

Does the Use of Social Network Sites and Mobile Phones Promote the Acquisition of Job-Related Information, Job Mobility and Entrepreneurship in Asia?

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This study examines how different uses of social network sites (SNS) and mobile phones (MP) to communicate with friends and business associates are related to the acquisition of job-related information, job mobility, and entrepreneurial intentions, using social capital as its main theoretical lens. To this end, a nationally representative, random digit dialing (RDD) survey was conducted in Singapore. Path analyses show that SNS interactions with friends are positively related to both bonding and bridging social capital. The former is linked with greater job mobility, the latter with entrepreneurship, and both are associated with more job-related information. SNS interactions with business contacts are directly positively related to job-related information and entrepreneurship. For mobile phones, interactions with friends are positively related to social capital, job information and entrepreneurship. Professional networking is associated with more bridging social capital, job information and job mobility. Bonding capital is found to be linked with greater job mobility, while bridging capital has a positive relationship with both entrepreneurship and job mobility.

Keywords: social network sites; mobile phones; social capital; job mobility; entrepreneurship

Introduction

Rapid proliferation of social and mobile media has sparked immense interest in their socio-economic implications. Their capacity to connect millions of people in real time impacts information flows, resource distribution, patterns of behavior, as well as career outcomes. In this context, it is vital to examine how new technologies can be employed to tap onto underutilized sources of human and social capital, helping generate new business opportunities and unlocking new sources of value. As mobile phones (MP) and social network sites (SNS) have penetrated almost every major domain of formal and informal sociability in the developed world, we seek to understand how the uses of MP and SNS to interact with friends and business contacts can con-

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tribute to individuals' stock of social capital, and how that contributes to their acquisition of job-related information, perceived job mobility, and entrepreneurial intentions. In order to further internationalize and broaden the scholarly dialogue focused on new media, social capital and its socio-economic implications, we chose to conduct our study in a non-Western context, in the city-state of Singapore, known for its distinctively Asian business culture.

In this study, we largely relied on social capital theories to construct our theoretical model, which we then tested using a nationally representative sample of Singapore citizens. Two path models were constructed to examine the implications of MP and SNS use. Our study adds to the literature by: a) comparing how mobile phone- and SNS-mediated interactions with friends and business contacts are related to social capital, and thereby to different career outcomes; b) further exploring the importance of bonding and bridging social capital in the Asian business environment; c) providing empirical evidence of the links between the uses of new media in informal and formal contexts with entrepreneurial intentions.

Literature review and hypotheses

Coleman (1988) defines social capital as the resources accumulated through the relationships among people. Social ties can be leveraged for material gains, used as “safety net” in times of crises, or deployed to ensure a bright future for one’s offspring (Woolcock & Narayan, 2000). The seminal work of Granovetter (1973) emphasized the importance of weak social ties for career outcomes such as successful job hunting or job hopping in the Western context. He presented evidence to demonstrate that instead of close friends or family members, job seekers more often gain useful information from passing acquaintances, who provide “bridges” to different social and professional circles. Therefore, it is critical to differentiate between bridging and bonding forms of social capital, i.e. weak and strong social ties, respectively (Putnam, 2000). The former refers to weak connections outside an individual’s closely-knit circle, which promote flows of useful information across different social circles. The latter denotes strong bonds (e.g. family, kinship, friendship, ethnicity, religion, etc.) that provide necessary social and psychological support as well as a sense of belonging. Strong ties involve more emotion, commitment and mutual obligation. In contrast to what Granovetter discovered in the West, in certain Asian societies the key to a success in job hunting or entrepreneurship lies in obtaining influence or leverage from strong, bonding ties with those of higher status. In most cases, simply gaining information from bridging ties may not suffice. It is more “who you know” than “what you learn from them” that shapes career and business prospects. Therefore, Granovetter’s (1973) proposition may need to be amended for broader applicability in non-Western contexts.

