

Cultural differences in garnering social capital on Facebook: French people prefer close ties and Americans prefer distant ties

Abstract

The link between social capital (SC) and Facebook has been widely studied in the U.S., and less is known about how students from different cultures use the site to garner SC. We measured network composition, communication on Facebook, and SC via questionnaires in France and the U.S. We found that American students have a greater proportion of distant to close ties in their networks and higher levels of bridging SC than French, the latter preferring bonding SC. A stronger relationship between SC and communication via Facebook was observed in the U.S. These findings are explained by cultural differences in relatedness.

Keywords: Facebook, relatedness, social capital, network composition, cross-cultural

Cultural differences in garnering social capital on Facebook: French people prefer close ties and Americans prefer distant ties

Facebook is a social networking site used worldwide to stay in touch with friends and acquaintances. Communication with others on the site has been linked to increased social capital resources, however most of these studies have been conducted in the U.S. (*e.g.* Ellison, Steinfield, & Lampe, 2007; 2011; Ellison, Vitak, Gray, & Lampe, 2014; Steinfield, Ellison, & Lampe, 2008), and less frequently in other countries with different cultural backgrounds (*e.g.* Lee, Kim, & Ahn, 2014). Nevertheless, research on Facebook and other social media platforms has suggested that levels of autonomy and relatedness in different cultures may play a role in the network composition and communication patterns of users (*e.g.* Abbas & Mesch, 2015; Huang & Park, 2013; Marshall, Cardon, Norris, Goreva, & D'Souza, 2008). Therefore, in the current study we compare two countries, France and the U.S., which differ in their levels of relatedness with two main aims: (1) examining differences in network composition and associated differences in levels of social capital and (2) examining differences in the relationship between frequency of communication and social capital.

Social capital and Facebook

Social capital is commonly defined as the resources that individuals accrue through investment in social relationships (Lin, 1999). Two types of social capital have been defined and studied in the social capital literature: bridging and bonding (Putnam, 2000). Bridging social capital is composed of novel, informational resources that one would otherwise not have access to and a general feeling of connectedness to the world. This type of social capital is assumed to be provided by acquaintances or emotionally distant ties as it is a low cost resource (Putnam, 2000). Although, it is considered a low cost resource, bridging social capital is important because it allows people to have greater access to information and opportunities that they otherwise would not be able to access. For example, in his famous

study on the importance of weak ties, Granovetter (1973) found that weak ties (similar to distant ties), which provide bridging social capital were more helpful for adults trying to find a new job than strong ties (similar to close ties). It is reasonable to think that bridging social capital can also have important implications specifically for college students. For example, it can help them learn about opportunities for activities and cultural events on campus or can help them find part-time or summer jobs to help finance their schooling.

Bonding social capital is made up of emotional support, advice, and material resources in times of need. This type of social capital is assumed to be afforded by close friends and family because it is a high cost resource (Putnam, 2000). Bonding social capital is important because it provides dependable access to costly resources like money or help when one is sick. Bonding social capital may be especially important for college students because college can be a stressful time of transition to a new environment and new responsibilities (Friedlander, Reid, Shupak, & Cribbie, 2017). Therefore, having dependable access to help from close others may aid students to feel supported through this difficult period (Gray, Vitak, Easton, & Ellison, 2013).

The relationship between Facebook use and social capital is one of the most unvarying findings in the literature concerning Facebook (*e.g.*, Burke, Kraut, & Marlow, 2011; Ellison, et al., 2007; Steinfield, et al., 2008). Two important factors of Facebook use have been highlighted when examining its relationship with social capital. The first factor concerns the composition of users Facebook friendship networks. In general, users with more Facebook friends have been found to have greater levels of bridging social capital (Burke, Marlow, & Lento, 2010) although this effect holds true only up to a certain number of Facebook friends (Ellison, et al., 2011). A larger number of distinct Facebook communities, or groups of Facebook friends from different social contexts (ex. work, college, family), was linked to increased bridging social capital (Brooks, Hogan, Ellison, Lampe, & Vitak, 2014).

Concerning bonding social capital, to our knowledge, only one study has found that having more “actual” friends (what we might define as close friends) in one’s network was associated with higher levels of bonding social capital (Ellison, et al., 2011).

