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Willingness to follow opinion leaders: A case study of Chinese Weibo

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ABSTRACT

This study examined the effects of follower number and comment tone on judgements about potential opinion leaders and their pages on Weibo, a Chinese social media site. Two experiments differentiated different types of negative comments, uncivil, critical, neutral and mixed, to assess the effects of comment tone relative to previous research. The results suggest that these manipulations have minimal effects, and there is little evidence that the overall number of followers is influential. In contrast to prior research, the readers did not seem to rely upon social cues from either the number of followers or the tone of the comments to form judgements about potential opinion leaders and their pages. Mixed evidence indicates that uncivil comments may be distinguished from merely critical comments, but neither format definitively leads to more positive evaluations. The potential implications for opinion leadership in China and worldwide are considered.

1. Introduction

Opinion leadership, a longstanding concept in media research, proposes that certain individuals exert a disproportionate influence on opinions because they act as a conduit for information, filtering and shaping news and sharing their interpretations with others (Black, 1982; Bloch & Richins, 1983; Chan & Misra, 1990; Myers & Robertson, 1972; Rogers & Shoemaker, 1971). Traditionally, this type of influence was accomplished through conversation. However, it now potentially occurs through social media. Some people believe that opinion leaders are no longer important because the Internet, especially social media, enables individuals to obtain information directly from the media or from other sources (Nisbet & Kotcher, 2009; Wolny & Mueller, 2013). However, scholars have demonstrated that the Internet, especially social media, better equips opinion leaders to provide advice to and share information with their followers via blogs and microblogs (Kavanaugh et al., 2006). Scholars have also found that personal influence continues to occur within social media (Weeks, Ardèvol-Abreu, & Gil de Zúñiga, 2015). Research on Twitter has demonstrated that although opinion leaders are not the creators of media content, the two-step flow of communication still has explanatory power because opinion leaders are aggregators of information that they then share with their followers (Choi, 2015; Turcotte, York, Irving, Scholl, & Pingree, 2015). Tweets from news outlets are often filtered and then reach a new audience indirectly through opinion leaders (Wu, Hofman, Mason, & Watts, 2011). Studies have also suggested that active users of social media who regard themselves as opinion leaders and who try to change other users' political opinions can indeed succeed in exerting personal influence (Weeks et al., 2015). Patterns of social media use and connections suggest an outsized role for a subset of users; for example, the top 10% of active users on Twitter contribute over 90% of the platform's content (Kaplan & Haenlein, 2011).

In the age of the Internet, empirical findings have shown that a central network position among opinion leaders increases the speed of the information stream (Van Eck, Jager, & Leeflang, 2011). A study has shown that when people on social media are perceived as opinion leaders, their recommendations improve levels of media trust (Turcotte et al., 2015). However, little is known about the factors that affect willingness to follow opinion leaders on social media, and it is important for scholars to explore this subject. Therefore, this study examined what factors generally lower a person's willingness to follow an individual who is considered an opinion leader on social media.

We chose to analyse the Chinese social media service Weibo. Opinion leaders, celebrities, and even anonymous users have been targeted and bullied by trolls on Weibo. Weibo is an important entry point for scholarship on different types of negative comments and related cues, such as the number of followers who can be manipulated by outside entities to shape their impressions of user-generated content. However, the implications of this topic are far-reaching and extend beyond the Chinese context to general theories regarding how people process online information sources and whether they view social media account holders as opinion leaders and social actors.

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We conducted two studies by using experiments to examine the salience of specific social cues that may serve as heuristics to help individuals assess the value of a social media account when given limited information. Specifically, we considered whether social cues, in the form of comments from posters and number of followers, influence interest in an account.

1.1. Theoretical predictions of source credibility judgements online

1.1.1. Tone of comments

Negative comments and even attacks are not limited to Weibo or similar contexts. The possibility of anonymous commenting has resulted in widespread combative or hostile commenting online (Hlavach & Freivogel, 2011). Internet users consider flaming to be an unfortunate but acceptable online activity (Lee, 2005; Momeni et al., 2013). However, research has also shown that flaming posts serve as examples to others: users flame a person more often when earlier commenters have already done so (Cheng, Bernstein, Danescu-Niculescu-Mizil, & Leskovec, 2017; Moor, 2007).

Several areas of research converge to explain the influence of negative comments and even to help distinguish specific types of comments. Foundational psychological research on social influence has demonstrated that most people rely on social cues to make judgements about others and to shape their own behaviours (Cialdini & Goldstein, 2004). Responses from an audience are one such cue that can exert a powerful influence on others (Axsom, Yates, & Chaiken, 1987). With limited information available online, this tendency is amplified, and specific cues about others serve as vital tools in the heuristic processing of judgements about other people and online resources (Sundar & Nass, 2001). Internet users are likely to rely on heuristic cues to judge the quality and trustworthiness of online sources (Metzger, 2007). For example, ratings, comments, and reviews are indicators of collective opinion that can trigger individuals' endorsement heuristic when judging the credibility of sources (Hilligoss & Rieh, 2008; Metzger, Flanagin, & Medders, 2010).

Therefore, evaluations by others can serve broadly as a cue for the formation of social judgements, and online comments can offer one source of such evaluations. Other scholarship has focused on the specific influence of comments as a distinctly important source of reader information. For example, consistent evidence has shown that consumer reviews can have a strong influence on consumer choices (Zhang, Craciun, & Shin, 2010). Negative comments in an online brand community can undermine the effectiveness of such a community in promoting the brand (Relling, Schnittka, Sattler, & Johnen, 2016). YouTube comments can sway perceptions of public service announcements, reinforcing or undermining the intended message (Walther, DeAndrea, Kim, & Anthony, 2010). Facebook statuses are viewed in a negative light if the comments associated with them are negative (Ballantine, Lin, & Veer, 2015; Messing & Westwood, 2014), and negative Facebook comments have been shown to reduce the influence of news stories (Winter, Bruckner & Kramer, 2015). In another study, exposure to one-sided social media comments along with one-sided opinions of a health topic influenced participants' opinions on a related issue (Witteman, Fagerlin, Exe, Trottier, & Zikmund-Fisher, 2016). Notably, a significant amount of research considering the role of comments posted in response to online news has demonstrated several possible ways in which such comments can be influential. Comments may signal perceptions of media bias (Lee, 2012; Houston, Hansen & Nisbett, 2011) and indicate public acceptance of media content in a way that indirectly encourages positive evaluations (Kim, 2015). Comments that support the framing of a news story as criticism of an individual who is involved in a scandal may reinforce the message (Von Sikorski, 2016). In summary, it is broadly evident that comments are an influential component of online content and have the power to influence perceptions of that content.

Of particular note is research on the valence and civility of such comments. Several scholars have noted that uncivil comments, which are not merely negative but also disrespectful towards the author of a story or other commenters, are common features on news sites (e.g., Blom, Carpenter, Bowe, & Lange, 2014; Coe, Kenski, & Rains, 2014). Some research has suggested that such uncivil comments may actually create a contrast effect through which news stories that appear alongside uncivil commentary actually appear more credible (Borah, 2013; Thorson, Vraga, & Ekdale, 2010). However, another study found that the perceived quality of news stories without user comments was actually higher than when unreasoned or even reasoned comments appeared alongside that content (Prochazka, Weber, & Schweiger, 2016).

Negative comments can serve as a social judgement cue about the characteristics of the account holder and the quality of his or her argument. Harsh comments trigger audiences to engage in contrast processing (Mussweiler, 2003). Research has also shown that the credibility of persuasive messages increases when these messages are followed by lower-credibility comments (Tormala & Clarkson, 2007). Perhaps the inclusion of uncivil comments among the negative feedback can trigger this type of contrast (Luqiu & Schmierbach, 2016). To better understand and replicate the results, in this study, two different forms of negative comments were tested: constructive but negative feedback, which we labelled "critical", and true flaming comments employing hostile language and ad hominem attacks, which we labelled "uncivil". The distinction between these comments draws on the concept of uncivil comments and online news that has emerged in the broader literature on the effects of post-content comments.

