

Angry Friends, Happy Crowd: How the Emotionally Charged Content Influences Online Behavior

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Abstract: Social media are becoming new venues for more and more people to get information, express opinions, and connect with others. Various online communication behaviors carry and, meanwhile, are influenced by certain emotions. This study adopted a mixed method of survey and in-depth interviews to examine how the emotionally loaded content influenced people's online engagement. The targeted population focused on those active users on Chinese social media. The results revealed a unique phenomenon on social media in post-Covid China that both joy and anger attracted greater attention and more interaction. Also, the emotion of shock turned out to be unexpectedly influential on people's sharing behavior. It ranked ahead of anger and was second only to joy in getting people's attention. Furthermore, this study found that the content virality depended on the intended audience group—that people tended to forward the angry messages to friends in private and retweet the joyful content publicly. These findings added nuances to previous literature concerning the role of emotions on social media. It reflected a relatively new reality of the post-Covid online phenomena in China.

Keywords: emotions, joy, anger, shock, social media, online communication

1. Introduction

With the rise of social media, people are spending more time online. Data from the Harris Poll shows that 59% of people share online content with others frequently. And according to a report in The New York Times, sharing online content is becoming such a routine of our everyday life that every four seconds someone tweets a New York Times story [1].

While many social media users are interested in sharing factual information they find on social media, one of the prominent driving forces of sharing is emotion. As Derks et al. [2] pointed out, online communication not only exchanges information but also transfers emotions. Growing attention has been paid to the vital role of emotions in past decades. Scholars have considered the different effects of positive and negative emotions. Anger and happiness are the key emotions studied in investigations of the influences on people's online sharing behaviors [3-8]. The purpose of this study is to look at whether people are more likely to engage in happy and angry content compared to other kinds of emotional messages online. Further, it explores how anger- and joy-tinged content impacts online behaviors, especially online sharing. How do angry and happy messages contribute to sharing of online content differently? This study reviews the relevant literature, followed by methods and

findings of the study. A discussion of the study's limitations will also be included at the end of this paper.

2. Literature Review

For decades, scholars have been researching the role of emotions in human lives. Studies have shown that emotions have ubiquitous influences in our social lives, such as in negotiation, leadership, conflict resolution, and political behaviors [9-11]. Emotions can be communicated through social and interpersonal interactions and are transferable among people during these processes [12,13]. Psychologists Hatfield and Cacioppo [14] came up with the term "emotional contagion" and defined it as "the tendency to automatically mimic and synchronize expressions, vocalizations, postures, and movements with those of another person's and, consequently, to converge emotionally" (p. 96). Hatfield and Cacioppo also pointed out that such contagion could be completed with stunning rapidity and often takes place without detection. They indicated that others around were very likely to experience a similar emotional status with the emotional individuals, thus contributing to the synchronized, collective behavior, which might happen without people's awareness. From this perspective, understanding emotions' contagious influences could help interpret the pattern of collective behaviors under a specific type of emotion. Thus, it was reasonable to say that different emotions would contribute to different behaviors. A very vivid example used by Fan, Xu and Zhao [15] in their article was the scenario of road rage, in which they depicted that the negative emotions of aggression, anger, etc. spread swiftly among drivers during rush hour, producing a collective tendency of uncivil language and rude behaviors.

Earlier studies assorted emotions into two general categories: positive and negative. Though scholars were on the same page, admitting that emotions indeed influenced people's behaviors, they held divergent opinions concerning the salience and potency of positive and negative emotions that are operative. Some said negative emotions were more potent in motivating people than their positive counterparts [7,15]. They claimed that negative emotions could spread faster than positive ones and incite people to take more rash actions. For example, Godes et al. [16] argued that people seemingly preferred to transmit information that contained negative emotions during social interaction in a firm. Other researchers contended, however, that positive emotions were more salient than negative ones, and that information fraught with positive emotion would be more viral [3]. Wojnicki and Godes [17] suggested that people tended to share positive things to achieve self-enhancement, thus reflecting positively on themselves and making their friends feel good rather than bad.

As people spend more time on digital media, scholars put more effort into examining whether the influence of emotion on people's online communication mimics in-person interaction and activities such as political discussions. Goldenberg and Gross [6] found that there was indeed digital emotion contagion. Their article stated that exposure to others' online emotional expressions tends to make people express similar emotions. Also, increased exposure seemed to lead to stronger contagion.

