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Private message me s'il vous plait: Preferences for personal and masspersonal communications on Facebook among American and French students

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Abstract

Facebook, a social networking tool used worldwide, provides affordances for public, masspersonal and private, personal communication. Masspersonal communication, sending personal messages to one's entire network, may be more appealing in individualistic countries where large social networks are adaptive, whereas personal communication may be more appealing in less individualistic countries where close relationships are valued. To test this hypothesis, we collected data in two Western countries differing in levels of individualism, France (204 women, 47 men) and the US (75 women, 89 men) through questionnaires measuring their Facebook use. Results indicated that Americans had larger Facebook networks and used more masspersonal and personal communication with acquaintances, and masspersonal communication was mediated by network size. French students used more personal communication with friends, but this association was not mediated by network size. These findings suggest that sociodemographic factors like social network size have an influence on engagement in masspersonal communication, whereas cultural values play a larger role in the usage of personal messaging on Facebook.

Keywords: Facebook, personal communication, masspersonal communication, network size, cross-cultural

Highlights:

- Facebook users may adapt their Facebook use to specific cultural contexts.
- French students use more personal messaging with friends than Americans.
- Americans use more Facebook communication with acquaintances than French.
- Country differences in masspersonal communication are mediated by network size.
- Country differences in personal communication are not mediated by network size.

Private message me *s'il vous plait*: Preferences for personal and masspersonal communications on Facebook between American and French students

1. Introduction

Facebook, a social networking site released at Harvard University in the United States at the turn of the millennium, introduced a novel ability for individuals to engage in a one-to-many style of masspersonal communication. Masspersonal communication on Facebook, defined as textual or audiovisual messages transmitted to one's entire social network (O'Sullivan, 2005), precisely exemplifies a form of universalistic exchange that Triandis, Bontempo, Villareal, Asai, and Lucca (1988) have argued are more common in individualistic cultures. Universalistic exchanges involve information or resources that can be sent or applied to many different people. These are opposed to particularistic exchanges such as personal

favors or messages targeted to a specific person, which are more common in less individualistic cultures. Triandis and colleagues (1988) suggest that in relatively more individualistic cultures, social networks tend to be larger and more spread out such that it is more efficient to manage relationships with generalized resources. In contrast, when social networks are smaller, more tightly-knit and permanent, social conditions typical in less individualistic societies, individuals prefer one-to-one private exchanges that are generated for specific individuals. The goal of this study was to apply the concepts of universalistic and particularistic exchanges to masspersonal and personal communication on Facebook and examine whether preferences for these forms of communication differ among Facebook users in Western countries that vary in degrees of individualism.

In this study, we conceptualize Facebook as a *cultural import*, defined as an idea or product created in one culture and transported to other cultures (Lull, 2000; Tomlinson, 1991; 2006). Given the ease with which one can use Facebook to broadcast messages to networked publics, it is perhaps no surprise that the tool was developed in the US, the most individualistic country in the world (Hofstede, 2001). However, as Facebook is exported to other cultures, it is likely to be interpreted and adapted to local contexts. The technological affordances of Facebook for communicating with expansive social networks may be eschewed in favor of Facebook's private messaging tools, which may resonate with norms, preferences, and values for more intimate, particularistic communication in less individualistic cultures. In order to isolate the association between degree of individualism and preference for particularistic, or one-to-one

communication versus universalistic, or one-to-many communication, it is useful to examine Facebook usage differences among users Western countries that are similar in many other respects. In the current study we examined French and American university students' masspersonal and personal communication on Facebook to test whether individuals in France, a less individualistic country than the United States according to Hofstede (2001), will use masspersonal communication less frequently and private communications more often than individuals in the U.S.

1.1. Cultural differences between France and the US

Cross-cultural researchers have long been concerned about simple generalizations and subsequent comparisons of the “the West versus the rest” (eg. Hermans & Kempen, 1998, p. 1111). Although comparing two cultures with extremely different cultural and historical heritages can be informative, the simple dichotomy of the West versus all other countries hides cultural nuances and makes the dangerous assumption of homogeneity across Western and Eastern cultures when in fact these cultures may have varied cultural practices and values (Hermans & Kempen, 1998). In his decades-long study of culture, Hofstede (2001) demonstrated the cultural diversity of the West and observed large differences in many different cultural variables between Western countries. One example is a twenty point difference on individualism values between France and the United States (70 and 90, respectively, on a scale from 0-90; Hofstede, 2001). It is interesting that although France and the US have similar sociodemographics such as high enrollment in

primary school, a small rural population, and high internet diffusion (The World Bank Group, 2016a; 2016b; 2016c), differences in levels of individualism are still observed between them. Therefore a comparison between these two countries can help illuminate how Facebook users in similar Western countries with differing levels of individualism take advantage of opportunities to use masspersonal communications with the integration of new communication tools.

1.2. Social Relationships in France and the United States

The lower level of individualism in France compared to the U.S. is reflected in the ways that French people relate to one another. For example, the French have been described as having an autonomous-related view of the self (Kagitçibasi, 2005) due to parenting practices which focus on both a child's competence and emotional closeness with parents (Suizzo, 2002; 2004), whereby they have a strong emotional attachment to their family and friends but also greatly value personal choice. Americans have a more autonomous view of the self (Kagitçibasi, 2005) due to parenting practices that focus on independence (Suizzo, 2002; 2004), which leads to less emotional dependence on their relationships and higher values for personal choice. In the same vein, Carroll (1988) noted in an extensive cultural comparison study of France and the U.S. that the French develop their personal identities in the context of social groups that provide protection and security, whereas Americans forge personal identities through more independent explorations of multiple social groups. French people exhibit lower levels of interpersonal trust with society members at large than Americans in

their responses on the World Values Survey (Inglehart, 1997), which is likely linked to their lower levels of individualism and autonomous-related view of the self. These traits suggest that French people place higher value on their proximal in-groups made up of close friends and family than Americans. Typically in cultures where people make greater distinctions between in-groups and out-groups, they are less willing to communicate with out groups made up of socially distant acquaintances as Gudykunst and colleagues (1992) observed in their study comparing communication practices in the US, Australia, Hong Kong, and Japan. Conversely, Americans' higher levels of interpersonal trust, greater individualism, and autonomous view of the self lead to less dependence on and emotional closeness with their in-group. Given these differences, and the tendency for Americans to have larger social networks (Cho, 2010; Wheeler, Reis, & Bond, 1989), Americans to be more open to communicating with acquaintances and less focused on communicating with close friends.

