

The impact of mobile social media use on the integration of immigrants -- With empirical evidence from China

Wenjie Huang

Jilin Police College, Boshuo Road 1399, Changchun City, Jilin Province, China

huangwenjie0331@163.com

Abstract. Mobile social media, along with the rapid development of the mobile Internet, has injected more vivid vitality into the cross-cultural adaptation of foreign immigrants. Based on the cross-cultural adaptation model, this paper investigated 275 foreign immigrants to China and analyzed the impact of mobile social media use on cross-cultural adaptation. It was found that mobile social media use has a significant positive effect on cross-cultural adaptation and that the news access function, tool-type applets, and unique online subcultures provided by social media can help foreign immigrants to understand China more deeply from different perspectives. China. This paper not only enriches the research on cross-cultural adaptation but also further highlights the role of mobile social media in promoting social development and progress.

Keywords: social media use, cross-cultural adaptation, social integration of migrants.

1. Introduction

With the process of globalization, the number of expatriate populations is increasing, and they are facing various challenges in the new social environment, especially in terms of social integration. Mobile social networks, as an emerging social tool, play an important role in facilitating connections and information exchange between people. Social media has become an integral part of people's daily lives. More than 3.6 billion people worldwide use social media, which is expected to increase to 4.41 billion by 2025. The top social media networks are Facebook, YouTube, and WhatsApp, which together have over 2 billion active users [1].

Social media not only creates new communication channels for migrants to maintain cognitive and emotional ties with their native cultures but also changes the nature and attributes of global migrant networks in an ecological sense [2]. Therefore, a comprehensive understanding of the role it plays in the daily lives of migrants and how it provides migrants with new modes of identification through technology is essential for building a theory of migration in the digital age.

2. Research Design

2.1. Rationale and mechanisms

The concept of social media accompanies the development of media technology and continues to revolutionize its connotation in the new era. Anthony Mayfield pointed out in 2007 that social media is a kind of social space, which can realize the participation and interaction of every social individual, and users can recreate and share information in it. By the 1990s, social media, born under the technological

scenario of Web 2.0, mainly referred to as Internet applications. scholars such as Kaplan and Haenlein proposed that social media is an Internet application relying on Web 2.0 technology that allows users to produce, exchange original content (UGC), and disseminate it. In response to the different types of media, social media are categorized into six types containing blogs, social networking sites, virtual social worlds, collaborative projects, content communities, and virtual game worlds with reference to the self-expression and media richness of users in them [3]. In the same year, scholars such as Kietzmann highlight the interpersonal communication qualities of social media, arguing that social media are applications that can give groups of users the ability to create, modify, share, and discuss Internet content [4]. It allows for the consumption and creative production of content to be realized as one.

Tracing the role of social media use in cross-cultural adaptation, some scholars have suggested that migrants can facilitate the maintenance of social relations with their home countries through the use of social media [5]. At the same time, social media can also provide cross-cultural individuals in a foreign country with information about the country to which they immigrated, helping them to better integrate into the new social environment [6]. In addition, social media can also facilitate the rapid establishment of social networks by migrants in the new environment, and help them to better integrate into the new society. Social media can also facilitate the development of social networks in the new environment, thus helping them to better adapt to the cultural environment of the host country [7]. Through interpersonal communication and participation in social activities through social media, they can obtain high-quality communication across regions and cultures, which effectively reduces the pressure of cultural adaptation in the host country and helps them to obtain more entertainment and a sense of belonging to the group [8]. On the other hand, some scholars have suggested that the use of social media has a negative impact on the individual's cross-cultural adaptation and that the use of social media for cross-cultural adaptation of migrants will enhance their understanding of the cultural environment of the host country [9]. Cross-cultural adaptation of migrants through social media use will increase their dependence on social media, which in the long run will weaken their interpersonal skills in reality, and will not be conducive to a better adaptation to the new social environment. In serious cases, it may cause cultural alienation and hinder the process of cross-cultural adaptation [10].