Just as emotions can be contagious in traditional face-to-face interaction, emotions also play a significant role in influencing behaviors in digitally mediated environments [4, 6, 9]. For instance, Brader [9] proposed that online campaign ads could affect voting behaviors by cueing emotions seen in offline political campaigns. He conducted two experiments (focusing respectively on enthusiasm and fear) during an actual election to test his hypothesis. Brader's work demonstrated that political ads could change the way citizens get involved and that the voters could make choices simply by appealing to emotions. However, the experimental design of this study neglected some external factors, including contextual variations and the existence of competing ads from other candidates; in so doing, the study sacrificed external validity to a certain degree.

Another research that confirmed the vital role of emotion in online social networks was from Stieglitz and Dang-Xuan [18]. Retweets and reposts on social media can be regarded as a prominent

representation of content's virality. To investigate whether the emotions that occurred in political tweets can affect the quantity of retweets, Stieglitz and Dang-Xuan [18] examined communication on Twitter dealing with two specific political elections in Germany in 2011. They presumed affective messages (with both positive and negative emotions) would trigger more attention and participation. The more affective expressions a political tweet contains, the more often it was retweeted. As expected, they found that messages featuring more words associated with affective processes indeed triggered more retweets. More specifically, both positive and negative emotions articulated in tweets make them more likely to spread through the Twitter network. However, tweets with negative sentiment seemed to induce slightly more retweets on average. This further suggested that future investigations of emotions' influence online needed to consider specific categories of sentiments.

Likewise, in their study, Brady et al. [4] confirmed that emotion can facilitate the dissemination of content on social media. Building on Stieglitz and Dang-Xuan's [18] finding, Brady and his colleagues analyzed actual tweets from Twitter to examine how emotionally tinged messages about moralized content were transmitted through social networks. The results supported that the expression of moral emotion was vital for spreading moral and political ideas in online social networks: the presence of emotional words in messages increased their diffusion by a factor of 20% for each additional affective word. Together with Stieglitz and Dang-Xuan's [18] work, Brady and his colleagues' study mitigated the aforementioned experimental limitations in Brader [9]'s setting and increased the external validity. Yet, as emotions were only roughly divided into classes of "moral emotions" and "nonmoral emotions" in this study, the authors suggested that future research was needed in looking at more fine-grained subcategories.

The studies discussed above were all based on American and European countries' digital media environment. And as the Chinese social media network is developing at a stunning speed, more attention has been paid to Chinese online phenomena. Xiong et al. [8] provided valuable insights and perspectives from China. They took Sina Weibo, the most famous microblogging platform in China, for emotion analysis and conducted extensive research on the dynamic evolution of collective emotions. Xiong et al. discovered the phenomenon of emotion synchronization—that individuals preferred to have similar emotions with friends in online social media networks; the stronger the relationship, the more common in emotional expression. In other words, their study supported that the emotion could spread from one person to another online. However, the broadness of emotion classification was also an unneglectable limitation of this study—the scholars divided online emotions into three broad categories: positive, negative, and neutral. Recent scholarship has followed up on this research, investigating the influence of specific emotions like happiness, anger, sadness, embarrassment, etc. on virality.

Scholars continue to debate whether positive or negative content is more widespread and influential. Many have found that negative emotions contribute to more shares and are more powerful than positive emotions [5, 15, 19]. For example, according to Chmiel et al. [19], negative emotions drove Internet discussions; and users with more negative emotions tended to write more posts in online BBC fora. Fan and his colleagues [15] offered evidence that anger spreads faster than joy in social media; social media posts expressing anger appeared more contagious and preferred weak ties in social networks. Fan et al. examined the neutral and emotional postings in Weibo (a Twitter-equivalent Chinese social media platform) to explore the detailed mechanism of emotion contagion. Results revealed that angry tweets appeared to spread faster and wider than joyful ones. Anger, thus, had a greater capacity than joy to break local community boundaries to reach a larger audience. This study filled in the gaps of the previously mentioned literature, which roughly divided emotions into positive and negative categories, and zoomed in on two specific emotions: anger and joy.

Moreover, like Xiong et al.'s [8] study, Fan et al. denoted that the phenomenon of online emotional contagion exists not only in America and Europe but also in Asia. However, as Fan and his colleagues

[15] only looked at Weibo, a China-centric social media platform, cultural backgrounds may have played a role that was not fully investigated. Chuai and Zhao [5] provided additional perspectives. They observed that fake news was more viral because it carried more anger and less joy than real news. More importantly, based on data from Weibo, Twitter, and other mainstream online news, they found that the virality of “angry news” is independent of the platform.

