



International Users' Experience of Social Media: A Comparison Between Facebook and WeChat

Hanjing Huang, Hengameh Akbaria, Nina Alef, Phairoj Liukitithara, Monica Marazzi,
Bastian Verhaelen, Gina Chi-Lan Yang, and Pei-Luen Patrick Rau^(✉)

Department of Industrial Engineering, Tsinghua University, Beijing, China
rpl@tsinghua.edu.cn

Abstract. Social media are becoming more and more popular all around the world, but it remains unclear whether people have different user behaviors in different social media. WeChat and Facebook assist international users in China to communicate with their families and friends from different countries. We conducted the comparative study that examined international users' behaviors in WeChat and Facebook. The data were collected from 98 international users who used both WeChat and Facebook through questionnaire surveys. We mainly compared the satisfaction, trust and usage in different social media. The comparative analysis showed that Facebook was more like a news application, while WeChat was more like a communication tool for international users living in China. The results revealed that international users had higher satisfaction levels of voice call, video call, voice message, and emoji/sticker in WeChat, while they had higher satisfaction levels of posting and accessing news in Facebook. International users relied more on WeChat during their stay in China. Although international users used Facebook and WeChat frequently, they did not fully trust them. We also gathered some information about their reasons to use or not to use functions of social media. These findings would help designers have a deeper understanding of international users and help social media companies to globalize their products.

Keywords: Social media · Usage · Satisfaction · Trust · Globalization

1 Introduction

Social media are Internet-oriented forms of communication, which can be accessed whenever people have an Internet connection. In social media, people are able to have conversations, upload photos, share information, get access to information, and write blogs. There are various social media platforms in nowadays life including blogs, wikis, photo-sharing platforms, podcasts, instant messaging and many more. Examples include Facebook, WeChat, Twitter and WhatsApp, each of which is used by hundreds of millions of people. Social media are fast changing people's ways of communication and entertainment. Billions of people all around the world use social media in their everyday life. Especially, the younger generation is fully integrated in the world of social media. Moreover, social media are becoming inerasable parts of modern people and their

tentacles have extended beyond communication. Social media are further used in various aspects of people's life including business, advertising, education, news, entertainment and research.

It should be pointed out that different social media have different unique characteristics. For example, WeChat is an all-in-one messaging app, which is different from western social media apps. WeChat adds various functions such as online-to-offline services, advertising, e-commerce, booking, social game, and finance. In 2016, there existed over 800 million monthly active users in WeChat [1]. About a third of WeChat users used WeChat payments to make regular online purchases [2]. Moreover, a majority of Chinese organizations or companies can make an "official account" on WeChat. Almost all media companies, banks, celebrities, brands, and startups already have their own WeChat official accounts. Although Facebook tried to add more functions, WeChat still leads in terms of popularity of offering various services to its users [3]. There are trends to suggest that different social media have their own biases in terms of different types of communication that bring different social consequences for users [4]. Meanwhile, users may not completely replace one form of social media with another because each form supports the unique communication needs that the other cannot completely fulfill.

Moreover, social media with different features are targeted to different user bases. WeChat is developed by the Chinese company Tencent. WeChat users are mainly living in China. Now, WeChat sees a shift in the demographics of the user base and sets its sights on globalization. A quarter of WeChat users are already non-Chinese [1]. WeChat faces the challenges that whether Asia-inspired functions will be acceptable to its international users. Facebook also faces the challenges in exploring larger global markets. Understanding user behaviors in different social media has become increasingly important. However, research on people's user behaviors in eastern social media and western social media has not been sufficiently conducted.

Therefore, the goal of this study was to examine whether there existed differences between users' behaviors, satisfaction and trust in different social media. To achieve this goal, we compared user behaviors of international users who used both WeChat and Facebook to gain a deeper understanding of user behaviors in different social media.

