First-Generation and Continuing College Students’ Social Media Use: Divided in the Virtual World?

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Social media plays an important role in college students’ lives. This study aims to investigate whether a divide in social media use exists between first-generation and continuing college students in China. The study collected data from a sample of 865 college students. Comparative analysis was conducted to identify differences in social media use between first-generation and continuing college students. Regression analysis was performed to quantify the effects of parental education and sociodemographic factors on social media use. There was no difference in the use of domestic social media platforms between the first-generation college students and continuing college students, while there was a significant difference in the use of international social media. In terms of different types of social media use, our research found that the first-generation college students performed fewer activities to connect with one another and engage with news content than the continuing college students, while there was no significant difference in self-expression activities.

Keywords: digital divide; social media; first-generation college student; platform choice; Internet usage

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In teaching, there should be no distinction of classes.
—Confucius, The Analects

Social media are pervasive in the lives of young people. For many users, social media are part of a daily routine to connect with others, engage with news content, share information, and entertain themselves. Unsurprisingly, college-age adults (18- to 24-year-olds) use social media sites at the highest levels: Facebook (76%), YouTube (90%), Instagram (73%), and Snapchat (75%; Pew Research Center, 2019). In China, according to the China Internet Network Information Center ([CNNIC], 2020), 85% of Internet users used WeChat, China’s most popular social media platform, as of June 2020. Social media have been found to be positively associated with social capital accumulation, particularly for disadvantaged minorities (Gonzales, 2017; Koroleva, Krasnova, Veltri, & Günther, 2011; Mesch, 2012; Smith, 2013). For college students, social media play increasingly important roles in facilitating efforts to connect to friends, family, and faculty and to find resources in college or the job market (DeAndrea, Ellison, LaRose, Steinfeld, & Fiore, 2012; Ellison, Steinfeld, & Lampe, 2007; Haeger, Wang, & BrckaLorenz, 2014).

Digital divide studies have generally concluded that differences in the use of the Internet reflect known offline socioeconomic inequalities. Compared with continuing college students, first-generation college students are more likely to come from households with lower socioeconomic status (Bui, 2002; Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996; Tym, McMillion, Barone, & Webster, 2004; Zhang, Zhao, & Guo, 2016). It has been argued that first-generation college students might suffer from a cumulative disadvantage (Pascarella, Pierson, Wolniak, & Terenzini, 2004; Terenzini et al., 1996). A few researchers have attempted to explore whether social media use reproduces inequalities between first-generation college students and continuing students, but they have generated inconsistent conclusions (Haeger et al., 2014; Wohn, Ellison, Khan, Fewins-Bliss, & Gray, 2013; Yang, 2020).

To the best of our knowledge, there are very few studies on first-generation and continuing college students’ social media use in the context of China. Education has been regarded as a means of social ascendancy in China since ancient times. A recent survey showed that China’s first-generation college students are less active in expressing their viewpoints, seeking support from teachers or peers, and becoming involved in social events outside classrooms than continuing college students and that many of them have to take up part-time work (Wen, 2020). This study aims to investigate whether there is a divide in social media use between first-generation and continuing college students in China.

Social Media Usage Among Youths

Most digital divide studies on Internet use have focused on correlating socioeconomic and demographic variables with Internet usage; they have generally concluded that differentiated use of the Internet reflects known offline economic, social, and cultural inequalities and that such differentiated usage also contributes to reproducing existing societal inequalities (Goldfarb & Prince, 2008; Graham & Smith, 2010; Gutiérrez & Gamboa, 2010; Hargittai & Hinnant, 2008; Ignatow & Robinson, 2017; Kvasny, 2005; Kvasny & Keil, 2006; Livingstone & Helsper, 2007; J. P. Robinson, DiMaggio, & Hargittai, 2003; Selwyn, 2004; Van Deursen & Van Dijk, 2014; Van Deursen, Van Dijk, & Ten Klooster, 2015; Weiser,
However, studies on inequality in social media use have been inconsistent. Some studies have found that in Armenia, people with lower socioeconomic status use social media less for capital-enhancing activities, such as meeting new people and sharing and receiving information (Pearce & Rice, 2017). Other studies have reported that traditional racially or educationally disadvantaged individuals from the United States engage in more online network expansion rather than network maintenance (Gonzales, 2017). For example, Black Americans were found to be just as likely as White people to perform activities that enhanced their affective social networks and to be more likely than White people to perform professional activities that enhanced their social capital (Smith, 2013).