RQ1. How do the effects of uncivil and critical comments differ from one another and from balanced comments when influencing judgements about page quality and willingness to follow the user?

Studies on consumers have shown that the perceived quality of information has a positive correlation with people's willingness to pay (Li, Li, & Kambele, 2012; Whitehead, 2006; Zeithaml, Berry, & Parasuraman, 1996). Source attribution affects the perceived quality of news stories (Sundar, 2000), and the quality of online news comments is important to news media that want to maintain credibility within the community (Diakopoulos & Naaman, 2011).

Alternatively, social media sites may be viewed similarly to news sites, with the *quality* of the site being more important than other factors. As described above, in some cases, negative comments can actually improve readers' impressions of a story's credibility through a contrast effect. However, such an effect still relies upon people reacting negatively to the comments themselves, and in judging the site as a whole, we still anticipate that negative comments will have a negative effect on perceived quality, as expressed in the following hypothesis: **Hypothesis 1**: Perceived quality will mediate the effect of comments on willingness to follow.

1.1.2. Number of followers

News media have reported that a black market exists within social media for the business of providing fake followers (Confessore, Dance, Harris, & Hansen, 2018). A study on Weibo has also shown that a large number of fake accounts are created to sell their following links to customers who want to boost their number of followers (Zhang & Lu, 2016). Other studies have shown that system-generated cues may be used to form impressions or judgements in online environments (Walther, Van Der Heide, Kim, Westerman, & Tong, 2008). On Facebook, the number of friends impacts others' perception of the popularity of a profile owner, and too many or too few followers may decrease the perceived credibility of the profile (Tong, Van Der Heide, Langwell, & Walther, 2008). A study on Twitter also suggested that a curvilinear pattern in the shape of an inverted "U" exists between the number of followers and the willingness to follow (Westerman, Spence, & Van Der Heide, 2012). However, a study on newspapers' Twitter accounts showed that the number of followers positively predicted newspapers' adaption of Twitter and their online traffic (Hong, 2012). A study on voting behaviour also demonstrated a positive effect of the number of

followers on the number of preferential votes (Spierings & Jacobs, 2014). For this reason, fake followers on Twitter are used to alter concepts such as popularity and influences in the Twittersphere and to impact different aspects of public life, such as the economy, politics and society (Cresci, Di Pietro, Petrocchi, Spognardi, & Tesconi, 2015).

Weibo shows the number of followers for each account on its homepage and recommends accounts for other users to follow based on the popularity of the account. The number of followers is an indicator of collective opinion (Huang & Sun, 2014; Nguyen, Wu, Chan, Peng, & Zhang, 2012), and opinion leaders who have more followers demonstrate their followers' level of collective trust in them. Prior studies have demonstrated the importance of the number of people as a popularity cue in the aggregated bandwagon effect (Adler, 1985; Metzger & Flanagin, 2013; Snyder et al., 2004). For example, the number of followers helps predict the perceived credibility of health content on Twitter (Lee & Sundar, 2013). A study of online user-generated videos showed that hit counts serve as a cue to in forging quality impressions (Fu & Sim, 2011).

Another reason to include the number of followers as an additional factor involves the potential for that number to be distorted; users can sometimes hire companies to create artificial followers, and there is evidence of Chinese government efforts to cap the number of followers or block followers on Weibo (Fu & Chau, 2013). Consistent with prior research and the expected effects of other cues, we propose the following hypotheses:

Hypothesis 2. Participants will consider that an opinion leader's account with a smaller number of followers provides lower-quality content.

Hypothesis 3. Participants will be less willing to follow an opinion leader's account with a smaller number of followers.

2. Study 1

2.1. Method

2.1.1. Participants

Participants were recruited for a between-subjects experiment. The lead author posted a request to a Weibo account for voluntary participants for a study of Weibo users. Known influential figures were asked to repost the link to create a snowball sampling design. Weibo is the Chinese equivalent of Twitter but has functions that are more similar to those of Facebook. It has more than 556 million registered users, the equivalent of one-third of the population of China. According to Weibo's Q4 2016 financial report, the site's monthly active users totaled 313 million versus 319 million for Twitter (Huang, 2017). Therefore, studying Weibo is important for understanding social media in China. Studies have shown that 4.8% of users contribute more than 80% of all original posts; the majority of users only comment or repost others' messages (Fu & Chau, 2013).

All participants were assured of anonymity and received no incentive for participation; all aspects of the design were reviewed by the institutional review board at the researchers' university. Table 1 shows the demographic of the participants. The participants were all Weibo users (N = 957, male = 490, female = 386, refused to answer indicated = 81). With respect to age, 0.4% aged under 18, 79.1% were aged between 18 and 45, and 11.9% were over 45, and 8.6% refused to answer. With respect to education, the majority (70.1%) held advanced degrees. For the employment status, 20% were students and half of them (49.1%) were employed. With respect to the level of social media activity, 41.5% spent over 2 h per week, 33.2% spent 1–2 h per week, 16.8% spent less than 1 h per week on Weibo, and 8.5% refused to answer. All participants were Chinese, and the survey was presented in simplified Chinese. The survey items below were translated into English by the author responsible for the original translation.

Table 1
Demographic of participants.

	Study 1		Study 2	
	n = 957		n = 1039	
	n	%	n	%
Gender				
Male	490	51.2%	469	45.1%
Female	386	40.3%	570	54.9%
Refused to answer	81	8.5%	0	0.0%
Age				
Under 18	4	0.4%	15	1.4%
18-30	454	47.4%	554	53.3%
31-45	303	31.7%	300	28.9%
46-60	105	11.0%	154	14.8%
Over 60	9	0.9%	16	1.5%
Refused to answer	82	8.6%	0	0.0%
Education				
Middle school	14	1.5%	22	2.1%
High school	44	4.6%	69	6.6%
Diploma	137	14.3%	165	15.9%
College or above	671	70.1%	774	74.5%
Others	8	0.8%	9	0.9%
Refused to answer	83	8.7%	0	0.0%
Employment status				
Students	191	20.0%	324	31.2%
Employed	470	49.1%	536	51.6%
Others	215	22.4%	179	17.2%
Refused to answer	81	8.5%	0	0.0%
Weekly Weibo Activity				
Less than 1 h	161	16.8%	373	35.9%
1–2 h	318	33.2%	356	34.3%
Over 2 h	397	41.5%	310	29.8%
Refused to answer	81	8.5%	0	0.0%

2.1.2. Design

The participants were presented with basic questions about their demographics. They were then shown an image of a real Weibo account page and all information that may identify the author has been removed. The participants were instructed to carefully review the page. Each page presented the same individual with the same follower images in the comments, but key variations reflected the manipulations. Two independent variables were manipulated: the number of followers and the tone of the comments. The tone of the comments varied between neutral, which was used for the control group in this study, and the two types of negative comments: critical and uncivil. People in control group were showed the positive, neutral, critical and uncivil comments, while people in critical group only read critical comments and people in uncivil group were showed uncivil comments only. The critical comments included "Your judgement is full of bias", "You should think positively about your country", and "I am not satisfied with the government; however, I don't agree with you this time". The uncivil comments were personal attacks; for example, some read: "You make me sick", "Go die!" and "Leave Weibo!" The number of followers was small (154), medium (106,756), or large (1,089,765). The Chinese government defines Weibo users with more than 100 thousand followers as opinion leaders and those with over one million followers as "Super V". In 2013, 3,300 users had more than 1 million followers, and 200 users had more than 10 million followers. Although the top users with the largest numbers were entertainers, the Internet agenda setting was dominated by approximately 300 opinion leaders (Zhu et al., 2014).