Social network sites, mobile phones and social capital

Research suggests that specific technological affordances of the Internet are well-suited for the development of social capital. These include the reduction in interaction cost, provision of reputational information, momentous expansion of social networks, suppression of certain sensory cues, and the maintenance of interaction records which helps promote collective identity and trust (Resnick, 2001). SNS can be viewed as Internet services that allow people to connect with each other (boyd & Ellison, 2007), and maintain and expand their social networks (Joinson, 2008). Scholars found that using Facebook, the most popular SNS, is positively related to both

bridging and bonding social capital, but more strongly to bridging social capital (Ellison et al., 2007). Investment in social capital via SNS use allows individuals to access information resources and career opportunities that would otherwise be unavailable to them (Lin, 2002). Fulk and Yuan (2013) also noted that SNS, when used in workplace settings, can provide an advantage in promoting informal association and personalized recommendation. Donath and Boyd (2004) hypothesize that online social networks may not lead to substantial increases in the number of strong ties; however, weak ties may thrive as the technology is well-suited for maintaining such ties cheaply and easily. They found that Facebook primarily serves for maintaining or solidifying existing offline relationships, as opposed to helping meet new people. Still, a recent study in Singapore indicates that the use of SNS is associated with both bridging and bonding social capital even when respondents' offline ties are controlled for (Skoric & Kwan, 2011).

SNS use is related to the production of social capital as SNS sites: a) enable multiple channels for interpersonal feedback and peer acceptance (Katz & Gurevitch, 1974); b) fulfill informational needs; c) promote collective action (Kenski & Stroud, 2006; Shah et al., 2001); and d) satisfy the need for social integration and interaction (Ellison et al. 2007). This study aims to assess the contribution of SNS to social capital in both the informal (friends) and formal (business contacts) domains of social life. Based on the discussion, we hypothesize that:

H1: Using SNS to interact with friends is positively related to a) bridging social capital, and b) bonding social capital.

H2: Using SNS to interact with business contacts is positively related to a) bridging social capital, and b) bonding social capital.

The mobile phone is the fastest growing information technology in human history (Castells, 2007), with its unique affordance of personalization and mobility (Campbell & Park, 2014). Mobile communication provides a better and cheaper alternative to other communication technologies and it is lightweight, less intrusive, less subject to peripheral monitoring, inexpensive, and enables easy contact with spatially distributed peer groups (Kasesniemi & Rautiainen, 2002; Ling & Yttri, 2002). As a consequence of rapid diffusion of mobiles, billions of previously unconnected individuals have now been brought together into the global electronic grid. They can talk, text and share data anywhere, anytime, and we expect that the use of mobile phones is linked to greater opportunities for social networking and spread of influence (cf. Donner & Tellez, 2008).

Not surprisingly, several recent studies have examined the potential of mobile phones to nurture social capital. Indeed, robust positive links between different types of mobile phone use and indicators of bonding or bridging social capital have been established (e.g., Campbell & Kwak, 2010; Campbell & Ling, 2008). Different uses of mobile phones prevail in formal vs. informal modes of sociability (Campbell & Ling, 2008), and their effects therefore vary. Goodman (2005) observed that mobile phones are used more frequently to manage strong bonding ties, particularly those between family members, than to maintain or develop loose weak ties. A study conducted in the United States (Campbell & Kwak, 2010) established that both voice calling and text messaging via mobile phones increase social leisure activity. Voice calling predicts more active participation in organized groups, and it involves interactions with a mix of local or distant contacts. In Japan, young people use mobile phones extensively to improve the quality of their interpersonal relationships (Matsuda, 2000). Still, for the most part young people tend to interact

only with close friends via mobile phones, and they connect with each other regardless of geographic locations.

Findings from Japan reveal that young people use mobile phones primarily to maintain close friendship ties, rather than to expand their social networks (Ishii, 2006). In this regard, mobile phone use is “invigorating” existing social ties, allowing users means to do the kinds of things that they do with the people who are already in their social networks (Harper, 2003). Campbell and Ling (2008) suggest that, as a general rule, mobile phones are more suitable for strengthening the ties among members of small groups than for extending new connections to the “outside”. Still, mobile phones increase the frequency of communication, and allot opportunities to expand an individual’s network of interpersonal relationships. Given the different technological affordances of mobile phones, we proposed to examine their relationship with social capital separately. That is, while acknowledging the increasingly intertwined nature of mobile phone and SNS technologies (i.e. as in smartphones), we predict that mobiles may display distinctive social capital correlates. Based on the discussion above, we hypothesize:

H3: Using mobile phones to interact with friends is positively related to a) bridging social capital, and b) bonding social capital.

H4: Using mobile phones to interact with business contacts is positively related to a) bridging social capital, and b) bonding social capital.