The second factor concerns the type of users with whom we communicate on Facebook. Previous studies have shown a relationship between amounts of communication and bridging social capital where more communication is generally associated with greater social capital (ex. Ellison, et al., 2011; Ellison, et al., 2014). However no studies have currently measured whether users are communicating with close or distant ties on Facebook to garner social capital. This is an important issue because the theory of social capital assumes that bridging social capital will be associated primarily with communication with distant ties while bonding social capital will be associated primarily with communication with close ties. As mentioned by Burke and colleagues (2011), studies measuring total communication on Facebook have overlooked the relationship between the different forms of social capital (bridging and bonding) and Facebook communication with different types of ties (distant and close). Thus, one of the aims of the current study is to measure both Facebook network composition and amounts of communication with close and distant ties separately in order to examine how each of these factors may influence social capital in two different countries differing in their levels of relatedness, France and the U.S.

Autonomy and relatedness as cultural values in France and the U.S.

Kagitçibasi’s (2005) theory of autonomy and relatedness proposes that the variable of culture is bidimensional and is organized around two separate cultural values or dimensions: autonomy and relatedness. Cultures, generally studied at the country level, differ on levels of one or both of these dimensions creating four different quadrants of high or low autonomy and high or low relatedness. For example the U.S. is located in the high autonomy and low relatedness quadrant and France is located in the high autonomy and high relatedness

quadrant. Concerning the dimension of autonomy, in a country with low autonomy, individuals are bound to certain ways of life by strict cultural norms. In contrast, a country with high autonomy, individuals have much freedom in deciding how to express themselves and have many options for education and careers. According to Kagitçibasi's (2005) theory, most Western countries such as France and the U.S. have high levels of autonomy although they differ in their levels of relatedness. The relatedness dimension of culture influences how we approach relationships and thus, may play the largest role in network composition and who people communicate with to seek out social capital.

For instance, individuals living in a high relatedness culture, such as France, tend to make a greater distinction between close and distant ties and are less open to casual friendships (Kagitçibasi, 2005; Triandis, Bontempo, Villareal, Asai & Lucca, 1988). This generally results in a smaller network of friends and a higher proportion of close to distant ties in their social networks. For example, studies have shown that people in high relatedness cultures have smaller networks on Facebook (Cho, 2010; Lee-Won, Shim, Joo, & Park, 2014), and less desire to make new friends on the site (Abbas & Mesch, 2015). Moreover, in a recent study comparing Facebook users in France and the U.S., it has been shown that French students had smaller Facebook networks than American students (Brown, Michinov, & Manago, 2017). French people's smaller social networks may be due to the fact that in high relatedness cultures people are highly psychologically attached to their close friends and family. This high psychological attachment may also lead to greater amounts of bonding social capital, a resource which is theoretically provided by close ties.

Beyond Facebook use, a recent survey revealed that French university students attend schools closer to their home than American students, and visit home frequently on the weekends (Belgrith, Ferry, & Oton, 2013) suggesting a greater psychological attachment to their families. In the same vein, an anthropological study has been found a French people's

intense attachment to a small group of lifelong friends (Carroll, 1988). Such a strong psychological attachment to close others suggests that French people may depend highly and somewhat exclusively on these close others to provide resources, such as social capital. Therefore, we expect that bonding and bridging social capital will be more strongly associated with communication with close ties in France than in the U.S. We do not expect French students to seek out bonding social capital through communication with distant ties, because bonding social capital is a more costly resource and French students are less likely to communicate publicly with their entire network to ask for this kind of support from distant ties (Brown, et al., 2017). French students may, however, seek out bridging social capital from distant ties on Facebook because this resource is less costly and therefore they may be willing to solicit this kind of resource from their distant ties.

Individuals living in a low relatedness culture, such as the U.S., have a different approach to relationships as they are more open to creating new relationships or casual friendships and make less distinction between close and distant ties (Kagitçibasi, 2005; Triandis, et al., 1988). One of the main consequences is that people from low relatedness cultures have a larger social network. Indeed, studies have shown that Americans tend to have larger Facebook networks than users in high relatedness cultures such as South Korea (Cho, 2010; Lee-Won, et al., 2014), and France (Brown, et al., 2017). While it may seem paradoxical that people in a low relatedness culture would have more friends, this can be explained by the fact that people in these cultures are less psychologically attached to their friends and family and therefore are willing to expand their networks to gain more social capital resources. Indeed, American university students attend university farther from home and visiting home on the weekends is seen as a sign of maladjustment because this may prevent students from making new friends at university (Paul & Brier, 2001). We expect that

Americans' expanded networks will be associated with greater levels of bridging social capital, because this resource is theoretically provided by distant ties.