As increasing attention is paid to anger, scholars have become more curious about how anger influences other online behaviors than just information diffusion. Valentino et al. [7] examined the impact of anger and another distinct emotion, fear, in constituents’ online political behaviors. Though some prior literature claimed negative emotions overall would have similar effects on people’s political behavior, it suggested the possibility that anger and fear work differently. Indeed, the results of Valentino et al. [7]’s work showed that anger depressed both the quality and quantity of information seeking; on the contrary, fear boosted information seeking and learning. Their study supported the distinct impact of anger and fear in people’s online political behavior. The findings showed that anger could dampen the use of factual information and make people take actions online without many deliberations. At the same time, fear motivated people to reassess their existing beliefs and incited further information-seeking, which might discourage reckless actions, such as voting exclusively on the basis of personal preference, personal ideology, or candidates’ character traits.

Another research concerning the impacts of anger and fear in politics-oriented digital behavior was from Wollebæk et al. [20]. They investigated the extent to which the emotions of anger and fear impact information-seeking and online debate. They drew data from the 10th wave of the Norwegian Citizen Panel in November 2017. They found that angry people were more likely to engage in debates with people having both similar and opposing views. Further, angry people more frequently sought out information that confirmed their views. Fearful individuals, by contrast, tended to seek out information that contradicted their opinions. The research confirmed that anger reinforced people’s existing beliefs and fortified echo chamber and trench warfare dynamics in the digital public sphere, while fear counteracted these dynamics, for fear motivated people to learn more heterogeneous knowledge and increased people’s exposure to opposing views. Wollebæk et al.’s study observed that emotions such as anger did have an impact on a wide range of online behaviors.

Some scholars, however, found that positive contents are more viral overall than negative ones [3, 17]. Berger and Milkman [3] found that articles that carry positive emotions, overall, appeared to be more viral than their negative counterparts through the analysis of around 7,000 articles from New York Times. However, they also observed that several negative emotions appeared to be positively associated with virality. Fear- and anger-inducing content were both more likely to make the most emailed list among the analyzed NY Times articles. In fact, they found out that the most powerful predictor of virality was how much anger an article evoked. In this regard, though Berger and Milkman endorsed a position that messages with positive emotions could be more viral than negative ones, they also admitted that some negative emotions like anger indeed boosted sharing. Their study further elucidated the impact of anger on online communication behaviors.

Berger and Milkman [3] posed new questions concerning online content sharing: is it possible that both negative and positive emotions could boost content sharing? Hansen and his colleagues [21] showed that such postulation is likely—although perhaps depending on the intended audience. Besides the emotion it contains, Hansen and his colleagues contended that the determining factor of a message’s retweetability was the broadness of the intended audience. They found that negative emotions promoted retweetability among the general audience in the news segment, while positive emotions enhanced virality among close friends in the non-news segment. Hansen and colleagues summarized, “If you want to be cited: Sweet talk your friends or serve bad news to the public” (p.41). Their study thus unraveled the long-debated enigma whether positive or negative emotions contribute to online diffusion of content.

Current literature has made significant progress in exploring the effect of emotions on both offline and online behavior, especially on how they are contagious and help spread the message. It is necessary to investigate whether the two incompatible emotions of anger and happiness contribute concurrently to the virality of online content sharing among different audiences.

3. Methods

This study used mixed methods conducting surveys and in-depth interviews. The online questionnaire investigates what social media platforms respondents usually use, the kinds of content that attract them, and relevant online actions they took or will take after seeing certain content (especially anger-laden or joy-laden ones). Participants were college students and young adults, of both genders, 18-28, who speak Chinese. Those who did not use social media were excluded. The goal was to look at what emotions in content contributed to online engagement; it paid special attention to exploring the relationship between anger-/joy-loaded content and online sharing behaviors. In-depth interviews were of two kinds: one was follow-up interviews which targeted those who answered the last two optional short-comment questions in the survey; the other was independent of the survey and intentionally selected those who did not take the online survey to avoid overlaps to probe for more nuances. The interviewees who didn't participate in the survey were recruited by recommendations of the survey participants. During the interview, respondents were welcomed to freely share other related feelings or actions they took after viewing or receiving emotionally charged messages. Participants were encouraged to pass on the survey link to friends and recommend other people who might be interested in participating in the interview.