1.3. Individualism and Facebook network size

In a highly individualistic society where close local and familial ties are limited (Greenfield, 2009), having an expansive network becomes adaptive. Under these conditions, in-groups have weaker ties between members partly because they cannot be counted on to provide the same levels of support as an in-group in a less individualistic society (Triandis et al., 1988). Therefore having a diverse network, in which different relationships provide varied resources, becomes important to allow individuals to have access to emotional or material social resources without greatly taxing any one relationship.

Researchers have found support for the idea that people have more social contacts in highly individualistic societies in both face-to-face contexts and online. For example, Wheeler and colleagues (1989) measured face-to-face interactions in China and the U.S. through a daily diary method and found that Americans had a larger number face-to-face interaction partners than Chinese. In other words, American participants reported speaking to a larger number of different people throughout the day than Chinese participants. Additionally, Cho (2010) found that Americans had more Facebook friends than Korean Facebook users. Furthermore, Abbas and Mesch (2015) found that higher relative levels of individualism in Arab countries were associated with desiring to expand one's Facebook network. We predicted therefore that higher individualism would be associated with larger networks, such that American students, who are more individualistic than French students (Hofstede, 2001), will have larger Facebook networks than French students.

1.4. Masspersonal Communication on Facebook

As social networks become larger, time efficient techniques for managing these relationships become more important. For example, Wheeler and colleagues (1989) found that Americans were able to communicate face-to-face with a larger number individuals by spending less time on each interaction than Chinese individuals. Another way to reduce the cost of interacting with a large network is to use *universalistic exchanges*, rather than *particularistic exchanges* (Triandis et al., 1988). In universalistic exchanges the same message is sent to many people at the same time and can be used multiple times, thus rendering them a more

time efficient way to communicate. In comparison, particularistic exchanges occur between only two people and cannot necessarily be transferred to other contexts.

Facebook provides affordances that are extremely effective at reducing the cost of maintaining a multitude of connections because it allows users to send universalistic messages. Specifically, the tools on Facebook used for posting status updates and posting information such as photo albums, profile posts, or comments that can be viewed by one's entire network are examples of messages that are universalistic. This type of universalistic communication about personal traits or relationships has been described as *masspersonal communication* (O'Sullivan, 2005), which refers to disclosing personal information to an audience of others.

Masspersonal communication requires much less time and effort than communicating with each person in one's network individually, and researchers have found that although masspersonal communication may appear to be simply a performance for one's network, it is typically aimed at maintaining relationships and garnering social support (Forest & Wood, 2012; Manago, Taylor, & Greenfield, 2012; Smock, Ellison, Lampe, & Wohn, 2011). Indeed, masspersonal communication seems to fulfill these goals as Manago and colleagues (2012) found that in the highly individualistic society of the United States, having more Facebook friends, using more masspersonal communication (in this study, status updates which are posted on one's wall and seen by one's entire network), and having a larger audience for one's masspersonal communication was associated with higher satisfaction with life.

Furthermore, several cross-cultural Facebook studies have provided support for the association between individualism and differences in communication practices on Facebook. For example, Baker and Ota (2011) found that Americans were more likely to post public expressions of closeness to their entire Facebook network than Japanese users of the social network site Mixi. Furthermore, highly individualistic Americans are more likely to post photos accessible to their entire network than less individualistic Indians (Marshall, Cardon, Norris, Goreva & D'Souza, 2008). Differences in Facebook communication style also exist within Western countries differing in degree of individualism. Researchers found that compared to Americans, Germans posted fewer of what they termed "compromising photos" that included potentially embarrassing or highly personally information to their Facebook profiles (Karl, Peluchette, & Schlegel, 2010). Additionally, when comparing social network users in the U.K., a more individualistic country, to users in France, French participants report less self-disclosure on the site (Posey, Lowry, Roberts, & Ellis, 2010). Self-disclosure is a key feature of masspersonal communication as the information posted can be viewed by one's entire social network. Thus, we hypothesize that US Facebook users would engage in more masspersonal communication than French users because of norms for greater self-disclosure so as to cost-effectively communicate with their expansive networks of friends and acquaintances. Additionally, we predict that the between country differences in masspersonal communication will be at least partially mediated by network size, so that both French and American Facebook users with large networks will use more masspersonal

communication than Facebook users from either country with a smaller network, as a way to easily stay in touch with their numerous contacts.

1.5. Personal Communication on Facebook

Masspersonal communication can be contrasted with communication that involves disclosing to a single individual. This type of communication can be performed on Facebook through private messaging which offers users the opportunity to communicate privately via chat with one person. Private, personal communication is more costly than masspersonal communication because it is conducted with one other person and is therefore a more selective process. The costliness of personal communication poses less of a problem in less individualistic societies because people can have their needs met by a smaller group of close others and therefore do not need to maintain expansive networks (Triandis et al., 1988; Greenfield, 2009). This means that users in less individualistic societies will be more focused on maintaining and communicating with fewer close relationships rather than an expansive network of heterogeneous ties of both friends and acquaintances. Maintaining close ties, however, requires maintaining emotional intimacy. Personal communication seems to serve this purpose. For example, Valkenburg and Peter (2011) showed that using private chat to communicate with friends was associated with higher levels of intimacy in adolescent friendships. Additionally, Hu, Wood, Smith, and Westbrook (2004) found that the amount of instant messenger communication between friends was positively associated with their verbal, affective, and social intimacy.

Several cross-cultural studies have found evidence that users of Facebook from less individualistic countries prefer to communicate privately with a smaller number of Facebook contacts. For example, Baker and Ota (2011) found that Japanese social network users preferred to privately express closeness with friends on Mixi whereas Americans' preferred more public expressions of closeness diffused on Facebook. Additionally, researchers who conducted focus groups in the U.S. and Namibia, found that Namibian college students, who have less individualistic values, were more likely to view Facebook as a tool for privately chatting with friends than Americans (Peters, Winschiers-Theophilus, & Mennecke, 2015). Furthermore, Abbas and Mesch (2015) found that higher levels of uncertainty avoidance, a trait associated with lower individualism, were associated with using Facebook to communicate mainly with close friends. Based on these studies, we hypothesized that French students will use more personal communication than Americans, but only to communicate with friends and not acquaintances due to their smaller networks and the value they place on close relationships. Additionally, we predict that the use of personal communication will be mediated by networks size, as French students' smaller Facebook networks permit them to spend more time and effort cultivating close relationships through time intensive private messaging as opposed to Americans who have larger networks to maintain.