The experimental arrangement functioned as a 3 (comments: uncivil vs. critical vs. neutral) × 3 (follower size: small vs. medium vs. large) experimental design with random assignments to the conditions. Group n was as follows: large, neutral (104); small, neutral (101); medium, neutral (92); large, critical (106); small, critical (106); medium, critical (101); small, uncivil (114); large, uncivil (118) and medium, uncivil (115). Following exposure to the page, the participants answered a series of questions about their impressions of the page.

2.1.3. Stimuli

The post displayed on the Weibo page was a comment on the Lunar New Year Gala (Chunwan), a Chinese New Year special programme produced by Chinese Central Television that has an annual viewership of over 700 million and a top trending position on Weibo (Wong, 2013). As the topic was trending on Weibo, we chose one opinion leader's post and erased all contents with any identification. All comments were selected from the comments on the original post to fit the specific tone of the manipulated condition. The topic was chosen because it did not represent an explicitly political perspective that would automatically cue partisans to reply favorably or unfavorably.

2.1.4. Measures

2.1.4.1. Willingness to follow. The first question individuals answered was whether they would follow the individual whose page was shown; they used a seven-point Likert scale ($M = 3.50$, $SD = 1.65$).

2.1.4.2. Perceived quality. We measured the perceptions of the quality of the page by asking the individuals whether they agreed that the following five adjectives described the personal site (from 1 = *strongly disagree* to 5 = *strongly agree*): informative, interesting, important, accurate and relevant (Cronbach's $\alpha = 0.83$, $M = 3.00$, $SD = 0.91$).

2.1.4.3. Perceived opinion leadership. Because the participants may have chosen to follow people based upon perceived opinion leadership, we evaluated their perception of opinion leadership by drawing upon the basic indicators of political opinion leadership (Katz, 1957). We used Personal Strength scale (Noelle-Neumann, 1985) and this scale has been widely used to measure opinion leadership, including in new media environment (Schäfer & Taddicken, 2015; Schenk & Döbler, 2002; Schenk & Rössler, 1997; Weimann, Tustin, Van Vuuren, & Joubert, 2007). Since opinion leaders on Weibo referred to people who specifically posting about current events that their perceived leadership in that domain was important, our assumption was that people would evaluate them along that dimension. We added five items and these five questions were worded so that the participants indicated how much they agreed (from 1 = *strongly disagree* to 5 = *strongly agree*) that the individual controlling the page was interested in politics; participated in political discussion; and was well informed, reliable, and honest about politics and current issues (Cronbach's $\alpha = 0.92$, $M = 3.94$, $SD = 0.99$)[1].

2.2. Results

2.2.1. Manipulation check

The participants were asked several questions that described the post, and only those who chose the correct answer were retained in our dataset. For the comments, one question was whether the comments were emotional or rational, and another question was whether the comments were hateful or thoughtful. For the number of followers, participants were asked to choose from over 1 million, over 100,000 and over 100. A total of 1,619 participants submitted the survey, and after the manipulation check, 957 were retained in our dataset.

2.2.1.1. Comments. The participants were asked whether the comments were emotional or rational and whether they were hateful or thoughtful. The participants in the uncivil comment group (38.8%) and critical comment group (33.0%) perceived the comments as more emotional than did the participants in the control group (28.2%), and the participants in the control group (52.7%) perceived the comments as more rational than did the participants in the critical group (30.4%) and the participants in the uncivil group (17.0%), χ^2 (2) = 32.39, $p < .001$, *Cramer's V* = 0.18.

Furthermore, the participants in the uncivil group (44.5%) were more likely than the participants in the critical group (30.9%) to think that the comments were hateful, followed by the control group (24.6%); additionally, the participants in the control group (51.3%) thought that the comments were more thoughtful than did the participants in the critical group (38.6%), followed by the participants in the uncivil group (10.1%), χ^2 (2) = 99.86, $p < .001$, *Cramer's V* = 0.32. Thus, the results indicate that uncivil comments were more likely to be perceived as emotional and hateful and less likely to be perceived as rational and thoughtful than critical comments, followed by neutral comments.

2.2.1.2. Number of followers. After they reviewed the page, the participants were asked to indicate the number of followers (over 100, over 100,000, or over 1 million) of the opinion leader. More participants in the small follower group (65.3%) chose over 100 followers than those in the medium group (23.2%) and large group (11.5%); more participants in the medium group (42.3%) chose over 100,000 followers than those in the small group (28.5%) and large (29.2%) group; and more participants in the large follower group (60.4%) chose over 1 million followers than those in the small group (8.6%) and medium group (31.1%), χ^2 (4) = 293.77, $p < .001$, *Cramer's V* = 0.39.

2.2.2. Hypotheses

Table 2 displays the main findings in Study 1. A 3 (comments: uncivil vs. critical vs. neutral) × 3 (follower size: small vs. medium vs. large) two-way ANOVA with perceived quality as the dependent variable was conducted to test H2 and provide partial evidence regarding the research questions and H1. The main effect of comments on perceived quality was significant, F (2, 855) = 8.63, $p < .001$, $\eta^2 = 0.02$. The post hoc Tukey HSD test showed that participants in the uncivil group ($M = 2.82$, $SD = 1.00$) scored lower on perceived quality than did the participants in the critical group ($M = 3.08$, $SD = 0.85$) and the control group ($M = 3.09$, $SD = 0.77$). No mean difference was found between the critical and control groups. Therefore, H2 was not supported. The main effect of group size was not significant, F (2, 855) = 1.72, $p = .18$, $\eta^2 = 0.004$. The results showed no difference between the three follower size groups in terms of perceived quality ($M = 2.99$, $SD = 0.90$ for small size; $M = 2.91$, $SD = 0.90$ for medium size; and $M = 3.05$, $SD = 0.91$ for large size).

Another 3 × 3 two-way ANOVA was conducted with willingness to follow as the dependent variable to helping address RQ1. The main effect of comments on willingness to follow was significant, F (2, 948) = 38.77, $p < .001$, $\eta^2 = 0.08$. The post hoc Tukey HSD test indicated that the participants in the uncivil group ($M = 2.90$, $SD = 1.79$) were less willing to follow the opinion leader's page than were the participants in the critical group ($M = 3.82$, $SD = 1.58$) and the control group ($M = 3.87$, $SD = 1.34$). No mean difference was found between the critical and control groups. Therefore, H3 was not supported. The

Table 2
Means and standard deviations of perceived quality and willingness to follow by comment and follower size in study 1.

Perceived Quality	Follower Size								
	Small			Medium			Large		
Comment	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*
Uncivil	104	2.82	1.04	105	2.76	1.03	105	2.86	1.00
Critical	95	3.07	0.84	95	2.98	0.85	97	3.18	0.85
Neutral	93	3.10	0.76	78	3.02	0.72	92	3.13	0.81
Willingness to Follow	Follower Size								
	Small			Medium			Large		
Comment	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*
Uncivil	114	3.03	1.85	115	2.78	1.85	118	2.90	1.68
Critical	106	3.99	1.51	101	3.54	1.64	106	3.91	1.57
Neutral	101	3.82	1.26	91	4.03	1.32	105	3.77	1.42

Table 3
Indirect and relative direct effects of comments on willingness to follow through perceived quality.