Young generations, including college students, who are often termed digital natives, or the net generation, cannot be defined as a single generational cohort on the Internet because there is significant variation in the ways in which young people use technology (Bennett & Maton, 2010; Bennett, Maton, & Kervin, 2008). Evidence from a U.S. university showed that socioeconomic status was an important predictor of Internet usage and that compared with other students, students of lower socioeconomic status exhibited lower levels of Web know-how and tended to engage in fewer information-seeking activities online on a regular basis (Hargittai, 2010). Other studies showed that students from households with higher income tended to use full-spectrum technology more frequently (Ching, Basham, & Jang, 2005; Livingstone & Helsper, 2007). In Italy, it was found that teenagers from the upper middle class were more concerned with capital-enhancing Internet activities, while those from less-advantageous social contexts were interested mostly in social networking and user-generated content production (Micheli, 2015). Material access also matters (Van Deursen & Van Dijk, 2018). A U.S.-based study showed that young people with high-autonomy, high-quality Internet access exhibited an exploratory information habitus when surfing the Internet while those with low-autonomy, low-quality Internet access developed a task-oriented stance in their rationing of Internet use (L. Robinson, 2009).

In terms of social media usage, it was shown that Italian teenagers from lower-income families were more likely to use the communication and relational features of social networking sites (SNSs), while their peers from elite families seemed to focus on the capital-enhancing opportunities offered by SNSs (Micheli, 2015, 2016). In Chile, a study with a sample of 18- to 29-year-olds in the three main urban areas showed that more educated and skillful individuals tended to use Facebook for informational and mobilizing purposes (Correa, 2016). Another study found that university students of lower socioeconomic status in the United States were more likely to use Facebook for entertainment-based activities and less likely to use Facebook for communication and sharing (Junco, 2013).

The Impact of First-Generation Student Status on Social Media Use

Research in higher education has consistently found that, compared with their peers, first-generation students might suffer from a cumulative disadvantage with respect to their academic preparation, transition to postsecondary education, and progress toward degree attainment (Pascarella et al., 2004; Terenzini et al., 1996). For example, it was found that variations in cultural capital, based on parents’ educational experiences, corresponded with important differences in continuing college students’ and first-generation college students’ mastery of the college student role and, thus, their ability to respond to faculty expectations (Collier & Morgan, 2008).
One useful theoretical perspective for understanding the potential effects of first-generation student status on social media usage is through the lens of social reproduction theory, which suggests that technological innovation reinforces existing power relations and modes of consciousness that legitimize those relations (Bourdieu & Passeron, 1990). According to the corresponding fields model proposed by Helsper (2012), specific areas (economic, cultural, social, and personal) of digital and social exclusion influence one another. This perspective suggests that, since they have better access to human and cultural capital, individuals with college-educated parents may have an advantage over first-generation college students in understanding the capital-enhancing use of technology and its role in personal development. Consequently, compared with their peers, first-generation college students are more likely to be disadvantaged in accessing, understanding, and making beneficial use of technologies.

In recent years, a few studies have empirically tested whether a divide exists between first-generation and continuing college students in Internet usage. In terms of an access divide, first-generation college students were shown to be technologically disadvantaged and to have less experience with and access to the technologies that their peers often took for granted (Wilson, 2004). It was found that, in the United States, college students with less-educated parents were more likely to experience difficulty maintaining access to technology (e.g., because of broken hardware, data limits, and connectivity problems; Gonzales, Calarco, & Lynch, 2018). With respect to Internet skills, first-generation and low-income students were found to have insufficient digital literacy skills to evaluate and use online information (Brown, Wohn, & Ellison, 2016; Gui & Argentin, 2011; Hargittai & Micheli, 2019). In a historically Black mid-Atlantic university, research showed that first-generation students had deficiencies in the use of core computer applications for academic and professional productivity (Buzzetto-Hollywood, Elobeid, & Elobaid, 2017). However, a study based on a survey of 226 Hispanic college freshmen enrolled at an intensive doctoral institution in the southwestern United States reported no differences between first-generation and continuing college students regarding their attitudes toward educational uses of the Internet and their uses of technology (Slate, Manuel, & Brinson, 2002).