With the development of China's mobile Internet, social media has presented a richer and more dynamic composite media form, and the concept connotation of social media has been iterated constantly. Therefore, this paper screens the social media commonly used by expats in China by referring to the Chinese Social Media Information Atlas published by the White Paper on Social Media Ecology Overview 2019. Select WeChat and QQ in instant messaging, DouYin and KuaiShou in short video social networking, and XiaoHongShu and BiliBili for content community. Choosing the above commonly used social media as the overall dimension to investigate the impact on the social integration of immigrants also highlights the research value and theoretical significance in the context of the continuous iteration of China's social media development.

2.2. Questionnaire design

This study adopted a questionnaire survey and utilized the snowball sampling method to target the group of immigrants to China. The author contacted the staff of the Jilin Exit-Entry Administration offline to distribute questionnaires and conduct research on foreign migrants in Changchun, the capital city of the province, and four neighboring areas since 2010. In addition, the author synchronized data collection with offline data collection through the Questionnaire Star platform. The online and offline were produced in both English and Chinese to meet the reading habits of the migrants and to improve the convenience and efficiency of completing the questionnaires.

For data analysis using tools, the author mainly utilized SPSS Statistics, Stata 15 and the PROCESS plug-in for data analysis. The research period was from January 1, 2021 to April 1, 2022, a period of three months. During this period, a total of 300 questionnaires were distributed, 289 questionnaires were actually recovered, and finally, 275 valid questionnaires were obtained, with a questionnaire recovery rate of 96.33% and a questionnaire validity rate of 91.66%. At the same time as the questionnaire research, the authors also combined the in-depth interview method to conduct one-on-one in-depth

interviews with the immigrants to China to deeply explain and understand the behavioral constructs of the immigrant group related to the measurement of variables. Through in-depth communication and interaction with the interviewees, the authors were able to gain a deeper understanding of their cross-cultural adaptation experiences after arriving in China and deepen their portrayal of the formation of their cross-cultural adaptation experiences.

This questionnaire is divided into three parts, the first part mainly measures the basic profile of the migrants regarding social media use; the second part measures the key variable of this study: social media use; and the third part of the questionnaire is supplemented with some open-ended questions regarding the demographic elements of the migrants, basic information about migrating to China, and personal information.

Independent variable: social media use

The scale of social media use is selected from the social media use scale developed by Kuang Wenbo and Wu Xiaoli in 2019, which combines the Technology Acceptance Model (TAM) and the Uses and Gratification Theory. The scale was used in the same application scenario as this study to measure the social media use behaviors of incoming Chinese immigrants regarding China, which is the most up-to-date, comprehensive, and high-quality scale for measuring social media use behaviors at present. The scale consists of 9 questions and is based on a 7-point Likert scale, in which 1 stands for "totally disagree" and 7 stands for "totally agree".

Dependent Variable: Intercultural Adaptation to Social Integration

Because the measure of cross-cultural adaptation of immigrants to China in this study is more oriented to the quantification of behavior rather than being limited to the psychological domain, the Cross-Cultural Adaptation Scale developed by Black & Stephens in 1989 was used.

Control variable: demographic variables

Based on the above variables, this study included the length of time in China, age, gender, and Chinese language proficiency of the immigrants to China as the control variables in the research design, taking into consideration the construction of the model and the real-world operability.

3. Data analysis and empirical testing

3.1. Social Media Usage by Migrants to China

The data shows that the overall social media usage of immigrants in China has a mean score of 4.974, which is in the upper-middle range. Migrants started using Chinese social media earlier, almost all of them started to use Chinese social media before or within a week of their arrival in China. The cumulative time spent on social media by immigrants in China ranges from 2 to 4 hours per day, which is a relatively high frequency of use.