Social capital, job mobility, job information and entrepreneurship

Networking has always been an important means to “get ahead” in a career (e.g. Bolles, 1992). Social capital theory (Coleman, 1990) has provided a more fine-grained analysis of the ways individuals' social networks affect their careers in professional organizations (Burt, 1997; Podolny & Baron, 1997; Sparrowe et al., 1997). In our model, bonding and bridging social capital mediate the relationships between SNS and mobile phone use and career outcomes, including the acquisition of job-related information, job mobility, and entrepreneurial tendencies. Studies focused on Internet use in general (e.g., Howard, Raine, & Jones, 2001), have suggested some benefits of online access in terms of searching for jobs or performing job-related tasks. In terms of mobile use, there is an empirical study (e.g., Park, 2014) examining the relationship between the mobile and task-related coordination. Another study (Servaes, 2002) suggested that there may be a clear advantage of mobile phone use for certain groups of people such as the poor and the elderly, and that mobiles can also play a role in bridging the gap between haves and have-nots in pursuits of jobs (see Rice & Katz, 2003).

We define job information as the amount of employment or business related information available to an individual through his/her social network and the perceived ability to leverage on it (Granovetter, 1973). This information can be gleaned from various social ties. For example, weak ties connect people of diverse backgrounds and serve as information bridges between groups to promote information dissemination (Granovetter, 1973; Montgomery, 1992). Furthermore, social capital obtained from mediated interactions enhances leverage, which is the extent to which an individual can assert a positive influence on a desired economic outcome through others in his/her network (Lin, 2002). The ability to assert leverage depends on the individual’s access to contacts of superior knowledge and influence either in professional or in daily life. Lin (1999) argues that it is the extensiveness of one’s social network (of both strong and weak ties)

that gives individuals better opportunities to maintain such contacts. Accordingly, we hypothesize that:

H5: a) Bonding social capital and b) bridging social capital are positively related to job information.

We define job mobility as the perceived ability of individuals to move between jobs. According to statistics from the Ministry of Manpower (MOM), about 20% of Singaporeans changed jobs between 2007 and 2009. Greater real or perceived job mobility is usually regarded as an asset to the individual (by increasing one's employability) and to the industry (by increasing the flexibility of the labor market supply) (MOM, 2010). Extant studies suggest that social capital has a positive impact on job mobility (Bian & Ang, 1997), intra-organizational job mobility (Podolny & Baron, 1997), job search (Granovetter, 1974), and labor market participation (Brook, 2005). Three social capital theories, including the weak tie theory (Granovetter, 1974), structural hole theory (Burt, 1997) and social resource theory (Lin, 2002) have focused on different network properties as predictors of social capital. Yet, they all agree that social capital is positively related to job mobility by proffering access to useful information, social resources, sponsorship and social credentialing. Social capital increases job mobility by increasing the amount of new job information accessible to an individual, or by boosting the amount of influence one can exert indirectly over the placement of new job opportunities (e.g. Granovetter, 1974). As an illustration, it is estimated that nearly 75% of Singaporeans in the late 1990s used personal contacts to obtain career related information and leverage when changing jobs (Bian & Ang, 1997).

Studies also suggest that the impact of social ties on job mobility and entrepreneurship in Asian business cultures differs from that in the West. In Western countries, weak ties connect people from different circles and facilitate the flow of information and influence for job seekers (Lin, 1999). In contrast, in the Confucian-influenced business culture of Singapore, economic and information resources often reside in *guanxi* ties. Unlike bridging ties, *guanxi* are strong or semi-strong social ties featuring stronger sentiments and mutual obligation (Chen et al., 2004). They have long been a principle of economic and social organization in Confucian cultures (Cheng & Rosett, 1991). Bian and Ang (1997) found that in Singapore and China, jobs are channeled more often through strong ties than through weak ties. Even when job seekers and helpers are not directly connected they could be linked by intermediaries to whom both are strongly or at least moderately strongly connected. Chinese employers tend to recruit via people in their *guanxi* networks to obtain information and assurance about candidates. A good word from a well-positioned *guanxi* tie is heeded more by employers while information from weak ties are less reliable, and do not lead to a sense of obligation (Bian & Ang, 1997). Similarly, Watanabe (1987) found that people in Japan receive job-related information through strong ties within family or community networks more often than through weak ties. Studies of other Asian countries concur on the importance of bonding social capital in labor markets (Xiong et al., 1986). In other words, while both weak ties (bridging capital) and strong ties (bonding capital) can increase information and leverage available to an individual, it is individuals embedded in closer *guanxi* networks (bonding capital) who have better chances for successful job changes in Singapore. Hence, we hypothesized that:

H6: a) Bonding social capital and b) bridging social capital are positively related to job

mobility.