Thus far, evidence of the impact of parents’ education on their children’s social media use has been inconsistent. In regard to the choice of social media platform, the Pew Research Center (2019) reported that half of college graduates and individuals living in high-income households used LinkedIn, while only 10% or less who had not attended at least some college and individuals in lower-income households used the platform. Blank and Lutz (2017) studied the social structuration of six major social media platforms in the UK and found significant demographic and socioeconomic differences among users of the different platforms. Similarly, a study of first-year students at an American urban public university found that gender, race, ethnicity, and parental educational background were all associated with which social media platforms individuals used (Hargittai, 2007). American teens seemed to view Facebook as a digital suburb, while Facebook users looked down on MySpace as a kind of ghetto of lower socioeconomic culture and therefore looked down on its users (boyd, 2013). There appeared to be a positive relationship between parental schooling and the use of Facebook and Xanga and a negative relationship between parental education and the use of MySpace (Hargittai, 2007). However, based on a nationally representative survey from the Pew Internet & American Life Project, while sociodemographic differences existed among American teenagers’ use of MySpace and Facebook, parental education was not a significant predictor (Ahn, 2011). There is a dearth of research studying how first-generation and
continuing college students use social media differently. A recent study based on survey data from 251 undergraduates in the United States showed that first-generation and continuing students used social media in similar ways, except that first-generation students used Facebook to interact with on-campus friends less often than continuing students did (Yang, 2020). Another study in the United States found that first-generation students used social media less than their peers in building new relationships and in learning about events on campus (Haeger et al., 2014).

To the best of our knowledge, there has been no research on Chinese college students’ social media usage. Thus, in this article, we aim to explore whether a social media usage divide exists between first-generation and continuing college students.

In summary, this study aims to explore the following research questions:

Is there a digital divide between first-generation college students and continuing college students in terms of Internet skills?

Is there a digital divide between first-generation college students and continuing college students in social media usage in terms of platform choice?

Is there a digital divide between first-generation college students and continuing college students in social media usage in terms of types of use?

What factors contribute to the above divides?

Method

Sample

A questionnaire-based survey was conducted to collect data. A total of 865 questionnaires were distributed to college students from Southwest Jiaotong University and Hubei Second Normal University in China. The research team members administered the survey at the end of various class periods and were responsible for explaining the questionnaires in case any participants could not understand the questions; the participants were given a small gift after completing the questionnaires. After excluding 27 questionnaire responses with incomplete information, we finally obtained 838 valid questionnaires.

The respondents were asked, “What’s your father and your mother’s education background?” The response options were “primary school,” “junior high school,” “senior high school,” “vocational-technical school,” “bachelor’s degree,” and “master’s degree or above.” Respondents who reported an education level lower than a bachelor’s degree for both of their parents were considered first-generation college students and were coded as 1 (n = 538, 64.2%), and respondents who reported a bachelor’s degree or higher level of education for either parent were considered continuing college students and were coded as 0 (n = 300, 35.8%).
Measures

The questionnaire design was based mainly on the Oxford Internet Surveys (OxIS). The original questionnaire was translated, refined, and culturally modified by a panel of three scholars to create a Chinese version.

Internet Skills

The respondents were asked how confident they felt performing various tasks in an online environment on a 5-point scale (E. Helsper & Eynon, 2013). Sample items for Internet skills included “Judge the reliability of online content” (M = 3.29, SD = 0.86), “Remove a virus that infected your computer” (M = 2.93, SD = 0.98), “Participate in a discussion online” (M = 3.31, SD = 0.87), “Make new friends online” (M = 3.08, SD = 0.98), “Upload photos to a website” (M = 3.51, SD = 1.15), and “Download and save music” (M = 4.30, SD = 0.82). The average score of the six items was used as a measure of Internet skills (M = 3.40, SD = 0.61).

Internet Experience

The respondents were asked, “Which year did you start to surf the Internet?” Internet experience was assessed by calculating how many years the respondent had been using the Internet (M = 9.18, SD = 3.09).