1.6. Overview and hypotheses

In order to better understand how people from two Western countries with differing levels of individualism might use Facebook in

varied ways, we collected Facebook use data from first-year college students in France and the US via questionnaires. We asked questions concerning how students use masspersonal and personal Facebook functions to communicate with friends and with acquaintances. Masspersonal communications included posting a status update, comment, or photo for one's entire network to see and personal communications included sending private instant messages to a single individual.

(H1) We predict that due to their higher level of individualism, American users will have larger Facebook networks than French students.

(H2a) We also hypothesize that due to their larger networks, Americans will use more masspersonal communication to exchange messages with both friends and acquaintances than French students, (H2b) and that the between-country differences will be partially mediated by networks size.

(H3a) We predict that French students will use more personal communication with friends than Americans due to their lower levels of individualism and smaller network size, (H3b) and that the between-country differences in personal communication will be mediated by network size.

2. Method

2.1. Participants

2.1.1. French sample. Two hundred sixty first-year students (204 women, 47 men, 9 unreported, $M_{age} = 17.77$, $SD_{age} = 4.13$) were recruited from a medium-sized university in western France. Participants were recruited in first-year psychology classes and asked to participate in the

study of their own volition for no compensation (as is standard practice in France where remuneration of students is not permitted). Ninety-four percent of French students reported using privacy setting on their Facebook account. Approximately 95% of French students reported having used Facebook for at least 3 years. Most French students (50%) logged on between 1 and 5 times per day.

2.1.2. American sample. One hundred sixty-six first-year students (75 women, 89 men, 2 unreported, $M_{age} = 18.59$, $SD_{age} = 3.73$) were recruited from a medium-sized university in the western United States. Participants were recruited from first-year psychology classes. Compensation for their participation was offered in the form of research credits. Seventy-seven percent of American students reported using privacy settings on their Facebook account. Similarly to French students, approximately 96% of the American students reported having used Facebook for at least 3 years. Most American students (47%) also logged on between 1 and 5 times per day.

2.2. Measures

2.2.1. Facebook Network Size. Participants were asked to report their current number of Facebook friends. Research has shown that participants are fairly accurate in estimating their number of Facebook friends (Burke, Marlow, & Lento, 2010) therefore it is appropriate to use a self-report measure of this variable.

2.2.2. Personal and Masspersonal Facebook Use. The Facebook use questionnaire was constructed by the first author from items used by Yang and Brown (2013) and Smock and colleagues (2011). The

questionnaire asked how students use Facebook to communicate with four different types of individuals: high school friends, high school acquaintances, university friends and university acquaintances. For example a sample item measuring masspersonal communication with a friend is: "I contact a close (high school friend) by commenting on his/her photos." A sample item measuring personal communication with an acquaintances is: "I contact an (acquaintance at university) by sending him/her a private message." (see Appendix A for a list of all items). For each item, participants were asked to indicate how often they used each of the Facebook communication functions (1 = never, 7 = daily). The personal Facebook use activities included instant messaging and private messages. The masspersonal Facebook communication activities were posting status updates, posting to their own profile, commenting on status updates, posts, or photos, and posting a message on a Facebook friend's profile. The original four relationship categories were collapsed into two categories: friends (the average of high school and university) and acquaintances (the average of high school and university).

2.2.3. Demographics. Several demographics questions on age, gender, length of time since starting one's Facebook account, whether or not they use privacy settings on their Facebook account, and number of logins to Facebook per day were asked.

2.3. Translation of measures

All questionnaire items were originally in English. The first author and a committee of three French research assistants translated all items into French. Then, a professional translator was consulted to back

translate the French version of the questionnaires into English. The back translation showed acceptable equivalence of meaning across the English and French versions of the questionnaires.

2.4. Data analysis plan

To compare country and relationship differences in masspersonal (H2a) and personal (H3a) Facebook communication we conducted two 2x2 mixed ANOVAS, one for masspersonal communication and one for personal communication. In each ANOVA relationship type (friend and acquaintance) was a within subject variable as all participants responded to these questions. Country (France and US) was a between subjects variable.

To test the mediation hypotheses (H2b, H3b), analyses were conducted in SPSS using PROCESS, a macro for SPSS which uses the least ordinary squares method to test the model coefficients (Hayes, 2013). Confidence intervals were constructed using the 95th percentile.

Due to the large numbers of Facebook friends reported, we used the square root of the number of Facebook friends ($M = 18.18$, $SD = 6.60$) in order to obtain meaningful regression coefficients in the mediation analyses. Countries were dummy coded (France = 0, US = 1). We used the averaged masspersonal communication for friends and acquaintances to make an overall masspersonal communication Facebook use variable to test Hypothesis 2B. We also used averaged personal communication for friends and acquaintances to make an overall personal communication Facebook use variable.

3. Results

3.1. Analysis of Facebook network size

Two outliers in the American sample were removed for the network size analysis because their number of reported Facebook friends was almost five standard deviations above the mean and caused the distribution to be positively skewed. Removing these two outliers produced a more normal distribution. An independent samples t-test with equal variances not assumed showed that, as predicted in Hypothesis 1, American students reported a greater number of Facebook friends ($M = 500, SD = 307.20$) compared to French students ($M = 280, SD = 166.70$), ($t(220.66) = -8.31, p < .001$).

3.2. Comparing masspersonal communication between France and the US

A 2x2 mixed ANOVA was conducted on masspersonal communication comparing relationship type and country. Cell means and standard deviations are reported in Table 1. There was a main effect of relationship type, $F(1, 368) = 425.81, p < .001, \eta^2 = .54$. Participants engaged in more masspersonal communication with friends than acquaintances. The main effect of country was also significant, $F(1, 368) = 14.36, p < .001, \eta^2 = .04$. American students used more masspersonal communication than French students, however this main effect was qualified by the two-way Country x Relationship interaction which was also significant, $F(1, 368) = 11.33, p = .001, \eta^2 = .03$. (Insert Table A.1 here.)