According to SurveyAnyplace, the average response rate of online surveys is around 30%. Monetary incentives were provided to boost the response rate: the participants had a chance to draw a lottery. I adopted an online survey due to my limited resources to recruit enough qualified interviewers. An online survey may also help reduce interviewer bias. However, an online survey, compared with interviews, may suffer other limitations such as low response rate. Thus, online surveys and interviews complemented each other. Due to the influence of Covid-19, the current study chose to interview via telephone and Zoom meeting to overcome regional traveling restrictions and also reduce unnecessary physical contact.

The study aims to explore Chinese online behavior, so the targeted participants were those who currently reside in Mainland China and those who were active users on Chinese social media. And the survey and interviews were conducted in Chinese.

The study sample was composed of 111 subjects, who participated and completed the online survey. After excluding those who did not use social media, the final effective responses were 108. There were 34 of them who responded to the last two optional short-comment questions; 13 of them agreed to accept follow-up interviews. The two short-comment questions asked respondents to recall and describe a currently heated topic on social media that made them either happy or angry and further inquired about the kinds of online actions they took after seeing those content. The follow-up interviews were then conducted based on their answers to the two questions. The interviews of those who did not partake in the online surveys yielded 10 effective responses.

The majority (91.89%) of the respondents lived in Mainland China when the survey was conducted. Others resided in Hong Kong/Macau/Taiwan (2.7%) and overseas (5.41%), while all were Chinese and active users of Chinese social media. This ensured that the sample reflected the population of Chinese users of social media. The survey showed that the two frequently used social media platforms were, first, WeChat (including the WeChat Moment), followed by Sina Weibo, a twitter-like Chinese microblogging platform. It was congruent with the data from Azoya Group, an award-winning China e-commerce expert, showing that WeChat and Sina Weibo topped the first and second popular social media platforms in China in 2021, which was the time when this study was carried out.

All the online questionnaires were translated and proofread by professional translators. Interviews were recorded, transcribed, and translated as well.

4. Findings

Overall, the online survey results suggest that happy and angry content, indeed, is more likely to win greater clicks than other emotions such as sadness and fear. As expected, happiness and anger also produce greater willingness of online engagement, like retweeting, commenting, writing original posts, and forwarding to friends.

When asked what kinds of emotional content they would like to click on, the respondents chose happy (including funny), shocking (including surprising), and angry as the top three emotions that got their attention. Happy and angry emotions ranked ahead of other emotions, respectively yielding results of 4.46 and 3.37 on a 5-point scale. However, unexpectedly, the emotion of shock placed the second, ranking ahead of the angry one (See Table 1 below).

The first premise of viral for content is to successfully get audience's attention. The results indicated that, among the popular emotions online, joy, shock, and anger were the ones that had greater potential to go viral. Happy also earned the highest percentage of the "very likely" choice among all the emotions, which implied the greatest possibility of its virality. In fact, happy and shocking emotional content displayed far higher scores above the average score (3.55), while the angry content was just around the average score. This might suggest that although the three emotions contributed to greater attention of users to click on, the happy and shocking ones were more significant than their angry counterparts.

Table 1: The kind of emotional online content that the respondents would like to click on.

Title\Options	Very Unlikely	Unlikely	Not Sure	Likely	Very Likely	Average Score
Happy (Including Funny)	3 (2.78%)	0(0%)	3 (2.78%)	40 (37.04%)	62 (57.41 %)	4.46
Shocking (Including Surprising)	5 (4.63%)	1 (0.93%)	20 (18.52%)	40 (37.04%)	42 (38.89%)	4.05
Angry	7 (6.48%)	12 (11.11%)	38 (35.19%)	36 (33.33%)	15 (13.89%)	3.37
Fearful	16 (14.81%)	20 (18.52%)	44 (40.74%)	17 (15.74%)	11 (10.19%)	2.88
Sad	10 (9.26%)	19 (17.59%)	49 (45.37 %)	20 (18.52%)	10 (9.26%)	3.01
Subtotal	41 (7.59%)	52 (9.63%)	154 (28.52%)	153 (28.33%)	140 (25.93%)	3.55

As for the probability of online engagement, the results were consistent with the previous question on the willingness to pay attention, that happy (including funny), shocking (including surprising), and angry content made the top three among all the popular emotions online. Happy content was also marked as the most likely to be shared. (See Table 2 below). The same tendency appeared in the interviews as well. Ten of the interviewees not involved in the survey indicated that they were more interested in joyful, shocking, and angry content than fearful and sad ones and were more inclined to engage in either retweeting, commenting, or forwarding to friends.