Variety of Platform Choice

This variable was used to measure the number of different social media platforms that individuals used online. The respondents were asked, “Do you use the following social media software (QQ, WeChat, Weibo, Momo, or international social media apps such as Facebook, Twitter, or others)?” The number of items with “yes” responses was determined (M = 3.44, SD = 1.00).

Types of Social Media Use

This measure included 10 items describing Internet uses associated with activities on social media online platforms. The respondents were asked a series of questions about how often they engaged in different types of social media Internet activities on a 6-point scale, ranging from never to several times a day. We categorized these items into three types of use, and then the item scores were averaged as a measure of the amount of use of each type (see Table 1).

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2 Information about OxIS can be found at https://oxis.ooi.ox.ac.uk/.
Table 1. Types of Social Media Use.

<table>
<thead>
<tr>
<th>Type</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-expression</td>
<td>Update social network status, such as posting Moments on WeChat</td>
</tr>
<tr>
<td></td>
<td>Update personal information on social network sites, such as your address or where you work</td>
</tr>
<tr>
<td></td>
<td>Post photos on SNSs</td>
</tr>
<tr>
<td></td>
<td>Post your thoughts, stories, or creative content on SNSs</td>
</tr>
<tr>
<td>Interaction with</td>
<td>Comment on other friends’ statuses on SNSs</td>
</tr>
<tr>
<td>Friends</td>
<td>Repost and share other people’s articles, videos, news, etc.</td>
</tr>
<tr>
<td></td>
<td>Like content that other people post on WeChat or QQ spaces</td>
</tr>
<tr>
<td>Social Media as</td>
<td>Join a group that discusses political issues</td>
</tr>
<tr>
<td>News</td>
<td>Receive news or information on SNSs</td>
</tr>
<tr>
<td></td>
<td>Follow public accounts on WeChat</td>
</tr>
</tbody>
</table>

Data Analysis

Comparative analysis (independent t-test and chi-square test) was conducted to analyze differences in Internet skills, Internet experience, and social media use between first-generation and continuing college students. Bonferroni correction was applied to control the experimentwise error related to the use of multiple t-tests. In addition, the effect size was computed.

A logistic regression analysis was conducted to quantify the effects of the sociodemographic factors on platform choice. In addition, a multiple regression model (MRM) was used to analyze the influential factors of the number of different types of use.

Results

Differences in Internet Skills

Table 2 shows the differences between the first-generation and continuing college students in Internet skills and experience, both of which were significant. The first-generation college students had lower Internet skills ($t = -4.09$, $p < 0.05$, $d = -0.30$) and fewer years of online experience ($t = -11.75$, $p < 0.05$, $d = -0.85$) than the continuing college students.
### Table 2. T-test of Internet Skills and Experience.

<table>
<thead>
<tr>
<th></th>
<th>First-generation college students Mean(SD)</th>
<th>Continuing college students Mean(SD)</th>
<th>T-test</th>
<th>Cohen’s d</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet skills</td>
<td>3.33 (.59)</td>
<td>3.51 (.64)</td>
<td>−4.09</td>
<td>−.30</td>
<td>.000</td>
</tr>
<tr>
<td>Internet experience</td>
<td>8.32 (2.87)</td>
<td>10.75 (2.84)</td>
<td>−11.75</td>
<td>−.85</td>
<td>.000</td>
</tr>
</tbody>
</table>

**Differences in Variety of Platform Choice**

There was a significant difference between the first-generation college students and continuing college students in the variety of platform choice ($t = −3.05, p < 0.05, d = −0.22$). The first-generation college students had significantly less variety in their social media platform choices than the continuing college students (see Table 3).

### Table 3. T-test of Variety of Platform Choice.

<table>
<thead>
<tr>
<th></th>
<th>Mean (SD)</th>
<th>T-test</th>
<th>Cohen’s d</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-generation</td>
<td>3.37 (.99)</td>
<td>−3.05</td>
<td>−.22</td>
<td>.002</td>
</tr>
<tr>
<td>college students</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing college</td>
<td>3.59 (.99)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>students</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Social media platforms were grouped into two types: domestic social media and international social media. First, the difference in the variety of domestic social media used between groups was determined using t-tests. The results are reported in Table 4. The first-generation college students did not significantly differ from the continuing college students in the variety of domestic social media ($t = −0.37, p > 0.05, d = −0.03$).