To better understand the effects of the two-way interaction we conducted post-hoc mean comparisons, using a Bonferroni correction with

p at .05 to reduce Type 1 errors (threshold for significance $p < .0125$). A graph of the cell means for personal communication can be seen in Figure A.1. Standard deviations, cell means, total means, and the number of participants can be found in Table A.1. Independent samples t -tests were used to test for between country differences. There was no significant difference in how much masspersonal communication American and French students used with friends, $t(390) = -1.86, p = .064$. Americans, however, used more masspersonal communication with acquaintances than French students, $t(393) = -5.81, p < .001$. Paired samples t -tests were used to test differences between communication with friends and acquaintances within each country. Both French ($t(237) = 24.80, p < .001$) and American ($t(162) = 9.17, p < .001$) students used more masspersonal communication with friends than with acquaintances. Hypothesis 2a was partially supported. Indeed, American students used more masspersonal communication with acquaintances than French students, but we found no difference between American and French students in how much masspersonal communication they used with friends. Additionally we found that both French and American students used more masspersonal communication with friends than acquaintances. (Insert Figure A.1.)

3.3. Mediation model for masspersonal communication

(Insert Figure B.1 here.) We used a simple mediation analysis using ordinary least squares path analysis to examine whether network size mediates the country's effect on masspersonal Facebook communication. We found that country indirectly influenced masspersonal Facebook

communication through its effect on network size. As can be seen in Figure B.1, Americans had larger networks than French ($a = 5.491$, $p < .001$) and participants with larger networks used more masspersonal communication ($b = 0.030$, $p < .001$). A bias-corrected bootstrap confidence interval for the indirect effect ($ab = 0.163$) based on 1,000 bootstrap samples was entirely above zero (0.083 - 0.274). Country did not influence masspersonal Facebook communication independent of its effect on network size ($c' = 0.164$, $p = .086$). These findings support hypothesis 2b.

3.4. Comparing personal communication between France and the US

A 2x2 mixed ANOVA was conducted on personal communication comparing relationship type (friend v. acquaintance) and country (France v. US). The main effect of relationship type, $F(1, 399) = 540.75$, $p < .001$, $\eta^2 = .58$, and Country, $F(1, 399) = 8.16$, $p = .005$ $\eta^2 = .02$ were significant. The two-way Country x Relationship interaction was also significant, $F(1, 399) = 107.10$, $p < .001$ $\eta^2 = .21$ and qualified both main effects. (Insert Table B.1 here.)

To better understand the effects of the two-way interaction we conducted post-hoc mean comparisons, using a Bonferroni correction with p at .05 to reduce Type 1 errors (threshold for significance $p < .0125$). A graph of the cell means for personal communication can be seen in Figure 3. Standard deviations, cell means, total means, and number of participants in each population can be found in Table 2. Independent samples t-tests were used to test between country differences. French

students used more personal Facebook communication with friends than Americans, $t(409) = 6.98, p < .001$. Americans, however, engaged in more personal communication with acquaintances than French students, $t(410) = -3.15, p = .002$. Both French ($t(222) = 19.75, p < .001$) and American ($t(146) = 10.57, p < .001$) students used more personal communication with friends than with acquaintances.

In summary, these results indicate French students use more personal communication with friends than American students, and American students use more personal communication with acquaintances than French students. These findings support hypothesis 3a. (Insert Figure C.1 here.)

3.5. Mediation model of personal communication

We used a simple mediation analysis using ordinary least squares path analysis to examine whether network size mediates the country's effect on personal Facebook communication (see Figure D.1). In this analysis we found that network size acted as a suppressor variable. A suppressor variable conceals the true relationship between two variables so that the true strength of the relationship between the variables is only evident when the suppressor variable is entered into the model (Warner, 2013). As can be seen in Figure 4, the direct effect of country with the mediator in the analyses ($c' = -0.487, p < .001$) was stronger than the direct effect without the mediator included in the analyses ($c = -0.333, p = .003$). A suppressor variable in the model makes interpretation of the indirect effect inappropriate. Network size most likely acts as a suppressor variable in this case because it explains part of the variance in personal

communication, which is unrelated to the variance explained by country. When the unrelated variance associated with network size is partialled out, there is a smaller amount of variance in personal communication to be explained which means that the proportion of variance explained by country is larger, and thus results in a stronger correlation. In other words, when controlling for network size, country has a stronger effect on personal Facebook communication. For example, when comparing a French student and an American student with the same sized Facebook networks, the French student is more likely to use more personal Facebook communication than the American student. This finding is contrary to hypothesis 3b; network size did not mediate the relationship between country and personal communication on Facebook. (Insert Figure D.1 here.)

4. Discussion

This study was designed to examine whether college students in two Western countries with differing relative levels of individualism use Facebook in varied ways. The first variable of interest was Facebook network size, as measured by the number of Facebook friends American and French students reported. As predicted, the present findings revealed that Americans had larger networks than French students. In fact, American students had almost double the number of Facebook friends than French students. This finding is consistent with several cross-cultural theories which posit that people in more individualistic societies have expanded social networks (Triandis et al., 1988; Greenfield, 2009). It is

also consistent with studies that have shown that people living in the highly individualistic U.S. have more face-to-face interaction partners (Wheeler et al., 1989) and more Facebook friends online (Cho, 2010) when compared to less individualistic Eastern countries. The present study furthers this line of research by showing that Facebook network size differs as a function of relative levels of individualism within Western countries, as identified by Hofstede (2001). This finding also supports results of a recent study (Abbas & Mesch, 2015) that found greater individualism among Facebook users in Arab countries was associated with a desire to expand their online social networks.

4.1. Masspersonal communication on Facebook

In addition to the gross measure of network size, we examined users' patterns of masspersonal and personal communication with friends and acquaintances on Facebook. We found that Facebook users in both countries use more masspersonal communication with friends than acquaintances. Indeed, previous research on Facebook use has found that the social networking site is more frequently used to stay in contact with friends than acquaintances (Manago et al., 2012). This may be further evidence that masspersonal messages can be used as a way to garner social support (Forest & Wood, 2012), and users are more likely to seek support from friends than acquaintances. In addition, social network users in the U.S. exchange public commentary with close friends in order to demonstrate to their entire network that they are well-liked and socially successful (Manago, Graham, Greenfield, & Salimkhan, 2008; Walther, Van Der Heide, Kim, Westerman, & Tong, 2008). A second finding, in keeping

with our predictions, was that American students use more masspersonal communication with acquaintances than French students. American students' larger Facebook networks may necessitate their use of masspersonal communication to stay in touch with their considerable number of Facebook friends. Indeed, sending a single message to one's entire network to stay in touch with acquaintances is much less time consuming than sending private messages one-by-one to 500 Facebook friends. Triandis and colleagues (1988) that universalistic exchanges, would become a necessity in highly individualistic societies where people have broad, diverse social networks.