Variable		*Indirect effect*	*Boot SE*	*LLCI*	*ULCI*	*Relative direct effect*	*SE*	*LLCI*	*ULCI*
Study 1									
Uncivil (vs. Neutral)	Unstandardized	−0.18	0.05	−0.29	−0.08	−0.90	0.13	−1.14	−0.65
	Standardized	−0.11	0.03	−0.18	−0.05	−0.54	0.08	−0.69	−0.39
Critical (vs. Neutral)	Unstandardized	−0.01	0.05	−0.10	0.08	−0.09	0.13	−0.34	0.16
	Standardized	−0.003	0.03	−0.06	0.05	−0.05	0.08	−0.20	0.10
Study 2									
Uncivil (vs. Post-only)	Unstandardized	0.01	0.05	−0.09	0.11	−0.10	0.10	−0.29	0.08
	Standardized	0.01	0.05	−0.08	0.10	−0.09	0.09	−0.26	0.08
Critical (vs. Post-only)	Unstandardized	−0.07	0.05	−0.16	0.03	−0.22	0.09	−0.41	−0.04
	Standardized	−0.06	0.04	−0.14	0.02	−0.20	0.08	−0.37	−0.04
Uncivil (vs. Balance)	Unstandardized	0.02	0.05	−0.08	0.13	0.05	0.10	−0.14	0.25
	Standardized	0.02	0.05	−0.07	0.12	0.05	0.09	−0.13	0.22
Critical (vs. Balance)	Unstandardized	−0.05	0.05	−0.15	0.05	−0.07	0.10	−0.26	0.13
	Standardized	−0.05	0.05	−0.14	0.04	−0.06	0.09	−0.23	0.11
Uncivil (vs. Support)	Unstandardized	−0.02	0.05	−0.12	0.09	0.09	0.10	−0.11	0.29
	Standardized	−0.02	0.05	−0.11	0.07	0.08	0.09	−0.10	0.26
Critical (vs. Support)	Unstandardized	−0.10	0.05	−0.20	0.01	−0.03	0.10	−0.23	0.16
	Standardized	−0.09	0.05	−0.18	0.01	−0.03	0.09	−0.20	0.15

main effect of group size on willingness to follow was not significant (M = 3.60, SD = 1.62 for small size; M = 3.40, SD =

1.71 for medium size; and M = 3.50, SD = 1.63 for large size), F (2, 948) = 0.79, p = .46, η^2 = 0.002. The relationship between perceived opinion leadership and willingness to follow was also not significant (r = .04, p = .22).

To test H1, a mediation analysis with a multi-categorical independent variable (IV) was conducted. Hayes (2013) PROCESS Model 4 was used to test the simple mediation model. Indicator coding of groups with the control group as the reference was used (Hayes & Montoya, 2017). The sample was repeatedly resampled 5,000 times. The results indicated that the indirect effect of comments (uncivil vs. control group) on willingness to follow via perceived quality was significant, as the 95% confidence interval did not include zero. The bootstrap analysis demonstrated that the effect of comments (uncivil vs. control) on willingness to follow was mediated by perceived quality. However, the indirect effect of comments (critical vs. control group) on willingness to follow via perceived quality was not significant (see Table 3).

3. Study 2

Our first study separately examined the effects of critical and uncivil comments on the perceived quality of the page of an opinion leader and willingness to follow that leader. The results support the premise that not all negative comments are viewed equally and that the primary mechanism by which comments affect ongoing interest in content or content creators is by affecting beliefs about quality. That is, the comments serve less as a social cue than as a component of the page to be judged for value.

We carried out a second study to better understand and replicate the results of Study 1. First, we added two new conditions: positive feedback, which we labelled “support”, and a condition in which the participants were exposed only to the post, which we labelled “post”. This approach provided a more useful control condition to see how the actual post content shaped views, as information credibility on social media increases when the person sharing the post holds values and predispositions that match those of the recipient (Metzger et al., 2010). Second, as Study 1 had shown that the number of followers was not a significant predictor or moderator, we excluded this variable from Study 2.

3.1. Method

3.1.1. Participants

Weibo users were recruited and randomly assigned to 5 conditions: post only, support comments only, balance comments, critical comments only and uncivil comments only (N = 1039, male = 469, female = 570). With respect to age, 1.4% under 18, 82.2% were between 18 and 45, and 16.3% were over 45. With respect to education, 74.5% held a bachelor's degree or higher. For the employment status, 31.2% were students, 51.6% were employees, and 17.2% others. With respect to the level of social media activity, 70.2% spent less than 2 h per week on Weibo (see Table 1). All participants were Chinese, and the survey was presented in simplified Chinese. The survey items below were translated into English by the author responsible for the original translation.

3.1.2. Design

The participants were shown a post of an existing Weibo account page and instructed to carefully review the page. The post was about the account holder's personal experience in New York. When she used Uber, she met a Chinese driver and had a negative experience because the driver made discriminatory comments about Muslims and other minorities. This post trended on Weibo, and there were over one thousand comments under the post with a combination of feelings and different opinions. We selected this post not only because it trended but also because it was more personal than the post used in Study 1.

Each page presented the same account holder and the same post but with key variations to reflect the manipulation. The participants read the comments in one of five conditions: uncivil, critical (negative but civil), positive, neutral (balancing positive and negative), and no comments (post only). All comments were selected from the existing comments below the post.

Group n was as follows: post only (240); support (198); balance (202); critical (205); and uncivil (194). In contrast to Study 1, we decided to retain the identity of the account holder, and any participants who had read the post or who had heard of the account holder were excluded from the dataset. Following exposure, the participants answered a series of questions about their impressions of the page.

3.1.3. Measures

3.1.3.1. Perceived quality. We measured broader perceptions of the quality of the page as an information resource using the same four questions as in Study 1 (Cronbach's α = 0.74, M = 3.22, SD = 0.86).

3.1.3.2. Perceived opinion leadership. As in the first study, we measured

the perception of the opinion leadership shown by the individual controlling the page with fifteen questions (Cronbach's α = .91, M = 3.92, SD = 0.81).

3.1.3.3. Willingness to follow. Similar to Study 1, the participants were asked whether they would follow the individual whose page was shown. A seven-point Likert scale ranging from 1 (*totally disagree*) to 7 (*totally agree*) was used. [2]

3.2. Results

3.2.1. Manipulation check

The participants were provided with multiple choices to describe the post. Three questions were provided for the participants to choose whether the comments were rational or contained flaming words (1 = extremely rational; 7 = extremely uncivil); whether they were supportive or oppositional (1 = extremely opposing; 7 = extremely supportive); and whether they were one-sided or balanced (1 = extremely one-sided; 7 = extremely balanced). One-way ANOVAs found that the participants in the different experimental groups scored differently regarding rational vs. uncivil comments, F (3, 795) = 69.27, $p < .001$, $\eta^2 = 0.21$; opposing vs. supportive comments, F (3, 795) = 82.15, $p < .001$, $\eta^2 = 0.24$; and one-sided vs. balanced comments, F (3, 795) = 32.40, $p < .001$, $\eta^2 = 0.11$. The post hoc Tukey HSD test showed that the participants in the uncivil group (M = 5.59, SD = 1.76) perceived that the comments were more uncivil than did the participants in the critical group (M = 4.38, SD = 1.86) and the control group (M = 4.05, SD = 1.80), followed by the support group (M = 2.94, SD = 1.92). In contrast, the participants in the support group (M = 5.28, SD = 1.81) perceived that the comments were more supportive than did the participants in the balance group (M = 3.99, SD = 1.68), followed by the participants in the critical group (M = 3.40, SD = 1.87) and finally the participants in the uncivil group (M = 2.49, SD = 1.86). Finally, the participants in the balance group (M = 5.07, SD = 1.91) perceived that the comments were more balanced than did the participants in the critical group (M = 4.40, SD = 2.17), followed by the participants in the support (M = 3.56, SD = 2.09) and uncivil group (M = 3.16, SD = 2.29). Therefore, the manipulations were successful.

3.2.2. Main findings

Table 4 shows the main findings in Study 2. One-way ANOVA showed no difference in the perceived post quality among the five groups, F (4, 1034) = 1.02, p = .40, $\eta^2 = 0.004$. In terms of perceived post quality, the post hoc Tukey HSD test demonstrated neither significant differences between the uncivil group (M = 3.25, SD = 0.74) and the post-only group (M = 3.23, SD = 0.67), p = 1.00; the uncivil group and the balance group (M = 3.22, SD = 0.67), p = .99; and the uncivil group and the support group (M = 3.28, SD = 0.68), p = 1.00, nor significant differences between the critical group (M = 3.15, SD = 0.71) and the post-only group, p = .66; the critical group and the balance group, p = .83; and the critical group and the support group, p = .33.