### Table 4. T-test of Variety of Domestic Social Media.

<table>
<thead>
<tr>
<th></th>
<th>Mean(SD)</th>
<th>T-test</th>
<th>Cohen’s d</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-generation</td>
<td>2.7(.59)</td>
<td>−.37</td>
<td>−.03</td>
<td>.71</td>
</tr>
<tr>
<td>college students</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing college</td>
<td>2.75(.60)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>students</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In terms of the use of international social media platforms such as Facebook, LinkedIn, or Twitter, Table 5 shows that 14.87% of first-generation college students and 33% of continuing college students in the sample used international social media. A total of 659 students had never used any type of international social media platform. Among the 659 students who had not used such platforms, 69.5% and 30.5% were first-generation and continuing college students, respectively. Among the 179 students who had used such platforms, 44.7% and 55.3% were first-generation and continuing college students, respectively. A chi-square test was performed to identify the difference in international social media
platform use between the first-generation and continuing college students. There was a significant difference ($\chi^2 = 37.689, p < 0.01$), which indicated that parental education level could significantly influence the choice of whether to use international social media platforms.

<table>
<thead>
<tr>
<th>Table 5. Cross-Tabulation of International Social Software Use* Parental Education.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental education</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>First-generation college students count</td>
</tr>
<tr>
<td>% of total first-generation college students</td>
</tr>
<tr>
<td>Continuing college students count</td>
</tr>
<tr>
<td>% of total continuing college students</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Then, binary logistic regression was conducted to quantify the effects of sociodemographic factors on the college students’ international social media use. As shown in Table 6, the results confirmed that parental education, Internet skills, and Internet experience each played a significant role in determining the likelihood of using international social media, whereas gender did not have a significant effect. The $\exp(\beta)$ of parental education showed that the odds of using international social software was 82.5% higher for the continuing college students than for the first-generation college students. Similarly, the $\exp(\beta)$ of Internet skills and Internet experience showed that the students who had mastered more Internet skills and had more years of online experience had higher odds of using international social media platforms.

<table>
<thead>
<tr>
<th>Table 6. Logistic Regression Analysis of International Social Media Software Use.</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\beta$</td>
</tr>
<tr>
<td>Parental education</td>
</tr>
<tr>
<td>Gender (female = 1)</td>
</tr>
<tr>
<td>Internet experience</td>
</tr>
<tr>
<td>Internet skills</td>
</tr>
<tr>
<td>Constant</td>
</tr>
</tbody>
</table>

Differences in Types of Social Media Use Between First-Generation and Continuing College Students

$T$-tests for independent samples were used to analyze the differences between the first-generation and continuing college students in social media use. As shown in Table 7, the continuing college students had significantly more interaction with friends and use of social media as a news resource than the first-generation college students ($p < 0.0125$; $t$-test with Bonferroni correction). There was no significant difference between the first-generation and continuing college students in self-expression activities.
Table 7. *T*-test of Types of Social Media Use.

<table>
<thead>
<tr>
<th>Type of use</th>
<th>Continuing college students Mean(SD)</th>
<th>First-generation college students Mean(SD)</th>
<th>T-test</th>
<th>Cohen’s d</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-expression</td>
<td>1.95 (.96)</td>
<td>1.84 (.93)</td>
<td>1.68</td>
<td>.11</td>
<td>.093</td>
</tr>
<tr>
<td>Interaction with friends</td>
<td>3.16 (1.11)</td>
<td>2.96 (.97)</td>
<td>2.67</td>
<td>.19</td>
<td>.008</td>
</tr>
<tr>
<td>Social media as news resource</td>
<td>2.67 (.95)</td>
<td>2.42 (1.00)</td>
<td>3.62</td>
<td>.26</td>
<td>.000</td>
</tr>
</tbody>
</table>

Predictors of Social Media Use

By using a hierarchical regression analysis, we examined whether parental education had a significant relationship with social media use, even when differences in gender, Internet experience, and Internet skills were taken into consideration (Correa, 2016). In the first step, we added the independent variables of gender and parent education, and in the second step, we added Internet experience and Internet skills. Then, the VIF of each independent variable ranged from 1 to 2, which meant there was no serious multicollinearity problem and that all variables could be included in the linear regression model. The regression results can be found in Table 8.