Social capital also provides an important leverage for entrepreneurs. Social ties increase access to and lower the costs of information, provide an initial customer base for new businesses, and increase social support for would-be entrepreneurs (Sawyer et al., 2003). While interacting with others especially via weak bridging ties, people can discover new business opportunities (Hoang & Antoncic, 2003), or improve their self-efficacy as they learn from others' success stories. Extant studies suggest that social capital is a significant determinant in individuals' self-employment decisions (Uzzi, 1999), successful entrepreneurial endeavors (Davidsson & Honig, 2003) and venture growth rates (Lee & Tsang, 2001). Individuals with greater bonding and bridging capital are more likely to initiate entrepreneurial activities, although it is those with greater bridging capital that tend to succeed as entrepreneurs (Davidsson & Honig, 2003).

In the Singapore context, networking is shown to impact entrepreneurship. Lee and Tsang (2001) found that networking activities, measured by the frequency of business interactions as well as the number of contacts, had a positive impact on the growth rate of startup businesses in the city state. However, the nature of networking is distinctive in Confucian societies, including Singapore. The bonding *guanxi* ties represent long-term cooperation relationships among business partners that contribute to organizational efficiency and sustained competitive advantages (Lovett et al., 1999; Warren et al., 2004). Guanxi provides access to scarce resources or business opportunities (Bain, 1997; Dunfee & Warren, 2001; Xin & Pearce, 1996). Having guanxi relationships with powerful and politically connected people allows a startup business to increase sales, avoid fines or taxes, obtain updates on policy changes, receive business permits or information on proprietary technology, and most importantly, lower transaction costs (Standifird & Marshall, 2000; Xin & Pearce, 1996). Aldrich and Fiol (1992) stated that as the number of bonding guanxi ties held by executives of new small businesses increased, the odds of survival for those businesses increased. Accordingly, it is hypothesized that:

H7. a) Bonding social capital and b) bridging social capital are positively related to entrepreneurship.

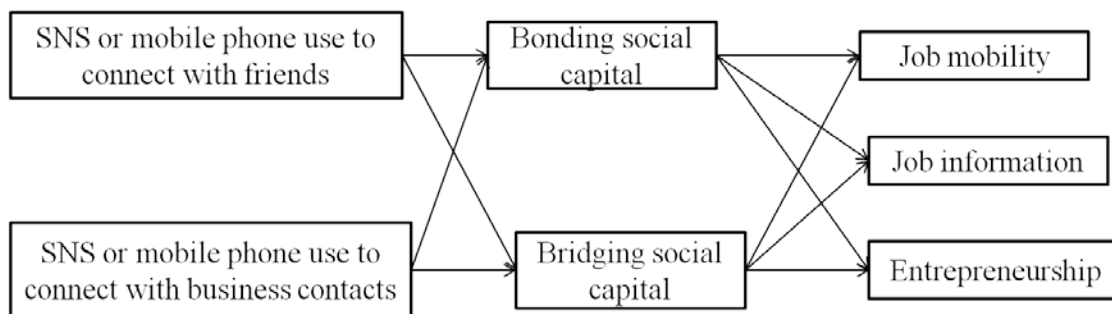


Figure 1. Conceptual model.

Method

Sampling and data collection

A computer-assisted telephone interview (CATI) survey was conducted with 1042 adult Singaporean citizens or permanent residents. Random-digit dialing procedures were used to contact households and a within-household sample was obtained using the youngest male or oldest female (YMOF) technique.¹ Interviews lasted 14.6 minutes on average and were conducted in English or Mandarin, the two most common spoken languages in Singapore. All respondents who declined or discontinued interviews in progress were contacted at least once more. The response rate reached 43.8%. Survey data were analyzed with Lisrel 8.5 to test the conceptual models in Figure 1, which summarizes the hypotheses proposed.

New media use measures

Use of SNS to connect with friends was measured by asking respondents to answer “How often do you use SNS to make new friends” and “How often do you use SNS to stay in touch with friends” on a 10-point scale (1= very infrequently, 10= very frequently).

Use of SNS to connect with business contacts was measured by asking respondents “How often do you use SNS to make new business contacts” and “How often do you use SNS to stay in touch with business contacts” (1= very infrequently, 10= very frequently).

Use of mobile phone to connect with friends was measured by asking respondents “How often do you use mobile phone to make new friends” and “How often do you use mobile phone to stay in touch with friends” (1= very infrequently, 10= very frequently).

Use of mobile phone to connect with business contacts was measured by asking respondents to indicate on a 10-point scale frequency of using mobile phones “to make new business or professional contacts” or “keep in touch with business or professional contacts”.

Social capital measures

Bonding was measured with five 7-point Likert-scale items (Williams, 2006). Respondents were asked to report agreement (1=strongly disagree, 7 = strongly agree) with statements such as “There are several people I trust to help solve my problems”, “There is someone I can turn to for advice about making very important decisions” and “The people I interact with would share their last dollar with me”.