Table 4
Means and standard deviations of perceived quality and willingness. to follow by comment in study 2.

		Perceived Quality		Willingness to Follow	
Comment	*n*	*M*	*SD*	*M*	*SD*
Post-only	240	3.23	0.67	4.33	1.16
Balance	202	3.22	0.67	4.16	1.14
Support	198	3.28	0.68	4.17	0.99
Critical	205	3.15	0.71	4.04	1.08
Uncivil	194	3.25	0.74	4.24	1.18

Another one-way ANOVA was conducted. The results demonstrated marginally significant group differences in willingness to follow, F (4, 1034) = 2.02, p = .089, $\eta^2 = 0.008$. In terms of willingness to follow, the post hoc Tukey HSD test showed no significant differences between the uncivil group (M = 4.24, SD = 1.18) and the post-only group (M = 4.33, SD = 1.16), p = .91; the uncivil group and the balance group (M = 4.16, SD = 1.14), p = .96; and the uncivil group and the support group (M = 4.17, SD = 0.99), p = .97. Finally, no differences were found between the critical group (M = 4.04, SD = 1.08) and balance group (M = 4.16, SD = 1.14), p = 0.82, and between the critical group and the support group (M = 4.17, SD = 0.99), p = .78. However, the participants in the post-only group (M = 4.33, SD = 1.16) were more willing to follow the opinion leader than were the participants in the critical group, p = .05. In general, the results of Study 2 answered the RQ negatively – the tone of the comments generally had no effect on site judgements and willingness to follow.

As in Study 1, perceived quality and willingness to follow were positively associated, r (1,039) = 0.46, $p < .001$. To test H1, we conducted a series of mediation analyses with a multi-categorical IV. We used PROCESS Model 4 (the sample was repeatedly resampled 5,000 times) and indicator coding of groups with the post-only group, balance group, and support group as the references. The bootstrap analyses showed that none of the indirect effects of comment type on willingness to follow via perceived quality was significant (see Table 3).

4. Discussion

Our research provides a more detailed explanation of the impact of uncivil speech and critical speech found in comments on how people judge a page owner and the page as a whole. Perceived opinion leadership does not serve as a strong and consistent predictor for whether people will decide to follow a Weibo account. It seems that people evaluate social media account pages not as representations of social actors but rather as websites. In addition, this study provides evidence that the number of followers is a key factor in forming judgements about potential opinion leaders on social media. The number of followers has long been considered a metric for judging the popularity of a social media account, an opinion leader, or even an organization and has served as a cue to influence willingness to follow. Our research further clarifies the evaluation process.

4.1. Opinion leader on social media

Opinion leadership comes from the theory of “two-step flow” of communication which emphasizes the importance of opinion leaders who interpret media messages and put them into context ((Lazarsfeld, Berelson, & Gaudet, 1944). Empirical marketing literature has shown that well-informed and visible individuals are often viewed as the most reliable source of information (Katz & Lazarsfeld, 1955; Loeper, Steiner, & Stewart, 2014; Weimann, 1991). In the time of social media, individuals are increasingly reliant on others in their online social network for information and opinion leaders become the aggregators of information for their followers (Bode, 2016; Choi, 2015; Kavanaugh et al., 2006). The affordances of social media can be regarded as an venue for influencing others and contributed as an arena of opinion leadership (Winter & Neubaum, 2016).

In authoritarian regimes, because of low media literacy and the government's control—including blocking—of information, most Internet users cannot get information from original sources. They depend on opinion leaders to be the aggregators and sharers of information from media outside their countries and to provide their opinions and analysis of current issues. Government censorship also lowers the credibility of the state-owned media. Research shows that when audiences have little faith in the news media, they are more likely to reject public opinions disseminated by the news media (Tsfati, 2003). Social media empowers opinion leaders to reach more followers in virtual

space and expand their influence.

4.2. Tone of comments

Page owners can be perceived as potential opinion leaders or social actors; thus, comments can function as information about those actors. Previous studies have shown that evaluations serve as cues informing social judgement (Hilligoss & Rieh, 2008; Metzger, 2007; Metzger et al., 2010; Sundar & Nass, 2001). In Study 1, we found that one-sided uncivil commentary polluted the cyber-environment and reduced people's willingness to follow the opinion leader, while civil but critical comments did not affect evaluations relative to balanced comments. However, the apparent mechanism driving these differences was not social judgement but evaluations of quality. Even if individual posts benefit from a contrast effect, the site as a whole may be harmed by incivility.

These findings are consistent with those of previous studies. For example, one study found that a lower quality of online news comments lowered the credibility of the news websites within the community (Diakopoulos & Naaman, 2011). However, other research has suggested contradictory results for comment tone, and this inconsistency emerges in our data as well. In Study 2, which we conducted one year after Study 1, the tone of the comments had no significant impact on the perceived quality of the post. A possible explanation for the contradictory findings lies in these two studies' focus on Weibo. The so-called "Water Army" or "Fifty-cent Army" uses insulting comments to decrease the credibility of targeted subjects (Han, 2015). Users may have become accustomed to a high ratio of negative-to-positive comments because of these attacks and critics and may even consider them an indicator that a user has something novel or interesting to say. Differences in the topics of the posts or the specifics of the comments may also account for the different results. To suggest that negative comments of any sort are universally likely to lower evaluations of a user or willingness to follow that user is premature. In some circumstances, uncivil comments might have an adverse effect, but neither study found evidence that positive comments boosted the perceived merit of the page.

4.3. Number of followers

In contrast to previous studies, especially those on Facebook and Twitter, our study showed that the number of followers does not serve as a social cue. Previous studies have shown that system-generated cues may be utilized to form impressions or judgements in online environments (Walther et al., 2008). On social media, the number of followers can serve as a system-generated cue and impacted others' perceptions of the account holder (Tong et al., 2008; Westerman et al., 2012). However, our findings imply that the number of followers does not affect other social media users' decisions to follow opinion leaders or their perceptions of opinion leaders' pages. Our exploratory results also demonstrate that the number of followers is not a moderator that affects the influence of negative comments on perceived quality and willingness to follow. One possible explanation is that social media users, particularly Weibo users, understand that the number of followers of an account can be fake; therefore, this factor does not affect users' perception of the page and intention to follow the opinion leaders. Users can hire companies to establish a large number of followers, and the Chinese government has the power to block followers on Weibo (Fu & Chau, 2013).

4.4. Implications and limitations

The results of this study expand our understanding of how users view the pages of potential opinion leaders. As our study shows, perceived opinion leadership is not a predictor of willingness to follow a social media account. Most importantly, the findings indicate a contrast between Weibo users and Western users of social media such as Twitter, who have been the focus of much of the previous research on this topic. To explain this phenomenon, we need to understand the unique environment of social media in China. Weibo uses different technologies to control the platform's timeline and functions, such as sharing a post and following. Users can automatically gain followers by paying the company, and their posts will be shown as a "trending topic" (Auer & Fu, 2015). It is difficult to accurately evaluate public opinion by reviewing online comments, especially since the "Fifty-cent Army" and "Water Army" have been widely reported. Our study uncovered strong evidence that social media users in China use their own strategies to defend themselves in this complicated and sophisticated Internet environment.

At the same time, our findings may also provide clues regarding why Facebook and Twitter users were interested in content provided by non-mainstream media during the 2016 U.S. general election. Social media users judged the quality of an account based on the content of its posts and related comments rather than other social cues, such as established reputation (enjoyed by the mainstream media) and the popularity of an account. Vigorous conflict on social media was not a barrier to appreciation. Even when negative feedback and subscriber numbers challenged the opinion leadership of the account holder, the broader site continued to appeal as a place to argue and challenge authority. Thus, it may be that the kinds of judgement strategies employed by Chinese Weibo users are becoming more common among all social media users.