Due to the fact that individuals in a low relatedness culture are less psychologically attached to their close ties, they cannot depend solely on close friends to provide all the social capital they might need. Indeed, studies have shown that American students are willing to seek out social support (a concept similar to bonding social capital) on Facebook from distant ties. Students seek out social support on Facebook by posting status updates in which they engage in emotional disclosure for their entire network to see (Forest & Wood, 2012; Manago, Taylor, & Greenfield, 2012). Concerning bridging social capital, American students have been shown to use more public forms of communication, visible to distant and close ties, on Facebook than French students which could provide them greater access to bridging social capital (Brown, et al., 2017). Therefore, we expect that bridging and bonding social capital will be more strongly associated with communication with distant ties in the U.S. than in France. We expect American students to seek out bonding social capital through communication with distant ties, because they are willing to ask for this kind of support from distant ties (Forest & Wood, 2012). Due to their comfort with communicating with distant ties (Brown, et al., 2017) American students may also be more effective at garnering bridging social capital from their distant ties than French students.

Current study

In the current study, we aim to compare how users from a high versus low relatedness culture (France and U.S., respectively) use Facebook to garner social capital. Such comparison is important for two main reasons: (1) these two cultural contexts have a high level of autonomy, but different levels of relatedness, and (2) Facebook is the most frequently used social networking site both in France (Médiamétrie, 2015), and in the U.S. (Pew Research Center, 2015). As we do not know to date how people from countries with different

levels of relatedness use Facebook to garner bridging and bonding social capital, the present study aims to fill this gap.

In this study, we use questionnaires to measure network composition, amounts of communication on Facebook, and social capital. We start by conducting an analysis to verify whether the differences in relatedness in the two countries exist by comparing students' distance from home and frequency of visits home. Then, we examine network composition in the two countries, by comparing percentages of Facebook users in each population who include certain categories of close or distant ties in their network. We expect French users to have less distant ties in their network (H1a) and a greater proportion of close to distant ties (H1b) than American students. We expect that these country differences will be associated with higher levels of bonding (H2a) and lower levels of bridging social capital (H2b) in the French sample than in the American sample. Finally, we test the strength of the relationship between social capital and communication with close and distant ties on Facebook and compare these relationships between countries. Due to French students' high psychological attachment to and dependence on close friends, we predict that the relationship between social capital both, bridging (H3a) and bonding (H3b), and communication with close ties will be stronger in France than in the U.S. Conversely, due to American students' openness to creating relationships and communicating with distant ties, we predict that the relationship between social capital, both bridging (H4a) and bonding (H4b), and communication with distant ties, will be stronger in the U.S. than in France.

Method

Participants

All participants were recruited from psychology courses during the fall semester in France and in the U.S. to complete questionnaires.

American sample

One hundred sixty-four American participants (89 men, 75 women, $M_{age} = 18.82$, $SD_{age} = 3.13$) were recruited from first year introductory psychology classes at a medium sized university in the western United States. Participants completed the questionnaires and were given research credit for their participation. Ninety-five percent of participants had their Facebook account for three years or longer. Thirty-one percent of participants logged in less than once per day, 47% logged in one to five times a day, 9% logged in six to ten times per day, and 13% logged in more than ten times per day.

French sample

Two hundred fifty-one French participants (47 men, 204 women, $M_{age} = 18.63$, $SD_{age} = 1.34$) were recruited from first year psychology classes at a medium sized university in western France. Participants completed the questionnaires and no compensation was offered because remunerating students for research participation is illegal in France. Ninety-five percent of participants had their Facebook account for three years or longer. Thirteen percent of participants logged in to Facebook less than once daily, 50% logged in between one and five times a day, 17% logged in between six and ten times a day, and 20% logged in more than ten times a day.

Measures¹

The questionnaires contained three sections: a demographics section in which the relatedness measures were included, a Facebook friend list section from which the variables of network

¹ All measures were originally in English. A committee of three French university student research assistants aided the first author in translating the items on all measures. The French translation of the items was then sent to a professional translator for a back-translation to English. The back-translation showed correspondence of meaning in the English and French versions of the questionnaires.

composition and frequency of communication variables were created, and a social capital section.