2 Literature Review

Culture affects everything from people's attitudes to motivations. Culture also affects people's needs and their behaviors to fulfill needs, as well as people's behaviors in social media [5, 6]. In Correa et al.'s definition, social media is "a mechanism for the audience to connect, communicate, and interact with each other and their mutual friends through instant messaging or social networking sites." [7]. Previous research has supported the opinion that online cultures are mirrors of the offline cultures of which they are products [8, 9].

Recent research has further investigated effects of culture on user behaviors in social media. It has been reported that Chinese users compared to US users tended to create and share content more: 40% of Chinese users were contributing content, compared to 20% in US [10]. Additionally, Chinese tended to live much more in the Internet than

westerners, perceiving their online-life as more real than their offline-life. Some research also compared user behaviors in Renren and Facebook as examples of the East–West distinction. [11]. As a result, Facebook culture was perceived as more individualistic than Renren culture. For example, Facebook users were more self-talk and self-interested, while Renren users were more benevolent in in-group sharing. Other research also found that users from different countries used social media differently. Chen et al. [12] compared social media usage of Chinese users and that of German users. They found that Chinese users had more online friends than German users, but German users met their friends more frequently in real life. Some research on WeChat also examined effects of different motives and attitudes toward using WeChat [13–15]. They found that entertainment acted as a dominant role in influencing WeChat users' attitudes [13]. Meanwhile, seeking information was another important motive of Chinese users to adopt WeChat [13–15]. Additionally, social interaction was also a major motivation of Chinese users to use WeChat [13, 14].

3 Research Framework and Hypotheses

Facebook is the dominant social network site in all over the world, while Chinese rely more on WeChat. In this research, we mainly compared international users' use behaviors of social media. Participants were living in China. They were using Facebook and WeChat to keep in touch with their friends in the host and home country. They could use Facebook for bridging, bonding, maintaining home country social capital, whereas they could use WeChat for entertainment, sociality, seeking information during their stay in China.

We mainly focused on three dimensions of social media usage, including satisfaction, perceived trust and privacy, and extent of use. We also explored the reasons to use or not to use functions in social media. Regarding these dimensions, our hypotheses are listed below:

Hypothesis 1: The satisfaction level of Facebook is higher than that of WeChat.

Facebook and WeChat are targeted at different populations. WeChat is designed especially for Chinese users. WeChat's concept model and functions within it can be less accepted by International users. Therefore, it is hypothesized that international users will have lower satisfaction level of WeChat.

Hypothesis 2: International users trust Facebook more than WeChat.

Perceived trust and privacy can be influenced by the familiarity and by how much control users have regarding privacy settings. International users are more familiar with Facebook compared to WeChat. Therefore, it is hypothesized that international users trust Facebook more than WeChat.

Hypothesis 3: International users use WeChat more than Facebook in China.

Since Facebook is blocked in China, and international users' new social circle will mainly use WeChat. Therefore, it is hypothesized that international users will use WeChat more frequently than Facebook while they are living in China.

4 Methodology

The goal of this study was to investigate international users' user behaviors and user experience in different social media. To achieve this goal, we compared the user behaviors of international users who belonged to both WeChat and Facebook. We used questionnaire surveys to gain information about international users' user behaviors and user experience in different social media.

4.1 Participants

Participants were recruited via an advertisement posted on both WeChat and Facebook. Participants answered the questionnaire through the online link. In all, 98 international users (Female: 51, Male: 47) took the questionnaire survey. They used both WeChat and Facebook in everyday life. The age distribution of these international users was represented in Fig. 1. Their nationalities included the United States, German, Italy, Australia, French, Thai, Iran, Mexico and other countries.

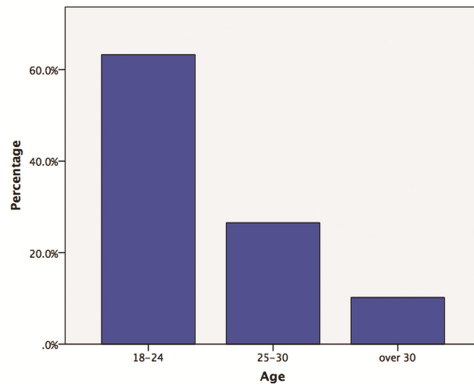


Fig. 1. Participants' age distribution

4.2 Questionnaire Designs

The questionnaire included items from satisfaction, perceived trust and privacy, extent of use, and reasons to use or not to use functions.