There were limitations to the findings, and the manipulation checks suggest that the contrast between the conditions may not be as sharp as expected. Because comments are not labelled or identified based upon their tone, it would be necessary for the participants to read or at least skim each comment to identify its tone. To the extent that not all people naturally read comments carefully, this could help explain why the effects were weaker than anticipated. Intention to follow does not necessarily mean that a user will trust the site or consult it regularly.

The further validation of measure perceived opinion leadership should be conducted in future studies. The specific selected issues and the corresponding ideology of the comments regarding those issues might have affected the evaluation separately from the tone. Weibo is an important research context; however, it may differ from other social media in important ways. Comparative research is needed to determine whether the evaluations of comments in this study are based on the specific strategies that users employ in comment sections when they are subject to state intervention.

4.5. Conclusion

In the digital age, especially given the emergence and popularity of social media, online opinion leaders play an increasingly important role in disseminating information and influencing public opinion. In both political and consumer campaigns, governments, commercial organizations, and civil organizations are trying to use opinion leaders strategically to influence and change individual attitudes and behaviors, which makes the study of factors that impact online opinion leaders urgent.

This study extends the previous research on negative comments on social media and distinguishes the different effects of critical and insulting comments. Critical comments create a platform for people to participate in discussions and continue to follow the account, while insulting comments have negative consequences when they dominate the online public sphere. On the one hand, people living under authoritarian regimes have less access to information than people in democratic societies; on the other hand, because they have more experience with a polluted cyber-environment, these users are sometimes have better defenses against or immunity to online trolling. However, in democratic societies, netizens are not vigilant towards network manipulation by state-sponsored trolling; thus, they are more likely to be affected by cues such as organized commenting and fake followers.

Several reports have indicated that in Russia, the government and well-connected businessmen sponsor Russian trolls to manage Twitter accounts, leave comments on news websites, and smear opponents online (Applebaum, 2014). The power of organized online attacks should not be underestimated.

Notes

[1] We also tested the results that used 10-items opinion leadership scale and 15-items scale. First, the associations between original 10-item opinion leadership and willingness of follow are: $r = 0.02, p = .61$ in Study 1 and $r = 0.20, p < .001$ in Study 2. Thus, the results were the same as the 15-item opinion leadership - follow correlation. Second, CFA results indicated that the two-factor model (one was the original 10-item opinion leadership scale and the other one was the newly added five-item scale) did not demonstrate good fit, $\chi^2 = 1491.52$, $p < .001$, CFI = 0.84, SRMR = 0.08, RMSEA = 0.13; nor the 15-item one factor model, $\chi^2 = 3306.16$, $p < .001$, CFI = 0.63, SRMR = 0.11, RMSEA = 0.20, although the Cronbach's alpha was high ($\alpha = 0.92$) and all the factor loadings of PCA (fixed factor = 1) were greater than 0.57. Our results provided implications that although the Noelle-Neumann measure is popular, it often does not do a good job of predicting opinion leadership types of behaviors. Future studies should adopt a different opinion leadership scale. It is noted that predicting opinion leadership was not our research purpose.

[2] We also tested a variable that combined all the engagement variables (i.e., follow, comment, share, recommend, and like) (Cronbach's $\alpha = 0.86$; $M = 4.12$, SD = 1.08) to see whether its performance was equivalent to that of the single item (i.e., follow). Having multiple items in a scale is preferable, but we also wanted to be able to make a direct comparison to the original. Having multiple items generated the same results: the participants in the post-only group ($M = 4.33$, $SD = 1.06$) were more willing to engage with the opinion leader than were the participants in the critical group ($M = 3.97$, $SD = 1.04$), $p = .004$. Perceived quality and engaging with the opinion leader were positively correlated, r (1,039) = 0.50, $p < .001$. All indirect effects of comment type on engaging with the opinion leader via perceived quality were not significant.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.chb.2019.07.005.

References

Adler, M. (1985). Stardom and talent. *The American Economic Review, 75*(1), 208–212.

Applebaum, A. (2014). *A need to contain Russia.* The Washington Post. Retrieved from https://www.washingtonpost.com/opinions/anne-applebaum-a-need-to-contain-russia/2014/03/20/8f2991dc-b06b-11e3-9627-c65021d6d572_story.html?utm_term=.c810e08bf9d3.

Auer, M., & Fu, K. W. (2015). Clearing the air: Investigating Weibo censorship in China: New research to show censorship of microbloggers who spoke out about pollution documentary. *Index on Censorship, 44*(3), 76–79. https://doi.org/10.1177/0306422015605724.

Axsom, D., Yates, S., & Chaiken, S. (1987). Audience response as a heuristic cue in persuasion. *Journal of Personality and Social Psychology, 53*(1), 30–40. https://doi.org/10.1037/0022- 3514.53.1.30.

Ballantine, P. W., Lin, Y., & Veer, E. (2015). The influence of user comments on perceptions of Facebook relationship status updates. *Computers in Human Behavior, 49*(1), 50–55. https://doi.org/10.1016/j.chb.2015.02.055.

Black, J. S. (1982). Opinion leaders: Is anyone following? *Public Opinion Quarterly, 46*(2), 169–176. https://doi.org/10.1086/268711.

Bloch, P. H., & Richins, M. L. (1983). A theoretical model for the study of product importance perceptions. *Journal of Marketing, 47*(3), 69–81. https://doi.org/10.1177/002224298304700308.

Blom, R., Carpenter, S., Bowe, B. J., & Lange, R. (2014). Frequent contributors within U.S. newspaper comment forums: An examination of their civility and information value. *American Behavioral Scientist, 58*(10), 1314–1328. https://doi.org/10.1177/0002764214527094.

Bode, L. (2016). Political news in the news feed: Learning politics from social media. *Mass Communication & Society, 19*(1), 24–48. https://doi.org/10.1080/15205436.2015.1045149.

Borah, P. (2013). Interactions of news frames and incivility in the political blogosphere: Examining perceptual outcomes. *Political Communication, 30*(3), 456–473. https://doi.org/10.1080/10584609.2012.737426.

Chan, K. K., & Misra, S. (1990). Characteristics of the opinion leader: A new dimension. *Journal of Advertising, 19*(3), 53–60. https://doi.org/10.1080/00913367.1990.10673192.

Cheng, J., Bernstein, M., Danescu-Niculescu-Mizil, C., & Leskovec, J. (2017). Anyone can become a troll: Causes of trolling behavior in online discussions. *Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing* (pp. 1217–1230). . https://doi.org/10.1145/2998181.2998213.

Choi, S. (2015). The two-step flow of communication in Twitter-based public forums. *Social Science Computer Review, 33*(6), 696–711. https://doi.org/10.1177/0894439314556599.

Cialdini, R. B., & Goldstein, N. J. (2004). Social influence: Compliance and conformity. *Annual Review of Psychology, 55*(1), 591–621. https://doi.org/10.1146/annurev.psych.55.090902.142015.

Coe, K., Kenski, K., & Rains, S. A. (2014). Online and uncivil? Patterns and determinants of incivility in newspaper website comments. *Journal of Communication, 64*(4), 658–679. https://doi.org/10.1111/jcom.12104.

Confessore, N., Dance, G. J. X., Harris, R., & Hansen, M. (2018). *The follower factory.* The New York Times. Retrieved from https://www.nytimes.com/interactive/2018/01/27/technology/social-media-bots.html.

Cresci, S., Di Pietro, R., Petrocchi, M., Spognardi, A., & Tesconi, M. (2015). Fame for sale: Efficient detection of fake Twitter followers. *Decision Support Systems, 80*(1), 56–71. https://doi.org/10.1016/j.dss.2015.09.003.

Diakopoulos, N., & Naaman, M. (2011). Towards quality discourse in online news comments. *Proceedings of the ACM 2011 Conference on computer supported Cooperative Work* (pp. 133–142). . https://doi.org/10.1145/1958824.1958844.