Relatedness measures

Distance traveled from home to attend university. Students were asked to report how many minutes and/or hours it would take them to travel by car to university.

Visits home. Students were asked to report on average how many weekends they visited their family's home each month. Options ranged from zero to more than four with an option to indicate that students lived with their parents.

Facebook friend list and quantity of communication

Participants were presented with a list of ten different types of people² (close friend, friend, high school friend, high school acquaintance, friend of a friend, acquaintance, someone met only one time, online friend, someone met while traveling, and a stranger) with whom they might be friends on Facebook. These relationships were chosen based on the list presented in Manago, Taylor, and Greenfield (2012). For the construction of variables, close friend, friend, and high school friend were coded as close ties, as these types of relationships fit the definition of close ties and distant ties given by Clark and Reis (1988). High school acquaintance, friend of a friend, acquaintance, someone met only one time, online friend, someone met while traveling, and a stranger were coded as distant ties also based on the same definition. For each of the ten relationships participants were asked if they had a friend on Facebook that fell into this category. If they answered yes, they were asked how often they contacted this person via Facebook with examples of types of contact such as writing a

² We did not include parents in the list of close/distant ties because it is difficult to know the role that parents will play in a college students' life. Some will certainly remain very involved in their student's life while others may become more distant relationships. Therefore, we were uncertain whether to classify this relationship as close or distant as the transition to college is often a time when emerging adults are redefining their relationship to their parents (for example see Wintre & Yaffe, 2000).

message on someone's wall or commenting on their photos. There were seven possible responses of increasing frequency (*never, once a year, a few times per year, once a month, once a week, several days each week, and every day*). In our analyses, we excluded relationships where participants indicated that they never communicated as these relationships would be unlikely to provide social capital.

Network composition

Percentages of friendship categories. For each of the ten friendship categories the percentage of participants who answered that they had a Facebook friend in a certain category was calculated for each population separately.

Proportion of close to distant ties in their Facebook networks. The proportion of close to distant ties was calculated by dividing the number of categories of close ties that students reported being friends with on Facebook by the number of categories of distant ties.

Frequency of communication with close and distant ties

Close ties. This variable was calculated by averaging the frequency of communication on Facebook (responses ranging from 1 *once a year* to 6 *everyday*) with a close friend, friend, and high school friend. The median for France was 4.33 and the median for the U.S. was 3.67.

Distant ties. This variable was calculated by averaging the frequency of communication on Facebook (responses ranging from 1 = *once a year* to 6 = *everyday*) with an acquaintance, a friend of a friend, a high school acquaintance, someone met once, an online friend, someone met while traveling, and a stranger. The median for France was 2 and the median for the U.S. was 1.5.

Bridging and bonding social capital on Facebook

We adapted our scale measuring bridging and bonding social capital on Facebook from William's (2006) measure for online social capital. We changed the word "online" to "on Facebook" to be more specific for our study. Otherwise items were unchanged. Items are on a 7 point scale with anchors of 1 (*strongly disagree*) to 7 (*strongly agree*). There are twenty items total on the scale ($\alpha = .87$). There are 10 items measuring bridging social capital ($\alpha = .88$) and 10 measuring bonding social capital ($\alpha = .84$). A sample item on the bridging social capital subscale is, "Interacting with people on Facebook makes me want to try new things." A sample item on the bonding capital subscale is, "There are several people on Facebook I trust to help solve my problems." We took the average of the 10 items measuring bridging social capital to create the bridging social capital score and the average of the 10 items for bonding social capital to create the bonding social capital score. Cronbach's alphas conducted in each population separately for each subscale were greater than .80 suggesting that the translation of the items was reliable. Likewise, the bridging and bonding subscales were significantly correlated in both samples ($r_{\text{France}} = .249, p < .001$; $r_{\text{US}} = .397, p < .001$).

