic review with meta-analysis of validated field interventions. *Journal of Environmental Psychology* 51. 168–188.
- Vrontis, Demetris, Anna Makrides, Michael Christofi & Alkis Thrassou. 2021. Social media influencer marketing: A systematic review, integrative framework and future research agenda. *International Journal of Consumer Studies* 45(4). 617–644.

- Wang, Shizong & Chang Xu. 2020. 社会机制在城市社区垃圾分类政策执行中的作用研究 [The role of social mechanism in promoting household waste separation in urban communities]. *Chinese Public Administration* (05). 52–57.
- Wies, Simone, Alexander Bleier & Alexander Edeling. 2023. Finding goldilocks influencers: How follower count drives social media engagement. *Journal of Marketing* 87(3). 383–405.
- Xiong, Yang, Zhichao Cheng, Enhe Liang & Yinbo Wu. 2018. Accumulation mechanism of opinion leaders' social interaction ties in virtual communities: Empirical evidence from China. *Computers in Human Behavior* 82. 81–93.
- Yang, Yang & Louisa Ha. 2021. Why people use TikTok (Douyin) and how their purchase intentions are affected by social media influencers in China: A uses and gratifications and parasocial relationship perspective. *Journal of Interactive Advertising* 21(3). 297–305.
- Yuan, Shupei & Chen Lou. 2020. How social media influencers foster relationships with followers: The roles of source credibility and fairness in parasocial relationship and product interest. *Journal of Interactive Advertising* 20(2). 133–147.
- Zeng, Fanxu & Guangsheng Huang. 2012. 网络意见领袖社区的构成、联动及其政策影响:以微博为例 [The composition, linkage, and policy impact of online opinion leader communities: A case study of Weibo]. *Open* (04). 115–131.
- Zhang, Dong & Junbin Wei. 2021. 情感驱动下主流媒体疫情信息数据分析与话语引导策略 [Emotion-driven data analysis of mainstream media epidemic information and discourse guidance strategies]. *Library and Information Service* 14. 101–108.
- Zhang, Bin, Kee-Hung Lai, Bo Wang & Zhaohua Wang. 2019. From intention to action: How do personal attitudes, facilities accessibility, and government stimulus matter for household waste sorting? *Journal of Environmental Management* 233. 447–458.
- Zhang, Kaiping, Tianguang Meng & Zhongbin Huang. 2023. 软宣传”的兴起、特征与效果——基于2009-2023年主流媒体与政务新媒体的大数据分析 [The rise of soft propaganda: A big data analysis of mainstream media and government social media accounts (2009 – 2023)]. *Journalism & Communication* (12). 86–103.
- Zhou, Quan. 2021. 数字媒体信息消费环境下记者信任形成机制研究 [The formative mechanism of journalistic credibility in the context of digital media consumption]. *Journalism Research* (09). 40–58.