In terms of social media usage, more than 90% of the immigrants preferred to use WeChat, and it is worth mentioning that more than one-third of the immigrants chose QQ and DouYin, in contrast to Weibo, XiaoHongShu, KuaiShou, and BiliBili, which were used by some people, but less frequently.

Table 1. Descriptive analysis results of social media usage.

Statistical index	Minimum value	Maximum value	median	Mean value	Standard deviation
Social media usage	1	7	5.221	4.974	1.223
Time to start using social media	1	6	2	1.835	1.079
Hours of social media use	1	5	3	3.310	1.366
Frequency of use of social media	1	7	5	5.011	1.539

In addition, there is a significant difference in the social media use of Chinese immigrants by gender, with a mean of 5.14 for males and 4.83 for females, and a T-value of 1.95, which passes the test of significance at 0.05, indicating that males are significantly better than females in social media use and that male immigrants are more proficient in the use of Chinese social media. In terms of age differences, it was found that there were significant differences in the social media usage of immigrants between different age groups, with the 23-25 age group having significantly better social media usage than the other age groups. Finally, in terms of the length of time in China, it was found that the social media usage of immigrants who had been in China for more than 3 years was significantly better than that of those who had been in China for 1-3 years and those who had been in China for 1-3 months.

3.2. Comparison of individual differences in Intercultural adaptation

Regarding the overall situation of intercultural adaptation of immigrants to China, the following table shows that the minimum value is 1.5, the maximum value is 7, the median is 5.069, and the mean is 4.979, which means that the intercultural adaptation of the sample as a whole is in the middle level, and there is still much room for improvement.

Regarding the dimensions of intercultural adaptation, the mean values of general adaptation and Operational adaptation of the immigrants to China are 5.062 and 5.069, indicating that the immigrants are better adapted to their daily life and study and work compared to the overall level. Interaction with Chinese people, on the other hand, is on the low side compared to general adaptation, with a mean value of 4.763.

The independent samples t-test analysis concluded that there is a significant difference between genders in the cross-cultural adaptation of migrants to China. The data show that the mean score of intercultural adaptation for males is 5.142, with a standard deviation of 0.92, and the mean score of intercultural adaptation for females is 4.836, with a standard deviation of 1.224, which indicates that males are more likely than females to have an overall degree of intercultural adaptation.

Table 2. Descriptive analysis results of Intercultural adjustment.

Statistical index	Minimum value	Maximum value	median	Mean value	Standard deviation
General adaptation	1.43	7	5.143	5.062	1.164
Interactive adaptation	1.25	7	5	4.763	1.374
Operational adaptation	1.33	7	5	5.069	1.275
Integrated adaptation	1.5	7	5.069	4.979	1.100

In addition, the author conducted one-way ANOVA with length of stay in China and Chinese language proficiency as independent variables, cross-cultural adaptation of immigrants to China as the dependent variable, and post hoc LSD test, in order to compare the differences in the level of cross-cultural adaptation of immigrants to China in the presence of these different control variables.

3.3. Regression Analysis of Social Media Use and Intercultural Adaptation

The author conducted a regression analysis for the direct path of influence between social media use and cross-cultural adaptation as a way to verify the hypothesized relationship between the two. The results were obtained as shown in the table below:

Table 3. Regression model of Intercultural adjustment of social media use.

Statistical index	Unstandardized coefficient		Standardized coefficient	t	significant	covariance statistics	
	B	standard error	β			tolerance level	VIF
constant	1.427	0.398		2.965	0.000		
Social media usage	0.449	0.044	0.512	10.75	0.000	0.914	1.095
genders	-0.013	0.109	-0.005	-0.125	0.911	0.861	1.165
Age	0.153	0.065	0.128	2.567	0.012	0.815	1.227
Duration of Visit to China	0.152	0.062	0.121	2.454	0.017	0.858	1.166
Chinese language proficiency	0.041	0.033	0.058	1.218	0.216	0.945	1.058

The data show that the regression model of the research hypothesis fits well. In the diagnosis of covariance, according to the VIF values, the VIF of social media use variables are all less than 5, and the tolerance degree is more than 0.3, which indicates that there is no multi-covariance between the variables, and the regression analysis can be carried out further. Based on the results of the data analysis, it can be seen that social media use ($\beta = 0.512$, $p < 0.001$) significantly predicts cross-cultural adaptation and shows a positive correlation. So how do immigrants to China help them adapt to the environment and life in China through social media use? By organizing the content of the in-depth interviews we found the following paths.