Fu, K. W., & Chau, M. (2013). Reality check for the Chinese microblog space: A random sampling approach. *PLoS One, 8*(3), e58356. https://doi.org/10.1371/journal.pone.0058356.

Fu, W. W., & Sim, C. C. (2011). Aggregate bandwagon effect on online videos' viewership: Value uncertainty, popularity cues, and heuristics. *Journal of the American Society for Information Science and Technology, 62*(12), 2382–2395. https://doi.org/10.1002/asi.21641.

Han, R. (2015). Defending the authoritarian regime online: China's "voluntary fifty-cent army". *The China Quarterly, 224*(1), 1006–1025. https://doi.org/10.1017/S0305741015001216.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach.* New York, NY: Guilford Press.

Hayes, A. F., & Montoya, A. K. (2017). A tutorial on testing, visualizing, and probing an interaction involving a multicategorical variable in linear regression analysis. *Communication Methods and Measures, 11*(1), 1–30. https://doi.org/10.1080/19312458.2016.1271116.

Hilligoss, B., & Rieh, S. Y. (2008). Developing a unifying framework of credibility assessment: Construct, heuristics, and interaction in context. *Information Processing & Management, 44*(4), 1467–1484. https://doi.org/10.1016/j.ipm.2007.10.001.

Hlavach, L., & Freivogel, W. H. (2011). Ethical implications of anonymous comments posted to online news stories. *Journal of Mass Media Ethics, 26*(1), 21–37. https://doi.org/10.1080/08900523.2011.525190.

Hong, S. (2012). Online news on Twitter: Newspapers' social media adoption and their online readership. *Information Economics and Policy, 24*(1), 69–74. https://doi.org/10.1016/j.infoecopol.2012.01.004.

Houston, J. B., Hansen, G. J., & Nisbett, G. S. (2011). Influence of user comments on perceptions of media bias and third-person effect in online news. *Electronic News, 5*(2), 79–92.

Huang, Z. (2017). *China's Twitter clone will soon have more users than Twitter. Quartz.* Retrieved from https://qz.com/918410/chinas-twitter-clone-sina-weibo-wb-will-soon-have-more-users-than-twitter-twtr/.

Huang, R., & Sun, X. (2014). Weibo network, information diffusion and implications for collective action in China. *Information, Communication & Society, 17*(1), 86–104. https://doi.org/10.1080/1369118X.2013.853817.

Kaplan, A. M., & Haenlein, M. (2011). The early bird catches the news: Nine things you should know about micro-blogging. *Business Horizons, 54*(2), 105–113. https://doi.org/10.1016/j.bushor.2010.09.004.

Katz, E. (1957). The two-step flow of communication: An up-to-date report on an hypothesis. *Public Opinion Quarterly, 21*(1), 61–78. https://doi.org/10.1086/266687.

Katz, E., & Lazarsfeld, P. F. (1955). *Personal influence. Glencoe.* IL: The FreePress.

Kavanaugh, A., Zin, T. T., Carroll, J. M., Schmitz, J., Pérez-Quiñones, M., & Isenhour, P. (2006). When opinion leaders blog: New forms of citizen interaction. *Proceedings of the 2006 International Conference on digital government research* (pp. 79–88). . https://doi.org/10.1145/1146598.1146628.

Kim, Y. (2015). Exploring the effects of source credibility and others' comments on online news evaluation. *Electronic News, 9*(3), 160–176. https://doi.org/10.1177/1931243115593318.

Lazarsfeld, P., Berelson, B., & Gaudet, H. (1944). *The people's choice: How the voter makes up his mind in a presidential campaign.* New York, NY: Columbia University Press.

Lee, H. (2005). Behavioral strategies for dealing with flaming in an online forum. *The Sociological Quarterly, 46*(2), 385–403. https://doi.org/10.1111/j.1533-8525.2005.00017.x.

Lee, E.-J. (2012). That's not the way it is: How user-generated comments on the news affect perceived media bias. *Journal of Computer-Mediated Communication, 18*(1), 32–45. https://doi.org/10.1111/j.1083-6101.2012.01597.x.

Lee, J. Y., & Sundar, S. S. (2013). To tweet or to retweet? That is the question for health