In keeping with Triandis and colleagues (1988) prediction we also found that network size fully mediated the effect of country on masspersonal Facebook use—Americans have more Facebook friends and in turn use more masspersonal communication. In other words, country is associated with the size of one's Facebook network which is associated with engagement in masspersonal communication, among individuals in both France and the US. Thus, we observed that masspersonal communication, as Triandis and colleagues (1988) predicted, is well-suited to a context where individuals' networks are broad and heterogeneous. That social network size was a stronger predictor of masspersonal communication on Facebook than country suggests that masspersonal communication is a behavior that is readily adopted to manage large social networks across cultural contexts.

4.2. Personal communication on Facebook

Both American and French students used more personal communication with friends than with acquaintances. Previous research has shown that Facebook is most often used to communicate with friends rather than acquaintances (Manago, et al., 2012). This finding extends the media multiplexity theory (Haythornthwaite, 2005) to Facebook. This theory states that people in close relationships add new forms of communication media to stay in touch more easily and maintain intimacy. As predicted, French students use more personal communication than Americans with friends. This finding points to the greater importance of having fewer and maintaining closer relationships in the less individualistic culture of France. French students show their value for these close relationships by using the time-intensive method of sending private, personal Facebook messages to communicate with friends. We found Americans use more personal communication with acquaintances than French. This result is in line with findings that Americans receive equal levels of social support from Facebook contacts regardless of their level of relational closeness (Rozell et al., 2014). This suggests that Americans are seeking out support from acquaintances as well as friends on Facebook.

Triandis and colleagues (1988) predicted that more universalistic exchanges, associated with larger social networks, could put a limit on how much time one has to engage in personal communication. To test this idea, we conducted mediation analyses using network size as a mediator of the effects of culture on personal communications via Facebook. Network size did not, however, mediate the influence of culture on personal communication. In fact, French students use more personal

communication than Americans even when holding network size constant. Consequently, when comparing a French and American student with the same sized network, the French student uses more personal communication than the American student. Our findings suggest that, although French Facebook users will adopt masspersonal communication behaviors as their social networks get larger, they do not abandon intimate, particularistic exchanges.

4.3. The differing functions of masspersonal and personal communication on Facebook

It is interesting that our findings are not consistent with all the predictions of Triandis and colleagues (1988). Although network size did mediate the between country differences in the amount of masspersonal communication, it did not mediate the between country differences in the amount of personal communication. The difference in these mediation models may be due to the fact that masspersonal and personal communication serve different but not opposite relational needs. Masspersonal communication seems to serve the goal of staying in touch with a broad, diverse network of Facebook connections. People in individualistic societies may prefer maintaining a large Facebook social network (Manago & Vaughn, 2015) and a large face-to-face network (Triandis, et al., 1988) instead of limiting their networks to close relationships.

Large networks promote an instrumental form of relatedness that has been termed *customized sociality* (Manago & Vaughn, 2015) meaning that individuals have a greater capacity to tailor their social worlds to

meet their personal needs using communication technologies. Facebook contacts who provide useful resources but require infrequent communication exchanges have been termed latent ties, because they are there when a specific need arises, but are not regular communication partners (Ellison, Steinfield, & Lampe, 2007). Latent ties enable greater customized sociality in that one can call on a wide variety of contacts to meet a specific need with limited social obligations. For example, if someone wanted to know what movie to see this weekend they could ask the movie critic in their Facebook network for a recommendation and invite him/her to the movie even if they have not communicated with this person in months. Instrumental relatedness may be necessary in highly individualistic societies where people are less attached to their in-groups, receive less support from them, and are therefore required to seek it broadly through a variety of relationships (Triandis, et al., 1988). Instrumental relatedness may also be reflected in the finding that Facebook users in both countries engaged in more masspersonal use with friends than acquaintances. If these messages were sent out as a way to garner social support, it is interesting that users did not privately contact one individual but instead cast a wide net sending their message to their network to see who would respond. Alternatively, it could be that Facebook users use masspersonal communication to showcase their social success and build a positive reputation in their network (see Donath, 2007; Tufekci, 2008).

Personal communication serves a different purpose than simply maintaining an open line of communication with one's many social

contacts. Personal communication seems to serve the purpose of maintaining and building intimacy in close relationships (Valkenburg & Peter, 2011; Hu, et al., 2004). Personal communication on Facebook builds intimacy by allowing for person-specific self-disclosure and back-and-forth exchanges that friends construct together much like traditional face-to-face intimacy building conversations (Altman, 1973). Because of the intimacy building potential of these interactions, they promote the development and maintenance of close friendships. French students who are less individualistic than Americans may value these types of close relationships more than Americans and therefore engage in personal communication more frequently with close friends than Americans to cultivate these close relationships even when they have large Facebook networks. Americans, on the other hand, who use more personal communication with acquaintances than French students, because they may be using personal communication to turn these relationships to turn acquaintances into friendships (Steinfeld, Ellison, & Lampe, 2008) or as a way to garner social support from acquaintances (Rozell et al., 2014).

Considering the predictions of Triandis and colleagues (1988) it may seem contradictory that French students with large networks would use both more masspersonal and personal communication with their Facebook contacts. However, a study by Hansen, Postmes, van der Vinne, and van Thiel, (2012) provides support that technology can promote both individualistic and collectivistic values depending on how it is used. These researchers randomly assigned children in Ethiopia, a country low in individualism (Hofstede, 2001), to receive laptops and others to receive no

laptop or a laptop that stopped functioning during the study period. After one year, they found that children with a working laptop had an increase in their levels of individualistic values and independent self-construals, but their levels of collectivistic values and interdependent self-construals did not decrease. The researchers posit that this is because the laptops provided information to the children that might result in greater independence, but the children also shared and invited others to participate as they used their laptops, which would help to maintain their collectivistic values. Much like the children in Hansen and colleague's (2012) study, French Facebook users found ways to use the social network site that were consonant with their values for maintaining close personal relationships with their friends.

This finding is also congruent with Kagitiçibasi's (2005) theory that values for emotional interdependence change more slowly than values for personal choice. Kagitiçibasi (2005) argues that although these values have typically been presented as opposing they can coexist specifically in communities transitioning from pre-industrial to post-industrialized societies. We observed the coexistence of these values in France where Facebook users engage in masspersonal communication when they have large networks to facilitate personal choice in relationships and personal communication to build and maintain intimacy in close relationships. In the U.S., the value for personal choice in relationships was highlighted by users' much larger social networks and their use of masspersonal communication to maintain them.