Results

Analysis of relatedness in France and the US

We conducted an independent samples t-test to examine differences in how far from home American and French students attend university. French students ($M = 1.54$ hours, $SD = 3.81$) attended university significantly closer to home than American students ($M = 4.15$ hours, $SD = 8.64$; $t(202.39) = -3.63, p < .001$, equal variances not assumed). We conducted a chi-square test to examine differences in how often French and American students visited home ($X^2 = 148.19, p < .001$). French students were more likely to live with their parents or family while attending university (31.9%) than American students (4.2%). French students were also more likely to go home on the weekends than American students. Indeed, most French students visited home three or more times per month (40.2%) compared to 13.3% of

American students. On contrary, most American students (55.2%) visited home one or two times per month compared to 21.3% of French students. Only 6.6% of French students visited home zero times per month compared to 27.3% of American students. Taken together, these results reveal that French students have more contact with their families, suggesting higher levels of psychological connection and relatedness with their families, than American students.

Differences in network composition in France and the U.S.

To examine differences in participants' network composition (H1a) between countries, we compared the percentage of participants in each country who had a Facebook friend in a certain category. Percentages for all ten categories are reported in Figure 1.

Close ties on Facebook

Most participants in France and the U.S. reported being friends on Facebook with a close friend, a friend, and a high school friend (greater than 98%). Chi-squared tests were conducted to examine differences in the percentages between France and the U.S. There were no significant differences in what percentage of participants friended close ties.

Distant ties on Facebook

We did observe differences in six of the seven distant ties categories of Facebook friends. A larger percentage of American participants had a friend of a friend ($X^2 = 50.098, p < .001$), an acquaintance ($X^2 = 38.337, p < .001$), someone met only once ($X^2 = 64.320, p < .001$), an online friend ($X^2 = 9.124, p = .003$), and a stranger ($X^2 = 24.508, p < .001$) in their Facebook networks than French participants. There were only two categories of distant ties which did not differ between France and the US: high school acquaintance ($X^2 = 2.892, p = .089$) and someone met while traveling ($X^2 = 1.616, p = .204$). These results show that

American students have a greater diversity of distant ties in their Facebook networks than French students which supported our hypothesis 1a.

[Insert Figure 1 here.]

We also calculated a ratio of close to distant ties for each participant to create a way to summarize the information in each of the ten categories and compare the entire network composition and test hypothesis 1b. It appeared that American students reported a smaller ratio of close to distant ties ($M = 0.70$, $SD = 0.37$) in their Facebook networks than French students ($M = 1.10$, $SD = 0.71$; $t(356.17) = 7.23$, $p < .001$, equal variances not assumed). In other words, the present findings support the hypothesis 1b that American students' Facebook networks are made up of more distant ties than close ties, and the inverse is true for French students. This difference is most likely due to the fact that Americans had more distant ties than French students, since American and French students did not differ in their number of close ties.

Differences in levels of perceived social capital in France and the U.S.

In order to examine Hypothesis 2, we tested the in levels of perceived social capital between countries using an independent samples t-test. There was a marginally significant difference in levels of bonding social capital between the two countries ($M_{US} = 4.495$, $SD_{US} = 1.133$; $M_{France} = 4.697$, $SD_{France} = 1.016$; $t(422) = 1.91$, $p = .057$). French students reported higher levels of perceived bonding social capital which supports hypothesis 2a. Additionally, there was a difference in levels of perceived bridging social capital revealing that American participants ($M = 4.223$, $SD = 1.051$) had a higher level of perceived bridging social capital than French participants ($M = 3.772$, $SD = 1.087$; $t(420) = 4.240$, $p < .001$), consistent with hypothesis 2b.

Relationship between communication with close and distant ties and social capital

To examine the relationship between frequency of communication with close and distant ties and bridging and bonding social capital in each country (Hypotheses 3 and 4), we calculated Spearman's correlations separately in each population. We used Spearman's rho due to the non-normal distribution of the communication with distant ties variable. To test the differences in these correlations between countries we used Fischer's r-to-z transformation. All correlations are reported in Table 1.

Social capital and communication on Facebook with close ties

In the U.S. and in France, bridging social capital was correlated positively with the frequency of communication with close ties. Furthermore, we found that the relationship between bridging capital and frequency of communication with close ties is not significantly different in the U.S. and France ($z = -1.38, p = .168$). We had expected that the association between bridging capital and communication with close ties would be stronger in France than in the U.S., so hypothesis 3a was not supported.