Satisfaction

We used the System Usability Scale (SUS) to evaluate how international users were satisfied with different social media. We used the Single Ease Question (SEQ) to evaluate the ease of use perceived by participants. We used a 5-point Likert scale for the questions following these models.

Perceived Trust and Privacy

We were interested in how they perceived trust and privacy when using WeChat and Facebook. We designed question items based on previous research [16]. We applied a 5-point Likert scale for the questions.

Extent of Use

We were also interested in how frequently international users used Facebook and WeChat differently. Therefore, we developed survey items to ask them how much time they spent on Facebook/WeChat per day.

Reasons to Use or not Use Functions

We included fill-in-the-blank questions in the survey to explore the international users' reasons of using or not using functions in social media.

5 Results

We analyzed the results from questionnaires into several aspects: satisfaction, perceived trust and privacy, extent of use, and reasons to use or not to use functions of social media.

Satisfaction

To test Hypothesis 1, we compared the satisfaction of voice call, video call, voice messages, emoji/sticker, posting, and access of news in WeChat and in Facebook. We conducted t-tests to investigate the difference between Facebook and WeChat in users' satisfaction.

The results (see Table 1) showed that WeChat got the higher satisfaction with the following functions: voice call, video call, voice messages and emoji/sticker. But Facebook achieved higher satisfaction in the posting and accessing of news.

Table 1. Users' satisfaction of social media

	Facebook		WeChat		t	p
	M	SD	M	SD		
Voice call	2.93	1.21	4.15	0.97	-7.82	<.001
Video call	2.81	1.23	3.88	0.97	-6.77	<.001
Voice messages	2.78	1.16	4.18	1.04	-8.94	<.001
Emoji/Sticker	3.26	1.15	4.16	1.13	-5.58	<.001
Posting	3.87	1.17	3.37	1.23	2.91	.004
Access of news	3.57	1.32	2.50	1.35	5.61	<.001

Perceived Trust and Privacy

To test Hypothesis 2, we considered 5 dimensions of trust of Facebook and WeChat: trust of data security, reliability of data, influence of data, trust of personal data security and fraud concern. We conducted t-tests to investigate the difference between Facebook and WeChat in users' trust.

The results from t-tests (see Table 2) showed that there was no significant difference in perceived trust and privacy between Facebook and WeChat based on the 5 dimensions. However, from data analysis, we concluded the trusting levels in 5 dimensions.

Table 2. Users’ trust of social media

	Facebook		WeChat		t	p
	M	SD	M	SD		
Trust of data security	2.46	1.15	2.47	1.20	-0.61	.952
Reliability of data	2.35	1.08	2.31	1.07	.27	.790
Influence of data	2.30	1.20	2.07	1.20	1.31	.192
Trust of personal data security	2.26	1.09	2.18	1.07	.46	.643
Fraud concern	2.96	1.05	3.16	1.18	-1.28	.204

1. Trust of data security: participants had low levels of trust in both Facebook and WeChat’s data security.
2. Reliability of data: participants rated low levels of data reliability in both Facebook and WeChat.
3. Influence of data: participants rated low levels of influence of data from both Facebook and WeChat.
4. Trust of personal data security: participants had low levels of trust in both Facebook and WeChat’s personal data security.
5. Fraud concern: participants showed medium levels of fraud concern in both Facebook and WeChat.

From all 5 dimensions, the results indicated that people still did not trust the security of WeChat and Facebook entirely.

Extent of Use

To test Hypothesis 3 on extent of use, we compared the distribution charts for usage time of each application (see Fig. 2). We found that about 32% of participants spent more than 3 h on WeChat every day, while only 7% of them spent more than 3 h on Facebook every day. Therefore, participants used WeChat more than Facebook when they were living in China.