4.4 Limitations and Future Directions

One limitation in our study is that we did not measure the percentage of close friends in American and French students' Facebook networks. Some research suggests a higher proportion of actual friends to total friends on Facebook in less individualistic cultures (Lee-Wohn, Shim, Joo, & Park, 2014). Additionally, research conducted in the US suggests that networks typically grow mostly due to adding socially distant ties, such as acquaintances (Manago, et al., 2012; Ellison, et al., 2007). Therefore network size, which we did take into account in our study, correlates positively with the proportion of distant to close ties on Facebook, and thus it served as a sort of control variable for network composition. Future studies should measure network composition to better understand the influence of the percentage of close versus distant ties on amounts personal and masspersonal communication engaged in across cultures.

It may also be advisable in future studies to take into account other sociodemographic variables in addition to social network composition. For example, relational mobility has been shown to influence cross-cultural differences in privacy concerns on Facebook (Thompson, Yuki, & Ito, 2015), and therefore may also have an influence on the types of communication that users prefer. Examining the differences in sociodemographic variables between countries and their relationship to communication on Facebook could help elucidate which specific societal differences influence how users communicate on Facebook.

4.5. Conclusions

In the current study we found support for the idea that Facebook is a “cultural import” (Lull, 2000; Tomlinson, 1991), and its specific affordances are used in different amounts in France and the US. For example, Americans make full use of the ability to collect expansive networks on Facebook. Additionally we observed that users in France preferred personal communication with friends whereas Americans preferred masspersonal and personal communication with acquaintances. We propose that these differences exist because Facebook, like other forms of computer-mediated communication, is a communication tool that reflects real-life communication patterns (Wellman et al., 2003). It provides new affordances for communication but how users choose to apply these affordances is bound by pre-existing cultural patterns of what is acceptable and valued in interactions with friends and acquaintances (McCall, 1988). Facebook users in different countries interpret and use this *cultural import* to communicate with others in ways that are consonant with the levels of individualism and congruent forms of social relationships that are valued in their culture.

References

- Abbas, R., & Mesch, G. S. (2015). Cultural values and Facebook use among Palestinian youth in Israel. *Computers in Human Behavior, 48*, 644-653.
- Altman, I. (1973). Reciprocity of interpersonal exchange. *Journal for the Theory of Social Behaviour, 3*(2), 249-261.
- Baker, V., & Ota, H. (2011). Mixi diary versus Facebook photos: Social networking site use among Japanese and Caucasian American females. *Journal of Intercultural Communication Research, 40*, 39-63.
- Burke, M., Marlow, C., & Lento, T. (2010, April). Social network activity and social well-being. In *Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 1909-1912). ACM.
- Carroll, R. (1988). *Cultural misunderstandings: The French-American experience* (C. Volk, Trans.). Chicago: The University of Chicago Press.
- Cho, S. E. (2010). *Cross-cultural comparison of Korean and American social network sites: exploring cultural differences in social relationships*

- and self-presentation* (Doctoral dissertation, Rutgers University-Graduate School-New Brunswick).
- Donath, J. (2007). Signals in social supernets. *Journal of Computer-Mediated Communication, 13*(1), 231-251.
- Ellison, N., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook “friends”: Social capital and college students’ use of online social network sties. *Journal of Computer-Mediated Communication, 12*, 1143-1168.
- Forest, A. L., & Wood, J. V. (2012). When social networking is not working: Individuals with low self-esteem recognize but do not reap the benefits of self-disclosure on Facebook. *Psychological Science 23*(3), 295-302.
- Greenfield, P. M. (2009). Linking social change and human developmental change: shifting pathways of human development. *Developmental Psychology, 45*(2), 401-418.
- Gudykunst, W. B., Gao, G., Schmidt, K., Nishida, T., Bond, M. H., Leung, K., Wang, G., & Barraclough, R. (1992). The influence of individualism-collectivism on communication in ingroup and outgroup relationships. *Journal of Cross-Cultural Psychology, 23*, 196-213.
- Hansen, N., Postmes, T., van der Vinne, N., & van Thiel, W. (2012). Technology and cultural change: How ITC changes self-construal and values. *Social Psychology, 43*, 222-231.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis*. New York: The Guilford Press.

- Haythornthwaite, C. (2005). Social networks and Internet connectivity effects. *Information, Community & Society*, 8(2), 125-147.
- Hermans, H. J. M., & Kempen, H. J. G. (1998). Moving Cultures: The perilous problems of cultural dichotomies in a globalizing society. *American Psychologist*, 53(10), 1111-1120.
- Hofstede, G. H., (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks, CA: Sage Publications.
- Hu, Y., Wood, J. F., Smith, V., & Westbrook, N. (2004). Friendships through IM: Examining the relationship between instant messaging and intimacy. *Journal of Computer-Mediated Communication*, 10(1).
- Inglehart, R. (1997). *Modernization and Postmodernization: Cultural, economic, and political change in 43 societies* (Vol. 19). Princeton, NJ: Princeton University Press.
- Kagitçibasi, C. (2005). Autonomy and relatedness in cultural context implications for self and family. *Journal of Cross-Cultural Psychology*, 36(4), 403-422.
- Karl, K., Peluchette, J., & Schlaegel, C. (2010). Who's posting Facebook faux pas? A cross-cultural examination of personality differences. *International Journal of Selection and Assessment*, 18(2), 174-186.
- Lee-Won, R. J., Shim, M., Joo, Y. K., & Park, S. G. (2014). Who puts the best "face" forward on Facebook?: Positive self-presentation in online social networking and the role of self-consciousness, actual-to-total Friends ratio, and culture. *Computers in Human Behavior*, 39, 413-423.