Yet, when the interviewer further asked which of the emotions listed in Table 2 was the most likely and the least likely for them to engage in (including share, comment, and forward to friends, etc.), 6

interviewees chose “happy messages” to be the most likely one; 4 admitted that they would choose the angry message. The “least likely” choices include “sad” and “fearful” messages. And no one chose “no” to happiness, which agreed with the survey results. Likewise, none of them chose “shocking” content as the most likely or the least likely. 7 of the interviewees responded that they might also engage in posts that contained shocking emotions, but usually, shocking posts would not be their first choice of retweeting or commenting.

Table 2: The kind of emotional online content that the respondents would like to share/comment/forward to friends.

Title\Options	Least Unlikely	Unlikely	Not Sure	Likely	Most Likely	Average Score
Happy (Including Funny)	7 (6.48%)	2 (1.85%)	8 (7.41%)	35 (32.41%)	56 (51.85%)	4.21
Shocking (Including Surprising)	12 (11.11%)	15 (13.89%)	17 (15.74%)	35 (32.41%)	29 (26.85%)	3.5
Angry	20 (18.52%)	16 (14.81%)	32 (29.63%)	22 (20.37%)	18 (16.67%)	3.02
Fearful	30 (27.78%)	28 (25.93%)	32 (29.63%)	10 (9.26%)	8 (7.41%)	2.43
Sad	24 (22.22%)	25 (23.15%)	37 (34.26%)	15 (13.89%)	7 (6.48%)	2.59
Subtotal	93 (17.22%)	86 (15.93%)	126 (23.33%)	117 (21.67%)	118 (21.5%)	3.15

As “shocking” emotion appeared rather significant in the survey results, which was unexpected, the interviewer was surprised by the degree to which shocking emotion contributed to sharing of online content. Why could shocking emotion easily get many users' attention and interaction? Interestingly, all the 13 interviewees mentioned “shocking” emotion in their responses; many of them explained that most of the time, when they saw an angry message, they also felt shocked at the same time. Whereas, when they felt shocked, they were not necessarily felt angry, for the word “shocking” in Chinese includes the feeling of surprise, which can be a positive sentiment. Hence, the emotion of shocking diverges in English and Chinese, making it more inclusive in China. One interviewee said:

Sometimes I felt shocked (means surprised in Chinese) when I saw happy posts as well. For example, in the just-ended Tokyo Olympics, the Chinese athlete Quan Hongchan, who is only 14 years old, had a flawless gold-medal diving performance with two perfect 10's. I felt happy and proud for her and our country. But at the same time, I was also shocked (which means surprised in Chinese), for I never thought a perfect 10 could really exist, and she scored two of them! (Xue)

This explanation offered nuances to the data. Semantic differences between English and Chinese due to cultural differences led to this unanticipated result. Shock in Chinese is an ambivalent emotion. It can mean a positive surprise and also a negative surprise. Consequently, the Chinese term “shock” may produce different results from those produced by “surprise” in English. The terms we use in different languages to refer to the same emotion may have nuanced differences. The linguistic references may mean differently in different cultures. In that sense, it is significant for it intersects between culture and computer-mediated communication (CMC).

The study anticipated that both anger and joy could promote content virality, and there might also be nuanced differences in their virality depending on the intended audience group. The survey results showed that the subjects were more willing to forward “angry” messages to friends in private and

retweet the joyful content publicly. When presented with an anger message, 61.32% of the respondents claimed they would forward it to friends; 22.64% said they would retweet. As for the happy content, 44.34% responded that they would retweet, and 36.79% answered they would forward the message to friends. The follow-up interviews then paid particular attention to this aspect to further examine the underlying reasons. One of the interviewees stated:

I often forward angry messages to several specific friends and discuss the content with them privately. I'd like to avoid retweeting openly and discussing angry content. Because you always need to take a stance when talking about an angry topic. And once you take a stance publicly, people from the other side may start a debate with you. I don't like the feeling of antagonism. Rather, it is safe to send the angry content to friends because you know they will not really hurt your feelings. However, joy does not require you to take a stance. We can feel happy together. (Ruby)

This statement presented one of the principal reasons why people would forward angry content to friends while retweet happy messages publicly. People tend to avoid public controversy that may come from "angry" content. They opt to share angry ones with friends instead, who they deem are on their side so that they can vent their anger together.