Bridging was measured with four 7-point items (Williams, 2006). Respondents indicated their agreement (1=strongly disagree, 7 = strongly agree) with statements like “Interacting with people makes me want to try new things”, “Interacting with people makes me interested in what others unlike me are thinking” and “Interacting with people makes me feel like part of a larger community”.

Criterion variables

The *job information* variable was measured with nine 7-point Likert items, which asked respondents to report their agreement (1=strongly disagree, 7 = strongly agree) with statements such as “I hear about many job openings through personal contacts”, “My current job was obtained with someone's recommendation to my employer” and “I received information about new business or job opportunities that most people would not”.

Job mobility was measured with four 7-point Likert items (ISSP, 2005). Respondents were asked to report agreement (1=strongly disagree, 7 = strongly agree) with statements like “I would be

difficult for my employer to replace me if I left”, “It would be difficult for my employer to replace me if I left” and “It is easy for me to find a new job if I needed one”.

Entrepreneurship was measured with three 7-point Likert items. Respondents were asked how much they agreed with statements like “In the next few years, I am likely to start my own business”, “I think that being self-employed can fulfill one's career ambitions better” and “I am confident about starting my own business”(1=strongly disagree, 7 = strongly agree). All multi-item scales were averaged into indices. *Table 1* presents the mean, standard deviation and reliability of all the variables.

Table 1: Scale descriptive and reliabilities.

<i>Indices</i>	<i>Items</i>	<i>α (r)</i>	<i>Mean</i>	<i>SD</i>
SNS use to connect with friends	2	.72**	2.37	2.75
SNS use to connect with business contacts	2	.93**	1.32	2.12
Mobile phone use to connect with friends	2	.25**	3.75	2.04
Mobile phone use to connect with business contacts	2	.85**	3.28	3.20
Bonding social capital	5	.81	4.51	1.41
Bridging social capital	4	.84	4.87	1.36
Job Information	9	.84	3.76	1.24
Job mobility	4	.69	3.45	.54
Entrepreneurship	3	.72	4.28	.11

Results

Guided by the discussion and the modification indices generated by statistical analyses, the conceptual model for SNS use in Figure 1 was revised to the path model in Figure 2. All goodness of fit indices in Table 2 indicated a satisfactory level of model fit. The insignificant χ^2 suggested a good match between the predicted and the reproduced correlation matrices (Jöreskog & Sörbom, 1993). The goodness of fit index ($GFI=.99$), whose higher value indicates better fit, exceeded the benchmark of .95. The root mean square error of approximation ($RMSEA=.04$) was lower than the .05 criterion (Hair et al., 1995). The adjusted GFI index was .97, the comparative, incremental and normed fit indices reached .99.

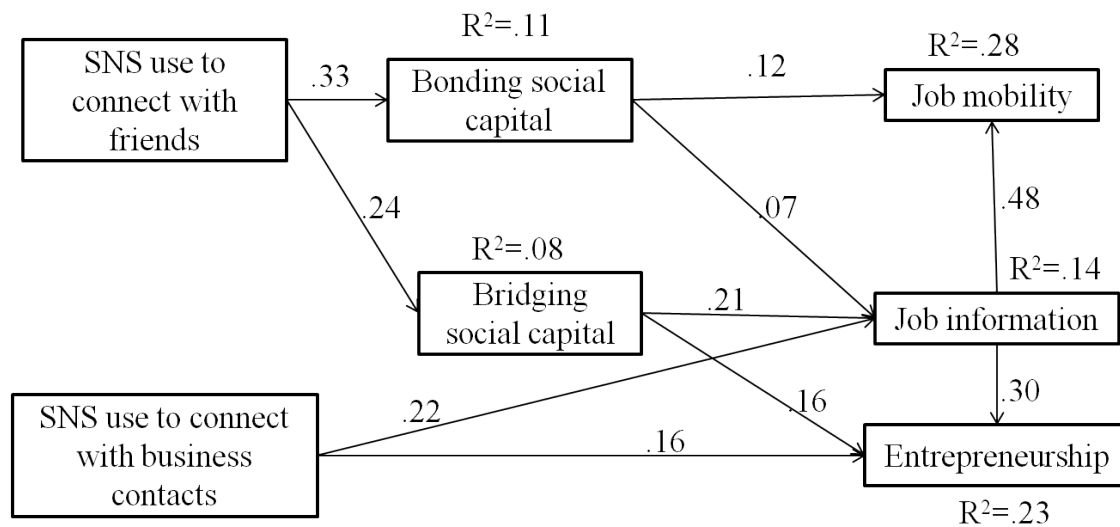


Figure 2. Path model for SNS use.