In the U.S. and in France, bonding social capital was positively correlated with frequency of communication with close ties. However, the relationship between bonding social capital and communication with close ties was stronger in the U.S. than in France ($z = -2.98, p = .003$). This finding is contrary to our hypothesis 3b which predicted that this association would be stronger in France.

Social capital and communication on Facebook with distant ties

In the U.S. and in France, bridging capital was positively associated with communication with distant ties. The positive association between bridging capital and communication with distant ties, however, is significantly stronger in the U.S. than in France ($z = -2.61, p = .009$). This finding supports our hypothesis 4a.

Finally, consistent with our hypothesis 4b, a significant positive relationship was found between bonding social capital and communication with distant ties in the U.S., but this correlation was not significant in France.

[Insert Table 1 here.]

Discussion

The purpose of the current study was to explore Facebook users' network composition and how they garner social capital from communication with close or distant ties in two countries with differing levels of relatedness. Our analyses of relatedness demonstrated that French students do exhibit a higher level of relatedness than American students as evidenced by their attending university closer to home and visiting home frequently during the semester. In our main analyses, we found that a high percentage of French and American students included close friends in their Facebook network. We observed differences, however, in the percent of users who included distant ties in their networks, with French students being less likely to include distant ties in their networks than American students. Furthermore, we found that this pattern of friending fewer distant ties in France led French students to have a higher proportion of close to distant ties in their networks than American students. French students also reported marginally higher levels of bonding social capital and lower levels of bridging capital on average than American students. Finally, in our analysis on communication and social capital, we found that communication with close and distant ties is important for garnering bridging capital in both countries, although communication with distant ties is even more strongly associated with bridging social capital in the U.S. These analyses also indicated that for American students, bonding social capital was associated with communication with both close and distant ties but for French students bonding social capital was only associated with communication with close ties. In general, these results point to Facebook being a more important social capital resource for American students than for French students.

Differences in network composition and levels of social capital in France and the U.S.

Contrary to our hypothesis that a larger percentage of French users would include close ties in their networks, we found that nearly all French and American students included close ties in their network. This finding is similar to a finding in a study conducted only in a U.S. population that showed most people on Facebook include close friends in their network (Ellison, et al., 2011). We did however observe differences between each country the percentages of distant ties included in their networks. A smaller percentage of French students included distant ties in their networks than American students. Furthermore, we found that French students had a larger ratio of close to distant ties on Facebook than American students. In fact, the ratio was greater than one for French students meaning that they have more close than distant ties on Facebook, whereas for American students the ratio was less than one meaning that their networks are made up of more distant than close ties. This finding is consistent with cross-cultural studies conducted on Facebook which have shown that lower levels of relatedness are associated with being more open to making new friends on Facebook in Middle Eastern countries (Abbas & Mesch, 2015), and in a comparison of France and the U.S. specifically, that American students have significantly larger networks than French students (Brown, et al., 2017).

We also tested levels of bonding and bridging social capital between the two countries. We found that French students reported a higher level of bonding social capital. This finding is consistent with the fact that French students had a higher proportion of close to distant ties in their networks which may provide French students greater access to bonding social capital, a resource typically provided by close ties (Putnam, 2000). Furthermore, French students' higher levels of relatedness may lead them to value bonding social capital over bridging social capital, as this costly resource serves to strengthen ties between close relationship partners who are greatly valued in high relatedness cultures. We also observed differences in levels of

bridging social capital with American participants reporting higher levels of bridging social capital than French students. This finding is consistent with American students' higher proportion of distant ties to close ties in their networks which may provide access to more bridging social capital, a resource typically provided by distant ties (Putnam, 2000).

Additionally, American students value for creating new relationships may lead them to value bridging social capital over bonding social capital as this resource is less costly to give when forming new relationships, but still provides information that may be useful as the relationship develops.

The relationship between social capital and communication with close ties on Facebook

In the current study we found that for both American and French students bridging social capital is related to communication with close ties on Facebook and the strength of this correlation did not differ between countries. This finding is contrary to our prediction that this relationship would be stronger in France. Perhaps this is due to the design of Facebook whereby a user's close ties are also connected to a network of distant ties. Therefore the information or bridging social capital a user receives from his/her close ties, may actually be passed on from the close tie's distant connections, a situation which can arise in both countries due to the interlocking nature of social networks.