From the survey, we also explored the reasons that participants used or not used WeChat functions and Facebook functions. Participants’ answers were listed in Tables 3 and 4. It was noteworthy that participants pointed out the convenience of functions was a key factor affecting their use of functions in WeChat and Facebook. Entertainment was another crucial factor affected participants’ use of functions. Moreover, participants believed that Facebook and WeChat could help them keep in touch with their families and friends, which made them use the communication function in these applications. Participants also mentioned that the ease of use affected their use of the social media. For example, participants mentioned that they would face the problem that they could not know some functions or were not sure how to use it, which stopped them from using these functions. Particularly, some WeChat functions did not include English interface. International users could not understand the use of these functions. In design of global social media,

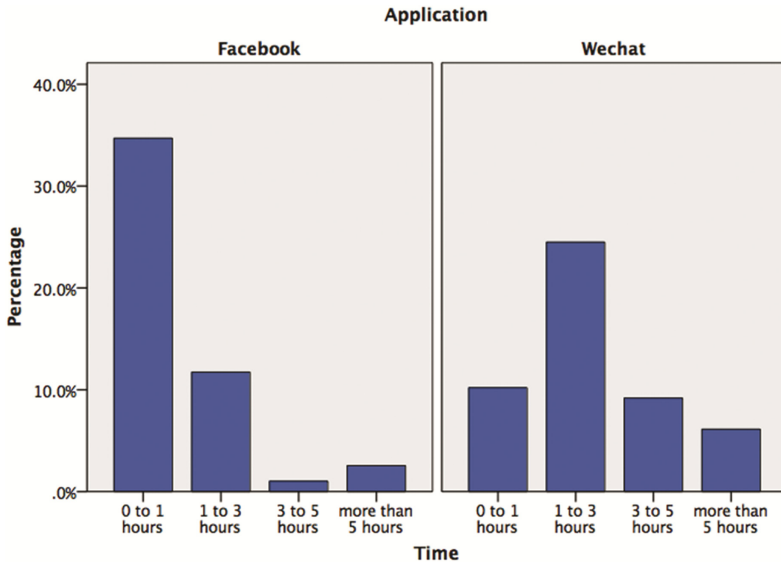


Fig. 2. Users' usage of social media

designers should care more about users' cultural background and language ability. It was interesting that participants also liked the payment, video call, voice call, and news function in WeChat. But participants did not fully trust WeChat and some believed that governments would monitor WeChat, so it was not free to express their opinions. Meanwhile, participants pointed out that it was difficult for them to get access to Facebook, which made them to rely more on WeChat when they were staying in China.

Table 3. Reasons for using the social media functions

Reasons for using Facebook's functions

- Facebook is very convenience
 - Up to date
 - Entertainment and killing time
 - Easy to make event or appointment
 - Contact with family
 - To keep in touch with old friends, see friend updates and see what friend are doing
 - Effective platform to communicate with friend
-

Reasons for using WeChat's functions

- It is the most convenient communication platform in China
 - To keep in touch with friends and school communities
 - Use WeChat instead of phone call
 - It is the only way to contact with family by video call or voice call
 - WeChat pay is very convenient
 - It is a channel to read news
 - Have no choice
-

Table 4. Reasons for not using the social media functions

Reasons for not using Facebook's functions
– Users do not know those functions or are not sure how to use it
– Not attractive function
– Access to Facebook is not easy in China and speed is not very good when you use VPN
Reasons for not using WeChat's functions
– User cannot read or speak Chinese so there are communication problems when the functions do not support international user
– Users do not know those functions or are not sure how to use it
– Bad user interface
– Do not trust WeChat and some believe that governments monitor WeChat, so it is not free to express their opinion

6 Discussion and Conclusion

Based on the results, we found that international participants in China had different user behaviors in Facebook and WeChat. The results revealed international users had higher satisfaction of WeChat in voice call, video call, emoji/sticker and voice message functions and higher satisfaction of Facebook in posting and accessing of news functions. We also found that both social media inspired a low level of trust. International users felt unsafe to give their personal information, and did not trust information on Facebook and WeChat that much. This suggests more efforts should be taken to enhance users' perception of security in social media. For instance, social media should make users know how their personal data will be used. However, the low trust did not seem to affect the popularity: one third of the participants claimed that they used WeChat more than three hours a day. International users tended to rely more on WeChat in everyday life. Moreover, we explored the reasons for using and not using functions of WeChat and Facebook. These findings would help companies and designers develop and improve the global social media.