professionals on twitter. *Health Communication, 28*(5), 509–524. https://doi.org/10.1080/10410236.2012.700391.
Li, G., Li, G., & Kambele, Z. (2012). Luxury fashion brand consumers in China: Perceived value, fashion lifestyle, and willingness to pay. *Journal of Business Research, 65*(10), 1516–1522. https://doi.org/10.1016/j.jbusres.2011.10.019.
Loeper, A., Steiner, J., & Stewart, C. (2014). Influential opinion leaders. *The Economic Journal, 124*(581), 1147–1167. https://doi.org/10.1111/ecoj.12100.
Luqiu, L. R., & Schmierbach, M. (2016). *Be a "defensive user": A study of opinion leaders on Chinese Weibo.* Minneapolis, MN: Paper presented at AEJMC 2016.
Messing, S., & Westwood, S. J. (2014). Selective exposure in the age of social media: Endorsements Trump partisan source affiliation when selecting news online. *Communication Research, 41*(8), 1042–1063. https://doi.org/10.1177/0093650212466406.
Metzger, M. J. (2007). Making sense of credibility on the Web: Models for evaluating online information and recommendations for future research. *Journal of the American Society for Information Science and Technology, 58*(13), 2078–2091. https://doi.org/10.1002/asi.20672.
Metzger, M. J., & Flanagin, A. J. (2013). Credibility and trust of information in online environments: The use of cognitive heuristics. *Journal of Pragmatics, 59*(B), 210–220. https://doi.org/10.1016/j.pragma.2013.07.012.
Metzger, M. J., Flanagin, A. J., & Medders, R. (2010). Social and heuristic approaches to credibility evaluation online. *Journal of Communication, 60*(3), 413–439. https://doi.org/10.1111/j.1460-2466.2010.01488.x.
Momeni, E., Tao, K., Haslhofer, B., & Houben, G. J. (2013). Identification of useful user comments in social media: A case study on Flickr commons. *Proceedings of the 13th ACM/IEEE-CS Joint Conference on digital Libraries* (pp. 1–10). . https://doi.org/10.1145/2467696.2467711.
Moor, P. J. (2007). *Conforming to the flaming norm in the online commenting situation.* Unpublished research paper. Retrieved from http://essay.utwente.nl/58838/.
Mussweiler, T. (2003). Comparison processes in social judgment: Mechanisms and consequences. *Psychological Review, 110*(3), 472–489. https://doi.org/10.1037/0033-295X.110.3.472.
Myers, J. H., & Robertson, T. S. (1972). Dimensions of opinion leadership. *Journal of Marketing Research, 9*(1), 41–46. https://doi.org/10.2307/3149604.
Nguyen, L. T., Wu, P., Chan, W., Peng, W., & Zhang, Y. (2012). Predicting collective sentiment dynamics from time-series social media. *Proceedings of the first International Workshop on issues of Sentiment Discovery and opinion mining* (pp. 1–8). . https://doi.org/10.1145/2346676.2346682.
Nisbet, M. C., & Kotcher, J. E. (2009). A two-step flow of influence? Opinion-leader campaigns on climate change. *Science Communication, 30*(3), 328–354. https://doi.org/10.1177/1075547008328797.
Noelle-Neumann, E. (1985). Identifying opinion leaders. *Broadening the Uses of research: 38th Esomar Congress, Wiesbaden (FRG), general Sessions* (pp. 173–219). Amsterdam, Netherlands: Esomar.
Prochazka, F., Weber, P., & Schweiger, W. (2016). Effects of civility and reasoning in user comments on perceived journalistic quality. *Journalism Studies, 19*(1), 1–17. https://doi.org/10.1080/1461670X.2016.1161497.
Relling, M., Schnittka, O., Sattler, H., & Johnen, M. (2016). Each can help or hurt: Negative and positive word of mouth in social network brand communities. *International Journal of Research in Marketing, 33*(1), 42–58. https://doi.org/10.1016/j.ijresmar.2015.11.001.
Rogers, E. M., & Shoemaker, F. F. (1971). *Communication of innovations: A cross-cultural approach.* New York, NY: The Free Press.
Schäfer, M. S., & Taddicken, M. (2015). Mediatized opinion leaders: New patterns of opinion leadership in new media environments? *International Journal of Communication, 9*(1), 960–981.
Schenk, M., & Döbler, T. (2002). Towards a theory of campaigns: The role of opinion leaders. In H.-D. Kingemann, & A. Rommele (Eds.). *Public information campaigns & opinion research: A handbook for the student & practitioner* (pp. 37–51). London, UK: Sage.
Schenk, M., & Rössler, P. (1997). The rediscovery of opinion leaders. An application of the personality strength scale. *Communications, 22*(1), 5–30. https://doi.org/10.1515/comm.1997.22.1.5.
Sikorski, C. (2016). The effects of reader comments on the perception of personalized scandals: Exploring the roles of comment valence and commenters' social status. *International Journal of Communication, 10*(1), 4480–4501.
Snyder, L. B., Hamilton, M. A., Mitchell, E. W., Kiwanuka-Tondo, J., Fleming-Milici, F., & Proctor, D. (2004). A meta-analysis of the effect of mediated health communication campaigns on behavior change in the United States. *Journal of Health Communication, 9*(S1), 71–96. https://doi.org/10.1080/10810730490271548.
Spierings, N., & Jacobs, K. (2014). Getting personal? The impact of social media on preferential voting. *Political Behavior, 36*(1), 215–234. https://doi.org/10.1007/s11109-013-9228-2.
Sundar, S. S. (2000). Multimedia effects on processing and perception of online news: A study of picture, audio, and video downloads. *Journalism & Mass Communication Quarterly, 77*(3), 480–499. https://doi.org/10.1177/107769900007700302.
Sundar, S. S., & Nass, C. (2001). Conceptualizing sources in online news. *Journal of Communication, 51*(1), 52–72. https://doi.org/10.1111/j.1460-2466.2001.tb02872.x.
Thorson, K., Vraga, E., & Ekdale, B. (2010). Credibility in context: How uncivil online commentary affects news credibility. *Mass Communication & Society, 13*(3), 289–313. https://doi.org/10.1080/15205430903225571.
Tong, S. T., Van Der Heide, B., Langwell, L., & Walther, J. B. (2008). Too much of a good thing? The relationship between number of friends and interpersonal impressions on Facebook. *Journal of Computer-Mediated Communication, 13*(3), 531–549. https://doi.org/10.1111/j.1083-6101.2008.00409.x.
Tormala, Z. L., & Clarkson, J. J. (2007). Assimilation and contrast in persuasion: The effects of source credibility in multiple message situations. *Personality and Social Psychology Bulletin, 33*(4), 559–571. https://doi.org/10.1177/0146167206296955.
Tsfati, Y. (2003). Media skepticism and climate of opinion perception. *International Journal of Operational Research, 15*(1), 65–82. https://doi.org/10.1093/ijpor/15.1.65.
Turcotte, J., York, C., Irving, J., Scholl, R. M., & Pingree, R. J. (2015). News recommendations from social media opinion leaders: Effects on media trust and information seeking. *Journal of Computer-Mediated Communication, 20*(5), 520–535. https://doi.org/10.1111/jcc4.12127.
Van Eck, P. S., Jager, W., & Leeflang, P. S. (2011). Opinion leaders' role in innovation diffusion: A simulation study. *Journal of Product Innovation Management, 28*(2), 187–203. https://doi.org/10.1111/j.1540-5885.2011.00791.x.
Walther, J. B., DeAndrea, D., Kim, J., & Anthony, J. C. (2010). The influence of online comments on perceptions of antimarijuana public service announcements on YouTube. *Human Communication Research, 36*(4), 469–492. https://doi.org/10.1111/j.1468- 2958.2010.01384.x.
Walther, J. B., Van Der Heide, B., Kim, S. Y., Westerman, D., & Tong, S. T. (2008). The role of friends' appearance and behavior on evaluations of individuals on Facebook: Are we known by the company we keep? *Human Communication Research, 34*(1), 28–49. https://doi.org/10.1111/j.1468-2958.2007.00312.x.
Weeks, B. E., Ardèvol-Abreu, A., & Gil de Zúñiga, H. (2015). Online influence? Social media use, opinion leadership, and political persuasion. *International Journal of Operational Research, 29*(2), 214–239. https://doi.org/10.1093/ijpor/edv050.
Weimann, G. (1991). The influentials: Back to the concept of opinion leaders? *Public Opinion Quarterly, 55*(2), 267–279. https://doi.org/10.1086/269257.
Weimann, G., Tustin, D. H., Van Vuuren, D., & Joubert, J. P. R. (2007). Looking for opinion leaders: Traditional vs. modern measures in traditional societies. *International Journal of Public Opinion Research, 19*(2), 173–190. https://doi.org/10.1093/ijpor/edm005.
Westerman, D., Spence, P. R., & Van Der Heide, B. (2012). A social network as information: The effect of system generated reports of connectedness on credibility on Twitter. *Computers in Human Behavior, 28*(1), 199–206. https://doi.org/10.1016/j.chb.2011.09.001.
Whitehead, J. C. (2006). Improving willingness to pay estimates for quality improvements through joint estimation with quality perceptions. *Southern Economic Journal, 73*(1), 100–111. https://doi.org/10.2307/20111876.
Winter, S., Brückner, C., & Krämer, N. C. (2015). They came, they liked, they commented: Social influence on Facebook news channels. *Cyberpsychology, Behavior, and Social Networking, 18*(8), 431–436. https://doi.org/10.1089/cyber.2015.0005.
Winter, S., & Neubaum, G. (2016). Examining characteristics of opinion leaders in social media: A motivational approach. *Social Media + Society, 2*(3), 1–12. https://doi.org/10.1177/2056305116665858.
Witteman, H. O., Fagerlin, A., Exe, N., Trottier, M. E., & Zikmund-Fisher, B. J. (2016). One- sided social media comments influenced opinions and intentions about home birth: An experimental study. *Health Affairs, 35*(4), 726–733. https://doi.org/10.1377/hlthaff.2015.1382.
Wolny, J., & Mueller, C. (2013). Analysis of fashion consumers' motives to engage in electronic word-of-mouth communication through social media platforms. *Journal of Marketing Management, 29*(5–6), 562–583. https://doi.org/10.1080/0267257X.2013.778324.
Wong, M. (2013). *7 ways to celebrate Chinese New Year.* CNN. Retrieved from http://travel.cnn.com/7-ways-celebrate-chinese-new-year-395376/.
Wu, S., Hofman, J. M., Mason, W. A., & Watts, D. J. (2011). Who says what to whom on Twitter. *Proceedings of the 20th International Conference on World Wide Web* (pp. 705–714). . https://doi.org/10.1145/1963405.1963504.
Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing, 60*(2), 31–46. https://doi.org/10.2307/1251929.
Zhang, J. Q., Craciun, G., & Shin, D. (2010). When does electronic word-of-mouth matter? A study of consumer product reviews. *Journal of Business Research, 63*(12), 1336–1341. https://doi.org/10.1016/j.jbusres.2009.12.011.
Zhu, X. H., Shan, X. G., Liu, P. F., Lu, Y. C., & Qi, S. H. (2014). *2013 China Internet Public Opinion Analysis Report.* People.cn. Retrieved from http://yuqing.people.com.cn/n/2014/0318/c364391-24662668.html.
Zhang, Y., & Lu, J. (2016). Discover millions of fake followers in Weibo. *Social Network Analysis and Mining, 6*(1), 1–16. https://doi.org/10.1007/s13278-016-0324-2.