Table 8. Results of the Regression Models.

<table>
<thead>
<tr>
<th></th>
<th>Variety of platform choice (all SNSs)</th>
<th>Self-expression</th>
<th>Interaction with friends</th>
<th>Social media as news resource</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td>(Constant)</td>
<td>3.284***</td>
<td>1.677***</td>
<td>1.773*</td>
<td>.376*</td>
</tr>
<tr>
<td>Parental education</td>
<td>.208***</td>
<td>.040</td>
<td>.116*</td>
<td>-.021</td>
</tr>
<tr>
<td>Gender (female=1)</td>
<td>.126</td>
<td>.211***</td>
<td>.077</td>
<td>.144**</td>
</tr>
<tr>
<td>Internet skills</td>
<td>.347***</td>
<td>.316***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet experience</td>
<td>.046***</td>
<td>.035***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.01</td>
<td>.08</td>
<td>.01</td>
<td>.06</td>
</tr>
</tbody>
</table>

* p < .1, ** p < .05, *** p < .01

Having Internet skills was the strongest predictor of social media use. Internet skills actively contributed to social media platform choice ($\beta = 0.347, p < 0.01$) and positively predicted self-expression ($\beta = 0.316, p < 0.01$), interaction with friends ($\beta = 0.426, p < 0.01$), and the use of social media as a news resource ($\beta = 0.326, p < 0.01$).

Internet experience was a positive predictor of social media use. Having more years of online experience was related to a wider variety of social media platform choice ($\beta = 0.046, p < 0.01$) and more
engagement in different types of social media use, including self-expression ($\beta = 0.035, p < 0.01$), interaction with friends ($\beta = 0.037, p < 0.01$), and the use of social media as a news resource ($\beta = 0.048, p < 0.01$).

Gender was a significant predictor of social media platform choice ($\beta = 0.211, p < 0.01$), self-expression ($\beta = 0.144, p < 0.05$), and interaction with friends ($\beta = 0.181, p < 0.05$). Compared with the male students, the female students used more social media platforms and were more engaged in social media usage for self-expression and interaction with friends.

When gender was controlled, parental education had a significant positive influence on social media use, including platform choice, self-expression, interaction with friends, and the use of social media as a news resource. Nevertheless, when Internet skills and Internet experience were taken into consideration, parental education was not statistically significant in any of the regressions. The lack of significant associations of this variable indicated that when other factors were controlled, parental education level did not account for differences in social media use, which indicated that Internet skills and experience compensated for the digital divide caused by parental education.

Discussion

In our sample, there appeared to be a digital divide between the first-generation college students and continuing students in terms of social media usage. The results showed that the first-generation college students had lower Internet skills, which is consistent with previous studies (Gui & Argentin, 2011). In terms of the variety of social media platforms used, the first-generation college students were found to use significantly fewer social media platforms than the continuing college students. However, such differences in the variety of platforms existed only in the use of international social media platforms, such as Facebook, Twitter, and LinkedIn. No difference was found in the use of China’s domestic social media platforms between the two groups. Existing research on the social stratification of social media platforms in Western countries has generally found that demographic and socioeconomic characteristics are associated with which social media platforms individuals use (Ahn, 2011; Blank & Lutz, 2017; boyd, 2013; Hargittai, 2007). However, findings on the impacts of parental education have been inconclusive, if not contradictory (Ahn, 2011; Hargittai, 2007).

This study revealed that, in the Chinese context, with Internet skills and prior experiences controlled, parental education had a significant relationship with the use of international social media software. The possible reasons are as follows. First, in China, some international social media platforms are blocked and require virtual private networks (VPNs) to circumvent firewalls. Accessing these services requires sophisticated skills. It is expected that higher skills and longer online experience increase the odds of using international social media platforms. Since first-generation college students are more disadvantaged than their counterparts in terms of both skills and prior experience, it is unsurprising that they are less likely to use those platforms. Second, interestingly, when skills and experiences were controlled, parental education remained a significant predictor of the use of international social media platforms. Digital divide studies have long recognized that differences in Internet use reflect known offline economic, social, and cultural inequalities. Helsper (2012) argued that people who are rich in certain
resources offline are also more likely to engage with the corresponding digital fields that require such resources. Chinese scholars have found that first-generation college students perform worse than continuing college students in cross-cultural learning courses because their families are usually incapable of providing the necessary financial and cultural capital to support their children’s cross-cultural learning activities (J. Guo, 2019; Zhang, Guo, & Shi, 2017; Zhang et al., 2016). It is reasonable to assume that first-generation college students are less likely to gain international educational or cultural experiences in their families, which is reflected in their online international social media use in college.

