

## Reconnecting Here and There: The Reactivation of Dormant Ties in the United States and Japan

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### Abstract

This article examines the reactivation of dormant ties in Japan and the United States. Using the institutional approach to culture developed by Yamagishi et al., it is hypothesized that respondents living in Japan will be less likely to reconnect with dormant ties when prompted than respondents living in the United States. It is further hypothesized that interaction with kin and work ties will help to explain lower levels of reconnection in Japan than in the United States. To examine these hypotheses, we developed a field experiment in which 95 adults living in Japan and 68 adults living in the United States were prompted by a smartphone application to reconnect with dormant ties. The results of this study show strong support for the hypothesis that respondents living in Japan are less likely to reconnect with dormant ties than respondents living in the United States when prompted. There is also mixed support for the hypothesis that interaction with kin and work ties helps to explain lower levels of reconnection in Japan than in the United States.

### Keywords

collectivism, personal networks, weak ties, reconnection, dormant ties

Are people living in Japan less likely to reactivate their dormant ties when prompted than people living in the United States? Research by Yamagishi and colleagues suggests that people living in Japan are less likely to reactivate dormant ties due to higher levels of relational dependency and lower social mobility. Related research by Hechter and Kanazawa (1993) and Miller and Kanazawa (2000) indicates that mutual monitoring within kin and work institutions in Japan acts as a barrier to reconnecting with dormant ties. By contrast, people living in the United States are assumed to be less constrained by these types of institutions and more likely to reconnect with their friends, colleagues, and family when there has been a sustained lack of contact. Central to this line of research is an explanation of collectivism in Japan that focuses on social institutions and rational choice, rather than deeply internalized cultural norms. In this article we discuss the details of this argument and its implications for the reactivation of dormant ties in Japan and the United States. We further discuss the role that communication technology might play in facilitating reconnection in both countries, and then examine the validity of these arguments using a combination of digital trace and self-report data collected through a smartphone-based field experiment.

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## **Dormant Ties and Institutional Collectivism**

A dormant tie is any relationship in which there has been a sustained lack of contact (Levin, Walter, & Murnighan, 2011). This lack of contact can occur for a variety of reasons such as physical relocation, lack of time, or diverging interests, and it is often a symptom of relational decay. Burt (2000) defines relational decay as “the tendency for relationships to weaken and disappear,” (p. 2) and argues ties spanning different social groups are more prone to decay than ties within group relationships (Burt, 2002). Relational decay is the opposite of relational persistence, a classic concern in sociology (Simmel, 1898), and it assumes that interpersonal relationships require maintenance through communication to remain real (Dindia & Canary, 1993).

Dormant ties can be valuable sources of information and ideas because they tend to be weak in nature and spend time in different social circles (Granovetter, 1973, 1983, 1995). However, these benefits are only realized when they are reactivated through renewed communication. Reactivation is particularly important among weak ties, where tie decay tends to happen more rapidly than in strong ties (Blumstein & Kollock, 1988).

Tie reactivation may occur for a variety of reasons. For example, Granovetter (1973) notes that chance meetings can entice individuals to reactivate ties. In work-focused relationships, ties that are instrumentally useful for business transactions and to maintain a reputation (Jack, 2005) may lay dormant until they are needed. By contrast, disengagement from other forms of strong ties, such as romantic relationships, can indicate a breakup and often involve complete interpersonal distancing (Baxter, 1984; Duck, 1982; Rollie & Duck, 2005). In certain circumstances, ties may not be reactivated because they are with stigmatized individuals (Goffman, 1986).

Despite the variation in the types of ties that are reactivated, research by Yamagishi et al. indicates that there may be important institutional barriers that prevent tie reactivation. This research stems from an attempt to explain why relationships appear to be more collectivistic in Japan than in Western countries such as the United States, without relying on the assumption that these behaviors are explained by deeply internalized cultural norms. Decades of scholarly research have failed to produce consistent evidence supporting Hofstede’s (1983) argument that people living in East Asia act in ways that are more collectivistic than people living in North America (Bond, 2002; Earley & Gibson, 1998; Fiske, 2002; Oyserman, Coon, & Kimmelmeier, 2002). Nevertheless, experimental studies by Yamagishi et al. have provided internally valid support for the more nuanced argument that relational dependency and mutual monitoring within institutions cause social life to be more collectivistic in Japan than the United States.