Note: Demographic factors including age, gender and education were controlled in analysis, but not presented in the figure.

H1a and *H1b* were supported according to Figure 2. Controlling for other factors, the more people use SNS to interact with friends, the more bridging ($\beta=.24, p<.01$) and the more bonding social capital ($\beta=.33, p<.01$) they accumulate. *Neither H2a nor H2c* were supported, however; using SNS to interact with business contacts was not related to either bonding or bridging social capital. However, the findings show that the more people connect with business contacts via SNS, the more job information they acquire ($\beta=.22, p<.01$) and the more entrepreneurial they become ($\beta=.16, p<.01$).

In parallel, the conceptual model for mobile phone use in Figure 1 was modified into the path model in Figure 3. Indices in Table 3 indicate a satisfactory fit of the model. The χ^2 , GFI , $RMSEA$, and all supplementary goodness of fit indices suggest a satisfactory level of model fit.

Table 2: Goodness of fit statistics for SNS use path model.

Statistics	Model Value
χ^2 (df)	16.67(5)
GFI	.99
RMSEA	.04
AGFI	.97
Normed Fit index	.99
Comparative fit index	.99
Incremental fit index	.99
Relative fit index	.97
RMR	.02

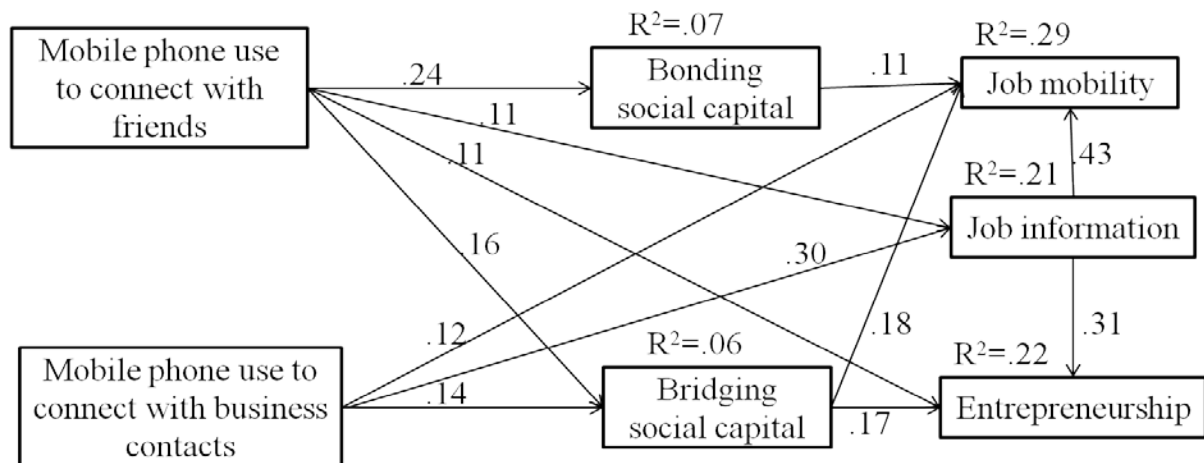


Figure 3. Path model for mobile phone use.

Note: Demographic factors including age, gender and education were controlled in analysis, but not presented in the figure.

H3a and *H3b* are supported according to the path model for mobile phone use in Figure 3. Using mobile phone to interact with friends is related to both bonding ($\beta=.24, p<.01$) and bridging ($\beta=.16, p<.01$) social capital. Moreover, doing so promotes job information ($\beta=.11, p<.01$) and entrepreneurship ($\beta=.11, p<.01$) directly. *H4a* is supported, but *H4b* is not. Using mobile phone

to connect with business contacts is positively related to bridging social capital ($\beta=.14, p<.05$), but not to bonding capital. In addition, mobile phone use to interact with business contacts relates directly to job information ($\beta=.30, p<.01$) and job mobility ($\beta=.12, p<.05$).

Table 3: Goodness of fit statistics for mobile phone use path model.

Statistics	Model Value
χ^2 (df)	10.12(3)
GFI	.99
RMSEA	.04
AGFI	.97
Normed Fit index	.99
Comparative fit index	.99
Incremental fit index	.99
Relative fit index	.97
RMR	.01

For *H5a* and *H5b*, findings suggest that social capital associated with SNS use differs from that from mobile phone use, regarding its relationship with career outcomes. Both bonding ($\beta=.07, p<.05$) and bridging social capital ($\beta=.21, p<.01$) promoted by SNS use are positively related to job information. In contrast, neither bonding nor bridging social capital derived from the use of mobile phone is linked with job information.