- Lull, J. (2000). *Media, Communication, Culture: A global approach*. Cambridge: Polity.
- Manago, A.M., & Vaughn, L. (2015). Social media, friendship and happiness in the millennial generation. In M. Demir (Ed.), *Friendship and happiness: Across the lifespan and in different cultures* (pp. 187-206). Amsterdam: Springer.
- Manago, A. M., Graham, M. B., Greenfield, P. M., & Salimkhan, G. (2008). Self-presentation and gender on MySpace. *Journal of Applied Developmental Psychology, 29*(6), 446-458.
- Manago, A.M., Taylor, T., & Greenfield, P.M. (2012). Me and my 400 friends: The anatomy of college students' Facebook networks, their communication patterns, and well-being. *Developmental Psychology, 48*, 369-380.
- Marshall, B. A., Cardon, P. W., Norris, D. T., Goreva, N., & D'Souza, R. (2008). Social networking websites in India and the United States: A cross-national comparison of online privacy and communication. *Issues in Information Systems, IX, 2*, 87-94.
- McCall, G. J. (1988). The organizational life cycle of relationships. In S. Duck (Ed.), *Handbook of personal relationships: Theory, research, and interventions*, New York: Wiley.
- O'Sullivan, P. B. (2005). Masspersonal Communication: Rethinking the mass interpersonal divide. Paper presented at the annual meeting of the International Communication Association, New York, May.
- Peters, A. N., Winschiers-Theophilus, H., & Mennecke, B. E. (2015). Cultural influences on Facebook practices: A comparative study of college

- students in Namibia and the United States. *Computers in Human Behavior*, 49, 259-271.
- Posey, C., Lowry, P. B., Roberts, T. L., & Ellis, T. S. (2010). Proposing the online community self-disclosure model: the case of working professionals in France and the UK who use online communities. *European Journal of Information Systems*, 19(2), 181-195.
- Rozzell, B., Piercy, C. W., Carr, C. T., King, S., Lane, B. L., Tornes, M., ... & Wright, K. B. (2014). Notification pending: Online social support from close and nonclose relational ties via Facebook. *Computers in Human Behavior*, 38, 272-280.
- Smock, A., Ellison, N.B., Lampe, C. & Wohn, D.Y. (2011). Facebook as a toolkit: A uses and gratification approach to unbundling feature use. *Computers in Human Behavior*. 27(6), 2322-2329.
- Steinfeld, C., Ellison, N. B., & Lampe, C. (2008). Social capital, self-esteem, and use of online social network sites: A longitudinal analysis. *Journal of Applied Developmental Psychology*, 29(6), 434-445.
- Suizzo, M. A. (2002). French parents' cultural models and childrearing beliefs. *International Journal of Behavioral Development*, 26(4), 297-307.
- Suizzo, M. A. (2004). French and American mothers' childrearing beliefs stimulating, responding, and long-term goals. *Journal of Cross-Cultural Psychology*, 35(5), 606-626.

- The World Bank Group. (2016a). *Net enrollement rate, primary, both sexes (%)*. Retrieved from <http://data.worldbank.org/indicator/SE.PRM.NENR>
- The World Bank Group. (2016b). *Rural population (% of total population)*. Retrieved from <http://data.worldbank.org/indicator/SP.RUR.TOTL.ZS>
- The World Bank Group. (2016c). *Internet users (per 100 people)*. Retrieved from <http://data.worldbank.org/indicator/IT.NET.USER.P2>
- Tomlinson, J. (1991). *Cultural imperialism : A critical introduction*. London: Pinter.
- Tomlinson, J. (2006). Globalization and culture. Talk presented at the University of Nottingham Ningbo China (UNNC) Research Seminar Series 2006-2007, cohosted by the Institute of Asia-Pacific Studies Ningbo and Institute of Comparitive Cultural studies. Retrieved from <http://libertyparkusafd.org/Hancock/Failure%20of%20Globalism/Glob alization%20and%20Culture.pdf>
- Thomson, R., Yuki, M., & Ito, N. (2015). A socio-ecological approach to national differences in online privacy concern: The role of relational mobility and trust. *Computers in Human Behavior, 51*, 285-292. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.465.9581&rep=rep1&type=pdf>
- Triandis, H. C., Bontempo, R., Villareal, M. J., Asai, M., & Lucca, N. (1988). Individualism and collectivism: Cross-cultural perspectives on self-ingroup relationships. *Journal of Personality and Social Psychology, 54*(2), 323-338.

- Tufekci, Z. (2008). Can you see me now? Audience and disclosure regulation in online social network sites. *Bulletin of Science, Technology & Society*, 28(1), 20-36.
- Valkenburg, P. M., & Peter, J. (2011). Online communication among adolescents: An integrated model of its attraction, opportunities, and risks. *Journal of Adolescent Health*, 48, 121-127.
- Walther, J. B., Van Der Heide, B., Kim, S. Y., Westerman, D., & Tong, S. T. (2008). The role of friends' appearance and behavior on evaluations of individuals on Facebook: Are we known by the company we keep? *Human Communication Research*, 34(1), 28-49.
- Warner, R. M. (2013). *Applied Statistics: From bivariate through multivariate techniques*. Thousand Oaks, CA: SAGE Publications, Inc.
- Wellman, B., Quan-Haase, A., Boase, J., Chen, W., Hampton, K., Diaz, I., & Miyata, K (2003). The social affordances of the internet for networked individualism. *Journal of Computer-Mediated Communication*, 8: 0.
- Wheeler, L., Reis, H. T., & Bond, M. H. (1989). Collectivism-individualism in everyday social life: The middle kingdom and the melting pot. *Journal of Personality and Social Psychology*, 57(1), 79.
- Yang, C. C., & Brown, B. B. (2013). Motives for using Facebook, patterns of Facebook activities, and late adolescents' social adjustment to college. *Journal of Youth and Adolescence*, 42(3), 403-416.

Table A.1

Cell means for masspersonal communication 2x2 ANOVA

	Masspersonal communication					
	Friend		Acquaintance		Total	
Country	M	SD	M	SD	M	SD
France (n = 210)	2.41	0.94	1.45	0.57	1.93	0.70
US (n = 143)	2.61	1.19	1.92	1.01	2.27	1.02
Total (N = 353)	2.49	1.05	1.64	0.80		

Note: M: Mean, SD: Standard deviation.