Interviews revealed that social media's access to advice, tool attributes, and online subculture labels are important factors that enable immigrants to better adapt to new environments through social media. First, social media's advisory function can help immigrants obtain and share the latest information about their living environment; second, social media's tool attributes can help immigrants adapt to local life from the perspective of practicality in daily life. Thirdly, under the background of mobile Internet, the unique "Chinese-style" online subculture formed by the online arena built by social media can help immigrants to China deeply understand the daily presentation and expression of Chinese netizens, and thus enhance their sense of cultural integration and cross-cultural adaptation in China.

4. Conclusions

This paper explores the use of social media by immigrants to China, their cross-cultural adaptation, and the comparison of individual heterogeneity among different groups. It is found that the use of social media has a significant positive effect on the cross-cultural adaptation of immigrants to China, which is mainly reflected in the fact that compared with other media, social media has unique anonymity, which can form a kind of online social subculture, and that immigrants to China will be regarded as Chinese by the majority of Chinese groups by default, and their communication will be closer to the daily habits of the Chinese, and immigrants believe that communication on social media can help them gain a greater sense of fairness and integration. This study reinforces the current academic voice about the positive role of social media use in cross-cultural adaptation. In the process of globalization, social media plays an important role in providing an effective medium for cross-cultural communication.

Acknowledgments

This study is gratefully acknowledged with financial support from the Social Science Research Program of the Department of Education of Jilin Province, China (Project No. JJKH20231066SK), and the Fourteenth Five-Year Plan of Educational Science of Jilin Province, China (Project No. ZD22162).

References

- [1] Chen, J. (2021). 36 essential social media marketing statistics to know for 2021. <https://sproutsocial.com/insights/social-media-statistics/> (accessed April 2021).
- [2] Cleveland, Mark; Iyer, Rajesh & Babin, Barry. Social Media Usage, Materialism and Psychological Well-being among Immigrant Consumers. *Journal of Business Research*, 2023, 155-Part B.
- [3] Kaplan A M, Haenlein M. Users of the world, unite! The challenges and opportunities of Social Media[J]. *Business Horizons*, 2010, 53(1):0-68.
- [4] Kietzmann, J, H, et al. Social media? Get serious! Understanding the functional building blocks of social media[J]. *Business Horizons* Bloomington, 2011, 54(3):241-251.
- [5] Brown, H. The Institutional Digital Divide Immigrant-Serving Nonprofit Organization Adoption of Social Media[J]. *Social Science Computer Review*, 2014:309-20.
- [6] Yali C, Hao T, Jiang C. Chinese first, woman second: Social media and the cultural identity of female immigrants[J]. *Asian Journal of Women's Studies*, 2021, 27(1).
- [7] Erdem B. How Can Social Media Be Helpful for Immigrants to Integrate Society in the US[J]. *European Journal of Multidisciplinary Studies*, 2018, 3(3).
- [8] Fogelman, T., & Christensen, J.. Translating the nation through the sustainable, liveable city: The role of social media intermediaries in immigrant integration in Copenhagen. *Urban Studies*, 2022, 59(11), 2388-2407.
- [9] Adikari S, Adu E K. Usage of Online Social Networks in Cultural Adaptation[C]// *PACIS 2015 Proceedings*, 2015:7.
- [10] Windzio M, Bicer E. Are we just friends? Immigrant integration into high- and low-cost social networks[J]. *Rationality and Society*, 2013, 25(2).