To some extent, the differentiation in the use of international social media might mirror offline social stratification. Twitter and LinkedIn have been reported to be used mainly by the middle class with higher income, particularly those working for multinational organizations, while QQ is used mainly by lower-income populations (Jiang, 2018). Social media might be considered by some as a symbolic expression of identity in the online world. In the United States, it was found that teen Facebook users look down on MySpace users (boyd, 2013). Similarly, in China, studies have found that users consider some platforms to be superior to others (Jiang, 2018; Xie, 2013).

In terms of types of use, we found no significant difference between first-generation and continuing college students in self-expression activities.

However, differences existed in the use of social media to interact with friends and the use of social media as a new resource. This online divide also reflects offline differences. First-generation college students have significantly lower perceptions of student-faculty and peer interaction (Long & Wang, 2018; Lu & Hu, 2015). A Chinese study demonstrated that while first-generation college students were no different from continuing college students in traditional learning, such as in “reading the designated textbook or reference book” and engaging in “weekly average extracurricular learning time,” their scores were much lower for critical learning, such as “challenging existing views on problems” and “considering problems from different perspectives” (X. Guo, Yang, Liu, & Han, 2020). In China, an increasing number of citizens trust social media to provide news (Y. Wang & Mark, 2013). Given the increasing importance of social media as alternative news resources (Bi, Lu, Ha, & Chen, 2021; Y. Wang & Mark, 2013), first-generation students are disadvantaged in developing a balanced view of political and other affairs in college.

Conclusions

This study examined the digital divide between Chinese first-generation and continuing college students in terms of social media use and revealed that college students are not a homogeneous cohort. In our sample, first-generation college students were found to use fewer social media platforms and participate less intensively in many types of social media use than continuing college students. Given the increasingly important role of social media in expanding college students’ social connections and in providing an alternative news resource, first-generation college students benefit less from the use of social media than continuing students. Overall, the divides between the groups are caused by inequalities in digital skills and prior experiences. Thus, it is important for higher education institutions to offer tailored
digital literacy courses for first-generation college students and to help them benefit from the full continuum of digital technologies.

Like most empirical work, this study is not without limitations that require further improvement. First, studies based in Western countries have generally found that first-generation college students are more likely to come from families with low socioeconomic status. While parental educational level provides a reasonable proxy for a student’s socioeconomic background, we did not collect some typical socioeconomic variables, such as family income and parents' occupations, to maintain accuracy and privacy in this study. Second, no differences were found between first-generation college students and continuing college students in the use of domestic social media platforms, while the divide in the use of international social media was significant. In addition, parental education was a salient predictor of a divide in the use of international social media. The differences in the use of domestic and international social media imply that social stratification might exist in social media platforms. However, our data are limited in explaining the cause of such stratification. Students’ previous experiences staying abroad and their political attitudes might help explain these differences. Further research implementing qualitative techniques is recommended to explore why first-generation students do not use international social media platforms. Third, the generalizability of this study is limited by the characteristics of the study settings. Because of the limited resources, the sampling method in this study was based on the convenience sampling technique, which did not yield a sample that is representative of the entire population. For future study, it is suggested that longitudinal data be collected to study the mediating role of college education on first-generation college students’ social media usage behaviors over time. Although first-generation students are likely to enter college with lower levels of cultural and social capital than their peers, college experience may help them make up for this deficit and have a stronger impact on them (Pascarella et al., 2004). Fourth, this study did not consider the negative impact of social media use. Studies have found that the overuse of social media negatively affects people’s emotional state and subjective well-being (Sagioglou & Greitemeyer, 2014; J. L. Wang, Gaskin, Rost, & Gentile, 2017). It has been argued that overuse has emerged as a new dimension of digital inequality (Gui & Büchi, 2019). Further social media inequality research should integrate the overuse perspective in the research design.

References