Acknowledgement. This research was supported by Shenzhen Malong Artificial Intelligence Research Center.

References

1. Statista: Number of active WeChat messenger accounts 2010–2016 (2016). <https://www.statista.com/statistics/255778/number-of-active-wechat-messenger-accounts/>
2. Jaivin., L.: WeChat: A new Chinese empire? <http://www.sbs.com.au/news/feature/wechat-new-chinese-empire>
3. Wang, H.H.: It's time for Facebook to copy WeChat. <http://www.forbes.com/sites/helenwang/2016/08/11/its-time-for-facebook-to-copy-wechat/?yptr=yahoo-79dcefba27a4>
4. McLuhan, M., Powers, B.R.: *The Global Village: Transformations in World Life and Media in the 21st Century*. Communication and Society, Oxford (1989)
5. Gudykunst, W.B.: *Bridging Differences: Effective Intergroup Communication*. Sage, Thousand Oaks (2004)

6. Van Dijck, J.: *The Culture of Connectivity: A Critical History of Social Media*. Oxford University Press, Oxford (2013)
7. Correa, T., Hinsley, A.W., De Zuniga, H.G.: Who interacts on the Web?: The intersection of users' personality and social media use. *Comput. Hum. Behav.* **26**(2), 247–253 (2010)
8. Morling, B., Lamoreaux, M.: Measuring culture outside the head: A meta-analysis of individualism—collectivism in cultural products. *Pers. Soc. Psychol. Rev.* **12**(3), 199–221 (2008)
9. Marcus, A., Krishnamurthi, N.: Cross-cultural analysis of social network services in Japan, Korea, and the USA. In: Aykin, N. (ed.) *IDGD 2009. LNCS*, vol. 5623, pp. 59–68. Springer, Heidelberg (2009). https://doi.org/10.1007/978-3-642-02767-3_7
10. Li, X., Chen, W.: Facebook or Renren? A comparative study of social networking site use and social capital among Chinese international students in the United States. *Comput. Hum. Behav.* **35**, 116–123 (2014)
11. Qiu, L., et al.: Putting their best foot forward: Emotional disclosure on Facebook. *Cyberpsychol. Behav. Soc. Netw.* **15**(10), 569–572 (2012)
12. Chen, Z., Rau, P.-L.P., Frank, B., Ignazio, F., Zhou, J., Sajed, S., Xiang, Y.: How to make friends in social network service? A comparison between Chinese and German. In: Rau, P.L.P. (ed.) *CCD 2013. LNCS*, vol. 8024, pp. 373–382. Springer, Heidelberg (2013). https://doi.org/10.1007/978-3-642-39137-8_42
13. Lien, C.H., Cao, Y.: Examining WeChat users' motivations, trust, attitudes, and positive word-of-mouth: Evidence from China. *Comput. Hum. Behav.* **41**, 104–111 (2014)
14. Chu, S.-C., Choi, S.M.: Electronic word-of-mouth in social networking sites: a cross-cultural study of the United States and China. *J. Glob. Mark.* **24**(3), 263–281 (2011)
15. Sun, Y., et al.: Understanding Chinese users' continuance intention toward online social networks: an integrative theoretical model. *Electron. Mark.* **24**(1), 57–66 (2014)
16. Yang, H.: Young American consumers' online privacy concerns, trust, risk, social media use, and regulatory support. *J. New Commun. Res.* **5**, 1–30 (2013)