H6a is supported. Bonding social capital, linked with SNS and mobile phone use, is positively related to job mobility in the Confucian culture of Singapore. For *H6b*, bridging social capital from mobile phone use relates positively to job mobility ($\beta=.18, p<.05$), while that from SNS use does not. *H7b* is supported, but *H7a* is not. Bridging social capital associated with the use of mobile phone ($\beta=.17, p<.05$) or of SNS ($\beta=.16, p<.05$) positively relates to entrepreneurial intention. In contrast, bonding social capital is not associated with entrepreneurship. In addition, job information is closely related to greater job mobility and entrepreneurial intention in both path models.

Discussion

This study finds that connecting with friends via SNS or mobile phones is important for career success in Singapore's business environment. Doing so promotes both bonding and bridging so-

cial capital, but the association with bonding capital is somewhat stronger. Professional networking via SNS and mobile phone promotes the flows of job-related information, thereby improving the dynamics of job markets and is also directly linked to entrepreneurial inclinations in the case of SNS. We also find evidence of the mediating role of social capital, namely that bonding social capital associated with the use SNS and mobile phones facilitates job mobility, while bridging capital is positively related to entrepreneurial intentions.

The implications of SNS use are different from those of mobile phone in that: a) professional networking via mobile phone is related to bridging capital, while the same activity on SNS shows no relationship with social capital; b) both types of social capital in the SNS model relate positively to job information while neither do in the mobile phone model; and c) bridging capital associated with mobile phone use is positively linked with job mobility, which was not the case for SNS.

These findings have implications for future research on social capital in the context of Asian business practices, as well as for the design of SNS and mobile services. The findings regarding interactions with friends via SNS or mobile phones are in line with previous research (e.g., Boyd & Ellison, 2008; Ellison et al., 2007; Skoric & Kwan, 2011). In contrast, communication with professional contacts via SNS is not linked to any type of social capital. By implication, minimum support is available in business interactions on SNS, even though using SNS may provide individuals with more job information, including personal stories of successful entrepreneurs, for example. In that sense, people whose business networks dwell mainly on SNS can be well-informed about their careers and adequately motivated to start business operations. The direct link between professional networking and job information is also intriguing as it suggests that even though connecting with business associates via social media does not promote social capital, it can still be beneficial in its own way. Using technologies to interact with business contacts could accelerate the flow of job-related information among professionals, which consequently promotes the dynamism of labor markets by increasing job mobility and entrepreneurship. Taken together with the importance of interactions with friends, the findings suggest that an optimum balance between informal and formal interactions should be achieved for the development of a healthy labor market.

The link between bonding social capital and job mobility suggests that the “strength of weak ties” argument previously validated in a Western context (Granovetter, 1973) should be amended as the “strength of weak and strong ties” thesis in the context of Asia. This is consistent with the previous findings by Bian and Ang (1997), which demonstrate that in the Asian context, strong ties and their leverage are at least as important predictors of job mobility than as weak bridging ties, although in our model the relationship was quite weak. Within the Asian context, learning about job opportunities from a loosely connected tie is not always sufficient to secure a new job. One may know about job openings, but without blessings from strong and resourceful bonding *guanxi* ties, getting a job is significantly less likely. Still, weak bridging ties can inspire people to start their own businesses.

The findings suggest different patterns of associations in SNS and mobile phone models. These nuances are reflective of the differences in socio-technological affordances of the two communication platforms. Compared with mobile phones, SNS provide much more user information. Profile descriptions, status updates, wall postings photos, comments, or shared contents may reveal user’s most intimate feelings, interests, or life events to their friends and acquaintances. Also, SNS users can browse their friend lists, learn who is connected to whom, and also link to their friends’ connections (Greenhow & Robelia, 2009). Many SNS users develop their

online networks in order to articulate and publicly display their existing offline social networks (boyd & Ellison, 2008). Moreover, SNS users can befriend bands, businesses, NGOs or political organizations. Such connections can provide information beyond that provided by close ties of friends and family. In contrast, frequent mobile phone conversations reassure established network ties (Licoppe, 2003), convey emotional support, and afford a sense of security to individual users (Ling & Yttri, 2002). Given that, a carefully designed mix of various mediated interactions should be strategically employed based on one's priorities at different stages of a career.