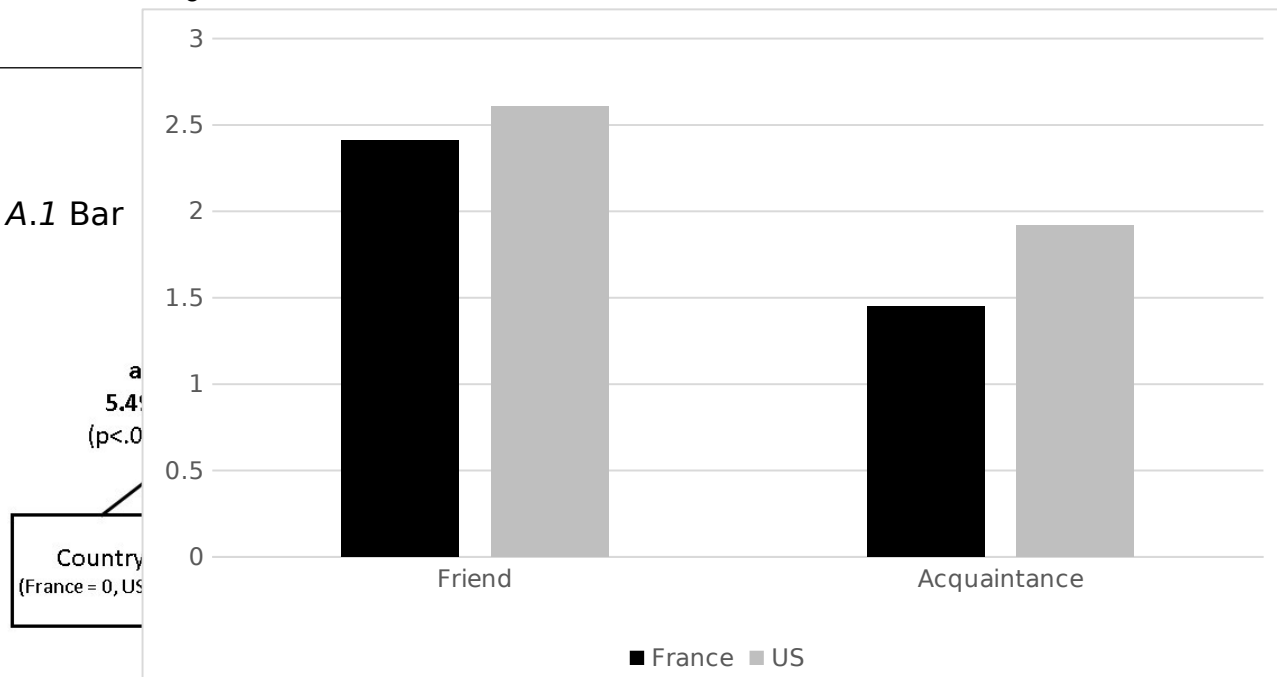
Table B.1

Cell means for personal communication 2x2 ANOVA

Personal communication						
	Friend		Acquaintance		Total	
Country	M	SD	M	SD	M	SD
France (n = 210)	4.34	1.32	2.19	1.07	3.27	1.00
US (n = 143)	3.35	1.55	2.53	1.24	2.94	1.23
Total (N = 353)	3.94	1.50	2.33	1.15		

Note: M: Mean, SD: Standard deviation.

Figure A.1 Bar



graph of cell means for masspersonal communication.

Figure B.1 Mediation model for masspersonal communication predicted from country and Facebook network size.

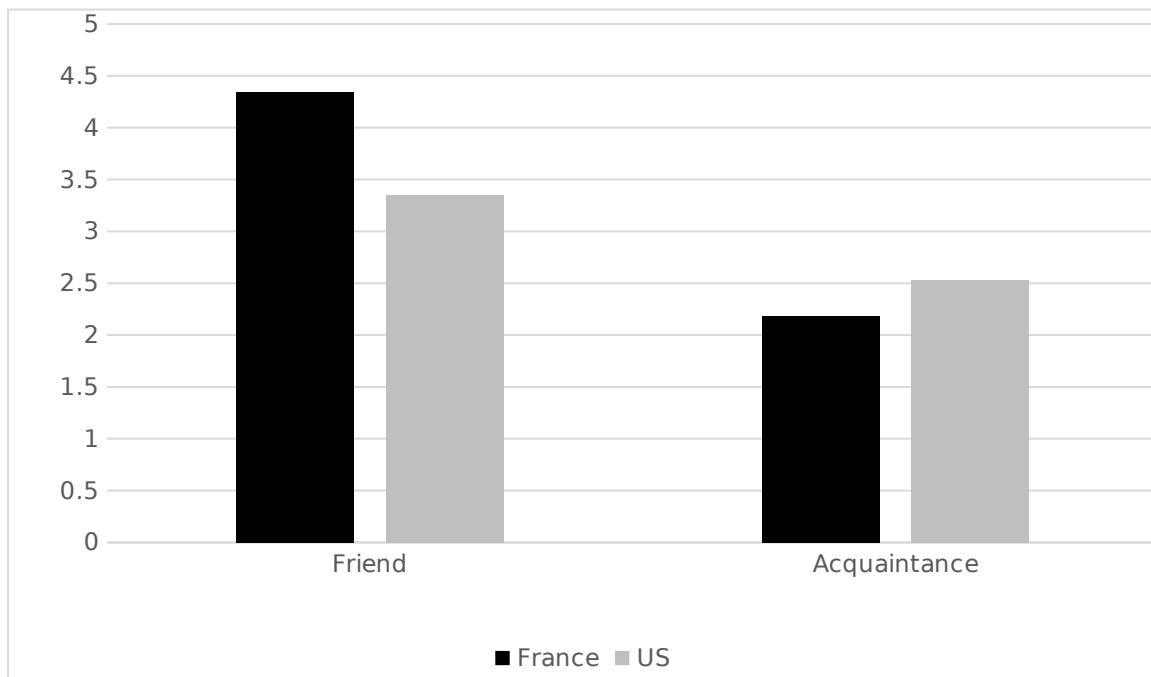


Figure C.1 Bar graph of cell means for personal communication.

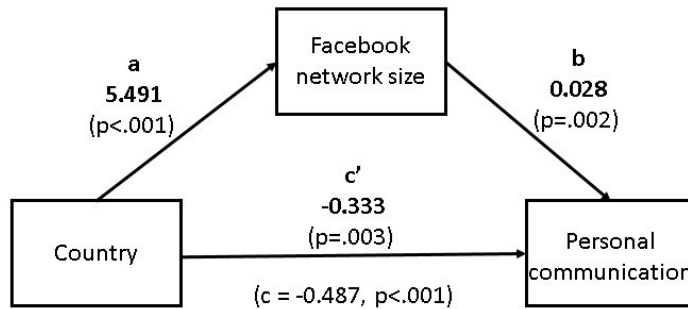


Figure D.1 Mediation model for personal communication predicted from country and Facebook network size.

Appendix A

Facebook use questionnaire

Response options: Never, Once a year, Several times a year, Once a month, Once a week, Several times each week, Daily

I contact a high school friend (high school acquaintance, university friend, university acquaintance) by...

Personal communication

1. Posting on his/her wall.
2. Facebook chatting with him/her.
3. Sending him/her a Facebook message.

Masspersonal communication

1. Comment on his/her photos.
2. Comment on his/her "what's on your mind" status.
3. Updating your own "what's on your mind" status.
4. Replying to his/her comments on your own page.
5. Posting stories/videos/links to your own page.

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