Interestingly, we found that while a positive association between communication with close ties and bonding social capital is present in both countries, the relationship is stronger in the U.S., contrary to our prediction that the relationship would be stronger in France. French students' stronger psychological attachment to their friends, due to their higher levels of relatedness may play a role in this difference. For example, people who had a denser network of close friends, like the patterns of relationships observed in countries with higher levels of relatedness, were found to spend less time on Facebook (Park, Lee, & Kim, 2012). This may be because users are less dependent on garnering bonding social capital online when they can

see friends face-to-face. This effect may be compounded by differences in university life in France and the U.S. French students, who visit home more often than American students, may have more opportunities to see close friends from high school face-to-face. American students who visit home less often may have Facebook as their only recourse for garnering bonding social capital from their close ties from home.

The relationship between social capital and communication with distant ties

We found that communication with distant ties was associated positively with bridging social capital in France and the U.S. As predicted, the strength of this correlation was greater in the U.S. than in France. This finding may be due to American students' larger proportion distant to close ties and their openness to communicating with these distant ties (Brown, et al., 2017) which would provide them greater access to social capital. French students' reticence to interact with distant ties on Facebook may prevent them from fully capitalizing on the bridging social capital available to them on Facebook.

Furthermore in the American sample, we found an association between communication with distant ties and bonding social capital. This association was not present for French students. This finding is significant because it is not predicted by traditional definitions of bonding social capital which predict that this resource will primarily be provided by close ties. Nevertheless, this finding is similar to some studies conducted in the U.S. which show that communication with distant ties or having distant ties in one's network is associated with increased bonding social capital (Ellison, et al, 2011; Manago, et al., 2012). American students, with their lower levels of relatedness, may be open to requesting and receiving bonding social capital from distant ties on Facebook because they cannot depend solely on close ties to have their bonding social capital needs met. Furthermore, due to their lower levels of relatedness, American students do not make a strong distinction between close and distant ties. For example, in an American sample of Facebook users, comments made by

distant ties were considered as supportive as those made by close ties (Rozzell, et al., 2014). Furthermore, American's comfort with seeking out bonding social capital from distant ties has been demonstrated by research that shows American students will seek out social support (bonding social capital) from distant ties by posting status updates requesting support for their entire network to see (Manago, et al., 2012; Forest & Wood, 2012) and that they are willing to use more public forms of communication with their entire network than French students (Brown, et al., 2017).

Limitations

One of the limits of our study was that we chose to measure relatedness through how far from home students choose to attend university and how often they visit home, however there may be problems with these measures of relatedness. For example, there are differences in how university systems are structured in France and the U.S. that may contribute to students living farther or closer to home. In France students who attend university must go to the closest university that teaches their area of interest. In the U.S. students can choose to go anywhere to university, but they can also choose to go to a university close by if they wish. Furthermore, visits home may not be the best indicator of closeness to family because students could be visiting home for other reasons, such as a weekend job or visiting high school friends. Researchers in the future may want to include other measures of relatedness when examining how Facebook communication is associated with social capital. Another limitation was that we did not measure offline social capital to see if Facebook social capital translated into real world social capital. Previous research however suggests that students are likely using Facebook to communicate with people they already know offline and indeed, these researchers found that Facebook use can increase offline social capital (Ellison, et al. 2007). Future researchers may want to further examine the link between online and offline social capital.

Conclusion

Our study provides a first look into how communication on Facebook with close and distant ties may differentially influence bridging and bonding social capital in countries with different levels of relatedness. We found that low relatedness is associated with seeking support from both close and distant ties and high relatedness is associated with seeking support principally from close ties. These findings suggest that it is important to take into account cultural variables when exploring how people use online networks to garner social resources. In conclusion, this study demonstrates that culture may influence how users garner social capital on Facebook and highlights the importance of future cross-cultural studies to better understand the relationship between Facebook use and social capital.

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Table 1

Correlations between social capital and communication with close and distant ties

	Bridging SC Close	Bridging SC Distant	Bonding SC Close	Bonding SC Distant
U.S.	.359 ($<.001$)	.405 ($<.001$)	.434 ($<.001$)	.337 ($<.001$)
France	.232 ($<.001$)	.162 (.012)	.162 (.010)	-.009 (.883)

Figure Captions:

Figure 1. Percentage of participants in each population reporting that they had a friend from each category of Facebook friends in their network. HS = high school.