Specifically, the finding that professional networking via SNS is related to entrepreneurship while that via mobile phone promotes job mobility suggests that the nature of interactions differs significantly between these media platforms. Therefore, SNS may represent venues where people share their stories of past successes or failures as entrepreneurs. Would-be entrepreneurs can gain useful tips, hear interesting stories and inspirational ideas via their direct or indirect connections with other entrepreneurs and professionals. On the other hand, people are more likely to talk over their mobile phones with business contacts who have the influence or the status to help them pursue new job opportunities. In the Asian context, successful job seeking often requires extensive connections, effective micro-coordination, and even a certain chemistry between employers and potential employees, and these assets are more easily acquired by mobile phones.

In addition, our findings suggest that both types of social capital, especially bridging capital, promoted by mediated interactions with friends on SNS could bring job information, while social capital associated with mobile communication does not. This suggests social capital is a mediator in the relationship between SNS interactions with friends and career information. Within SNS sites, a "friend" connection includes a large variety of relationships, such as schoolmates, colleagues, public figures, or simply individuals whose networks are accessed (Greenhow & Robelia, 2009). Via active friending behaviors, SNS users expand their information networks and enhance their sense of support. In comparison, talking with friends or professional contacts via mobile phones produces more leverage than simply job-related information. By implication, point-to-point conversation on mobile phone is more likely to be instrumental and targeted towards specific career goals.

Practical implications and conclusions

We suggest several practical implications of our findings. First, SNS interactions with friends vs. SNS interactions with business contacts have rather distinct implications. Namely, while both types of interactions are related to acquisition of job information and entrepreneurship, only interactions with friends have significant social capital benefits – SNS use for business purposes shows a more direct, instrumental relationships with job information and entrepreneurship without having any social capital correlates. SNS use to connect with friends is also more strongly tied to job mobility via its promotion of close, bonding ties. Thus, in an organizational context, SNS use that is limited to business contacts only can promote acquisition of job-related information and entrepreneurship, but it will not expand weak-tie connections nor help build networks of social support that employees need. This is important as employee satisfaction and well-being are known to predict higher productivity (e.g., Brief & Weiss, 2002; Fredrickson, 2001), and thus a good mix of formal and informal types of mediated interactions should be integrated into an organization's culture.

Our results show that successful job-hopping also requires stronger bonding ties, while bridging social capital is more important for entrepreneurship. According to our results, SNS interactions with friends play an important role in the creation and maintenance of bonding social capital, and a similar relationship is observed for mobile phones. On the other hand, would-be entrepreneurs may be more committed and confident as they gain encouragement and expertise from bridging ties gleaned from interacting with business contacts over mobile phones. In the case of government campaigns or training programs aimed at would-be entrepreneurs, it is critical that a large variety of communication tools be deployed to facilitate weak-tie contacts.

Interestingly, SNS-based interactions with business contacts have a direct relationship with entrepreneurship, which indicates that knowledge exchange is facilitated even without establishing weak ties. Given that, business-oriented SNS platforms should be designed to offer more information exchange, sharing of stories or how-to tips, in addition to individual profile information. Given our findings, it is not surprising that the leading business SNS, LinkedIn, has steadily expanded their news and content offerings over the past three years, including launching the Influencer Program allowing users to follow opinion leaders on the platform (Shih, 2014).

As to potential limitations of our study, we highlight that the measures of social capital used here are quite different from the measures used in some of the seminal studies which examined the impact of weak ties on job mobility (e.g. Granovetter, 1974). In our study, we deal with people's perceptions of their stock of social capital, rather than the data on their actual network relationships with others, which could affect our findings to some extent. Future studies should attempt to utilize social network analysis to more closely examine the nature of social ties utilized for job searching and/or for starting a new business. We are also unable to assess directly how SNS or mobile phone communication with individuals who are both business contacts and friends is linked with social capital and informational resources, or with job mobility and entrepreneurship. Lastly, the cross-sectional nature of our data does not allow us to make strong causal claims, although we believe that the model presented here has a solid theoretical grounding paired with a robust empirical analysis.

Acknowledgements

This project was funded by the Interactive and Digital Media Cluster at the Wee Kim Wee School of Communication and Information, Nanyang Technological University, Singapore. We devote this paper to the memory of our friend and colleague Wayne Wei-Jen Fu.

Notes

1. A within-household sample was obtained by asking to speak with the “youngest male, 18 years or older, who is now at home”. If no eligible male was present, then the interviewers would ask to speak to the “oldest female, 18 years or older, who is now at home”.

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