Similar answers came from another interviewee, Liu, who said that she does not want angry content to show up on her Weibo page to draw criticisms from antagonistic people, so she never retweets angry tweets. Instead, she prefers to retweet joyful ones to create a lighthearted atmosphere, thus attracting positive feedback. Such finding agrees with Wojnicki & Godes's (2008) opinion that people would like to share positive things to achieve positive self-presentation and make others feel good rather than bad.

This finding is supported also by results from the interviews. Nine of the 10 interviewees who did not participate in the survey reported that they often retweet happy messages, but rarely retweet angry messages unless they feel desperately furious. One interviewee said that he would retweet neither the happy nor the angry content because he did not want to be emotional, yet he might hit "like" on the joyful tweets. However, 6 of them admitted that they used to actively devote themselves to online debate when they saw angry or shocking posts in the past. In contrast, they would like to withdraw from unhappy discussions online and engage only in pleasant discussions in recent two years. The interviewer continued to ask them what might have caused such a change. Some said it could be because of the outbreak of Covid-19 that a longtime lockdown and depression made them want to escape from negative energy. They wanted no more downhearted feelings but yearned to cheer up; so that they actively share joyful messages to promote positive feelings in public.

Additionally, it may be plausible to attribute the significance "shocking" messages to the occurrence of Covid-19 as well. In the follow-up interviews, Zhang, who included "shocking" content to be one of the content types that she would like to engage with, admitted that among the various shocking content, the Covid-related news were the ones that she would retweet and forward to friends. She said:

Although I would often share the happy news on social media, I think some Covid-relevant news needs to be widely disseminated at this point. Some news would report newly infected cases and update contact tracing for coronavirus every day. News like that can keep us alert and help protect ourselves. They may sound shocking and unsettling, but we need to retweet posts like that to beware more people. That's good for all of us. (Zhang)

5. Conclusion

There are ongoing discussions on the influence of affective messages on social media. The current study adopted a mixed method of survey and in-depth interviews to explore what kinds of emotions in online content contribute to people's online engagement. It especially looked at the relationship between anger-/joy-loaded content and people's online sharing behaviors. The results demonstrated

that happy (including funny) and angry messages attract more clicks and interactions than other kinds of emotions. These two seemingly incompatible emotions were reconciled in this study.

However, the emotions of shock (including surprise) turned out to be more significant than expected and ranked ahead of anger to be a prominent sentiment in getting people's attention. The in-depth interviews provided a possible explanation. Because the questionnaires and interviews were conducted in Chinese, so it could be the expressive differences in English and Chinese that led to the unexpected results. The word "shocking" in Chinese includes the feeling of surprise, which was not necessarily a negative emotion. In that sense, the emotion of shock can be more complex and inclusive in Chinese than in English.

More importantly, the study found that content virality hinged on the intended audience group—people tended to forward the angry messages to friends in private and retweet the joyful content publicly. This finding added more nuances to previous literature. Respondents acknowledged that they would like to avoid expressing opinions and taking stances on angry and controversial topics. They were afraid of being attacked by opponents. It was safer to discuss controversy with friends in private. But being happy does not require taking a stance. Therefore, people will suffer no criticisms and attacks when retweeting happy content publicly. And after the long Covid-19 ordeal, people have suffered enough depression, so they would rather share happier content than before to promote positive feelings in public.

However, this study was not without limitations. Given that both the survey and interviews were self-reported, there might be concerns about the accuracy of the answers. Emotions are complex. It can be hard to tell what exactly the feeling is. Also, according to the data from Statista, only around 20% of social media users in China hold a bachelor's or higher degree. Nevertheless, the target population of this study was primarily composed of undergraduate and graduate students between 18 to 28, who can be regarded as minority groups on Chinese social media. Thus, the findings may not be generalizable to the entire Chinese population. Future research could extend the study to broader demographics and examine whether these findings are applicable to a more general population. Furthermore, the results also found that the terms we use in different languages to refer to the same emotion could have nuanced differences, thus resulting in different results. Future studies could pay more attention to the impact of shocking emotion due to semantic differences in different cultures.

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