Yamagishi et al. employ what they call the “institutional approach” to explain why relationships that appear collectivistic in nature are actually the result of rational choices operating within institutional boundaries (Cook et al., 2005; Kiyonari, Yamagishi, Cook, & Cheshire, 2006; Yamagishi, Cook, & Watabe, 1998; Yamagishi, Hashimoto, & Schug, 2008; Yamagishi, Jin, & Miller, 1998; Yamagishi & Yamagishi, 1994). They argue that dependency on kin and work institutions in Japan—as brought about by low rates of divorce, poor employment opportunities for women, and lifelong employment practices for men—means that kin and work institutions tend to be closed to outsiders. As a result, individuals have a greater vested interest maintaining kin and work ties, and few opportunities to nurture ties outside of these institutions. By contrast, higher rates of divorce and greater employment mobility in the United States create a fluid social system in which there are numerous opportunities to nurture weak tie relationships outside of kin and work institutions.

The institutional approach formulated by Yamagishi et al. also draws attention to the importance of mutual monitoring in Japan. According to this approach, mutual monitoring occurring in kin and work institutions ensures cooperative behaviors and guards against free riding. They argue that relying on monitoring as a primary mechanism to enforce cooperation in turn results in low levels of general trust, because general trust is not required in daily interactions (Yamagishi, 1986). Since general trust is a necessary precondition of nurturing relationships with individuals who are not heavily monitored, the reliance on mutual monitoring as a primary mechanism of cooperation works to further decrease the likelihood of nurturing weak ties in Japan.

Arguments by Hechter and Kanazawa (1993) and Miller and Kanazawa (2000) complement Yamagishi et al.'s experimental approach by using empirical data from various sources to show how mutual monitoring within Japanese kin and work institutions hinders the development of outside relationships. In the workplace, Hechter and Kanazawa (1993) and Miller and Kanazawa (2000) argue that Japanese workers tend to carry out their activities in large open areas, where they can monitor each other's behavior. Moreover, after work, they are often expected to socialize with colleagues. This constant monitoring that occurs during and after work hours further decreases the opportunity to form relationships with nonwork ties or reactivate decaying weak ties. By contrast, American workers are more likely to be separated by cubicles or offices, have more autonomy in determining their work schedules, and are generally not expected to socialize with colleagues after work. This greater time and flexibility further allows them to build and reactivate weak ties outside of work.

Miller and Kanazawa (2000) also discuss several ways in which monitoring inhibits weak tie formation and reactivation in Japanese kin institutions. They argue that in comparison with American homes, Japanese homes have thinner walls, are smaller, and have more shared common areas. This increases the potential for mutual monitoring while family members are at home. Moreover, aging parents often live at home, providing a constant source of monitoring for adult and child family members. Given that traditional gender divisions are more prevalent in Japan than America, women are more likely to stay at home and monitor children's behavior. All of these family obligations decrease opportunity for weak tie formation and reactivation.

Having discussed how kin and work institutions decrease opportunity to form and reactivate weak ties in Japan more than the United States, we next consider the possibility communication technology has the potential to provide new opportunities for weak tie reactivation in both countries.

### **Communication Technology and the Reactivation of Dormant Ties**

Communication technology has the potential to help individuals reactivate dormant ties by decreasing the barriers of time and space and, further, providing explicit reminders to reconnect. In regard to decreasing the barrier of time, the asynchronous nature of technology such as e-mail, text messaging, and social media affords the possibility of social connection among those with complex schedules (Boase, 2008; Boase, Horrigan, Wellman, & Rainie, 2006; Boase & Wellman, 2006). Communication technology can also afford contact with individuals that may be spatially distant, or at least more than a short walk away.

Communication technology also has the potential to help individuals reactivate latent ties by providing a renewed awareness of their existence. Haythornthwaite (2002) suggests that communication technology such as e-mail listservs can help individuals' reconnection by exposing them to messages from dormant ties. More recently, Hampton, Goulet, Rainie, and

Purcell (2011) have shown that social networking sites contain a large number of ties that are dormant. It is likely that messages posted by these ties—or even their existence on an individual's friends list—increases the likelihood of reactivation when compared with those ties for which no such reminders exist.

Although there is good reason to believe that communication technologies such as e-mail and social networking sites remind individuals in various ways to reconnect with dormant ties, mobile phones may have mixed implications for this type of reconnection. On the one hand, mobile phone researchers have shown that mobile phones tend to foster bonding relationships with strong ties (Licoppe, 2004; Ling, 2008; Ling & Campbell, 2012; Wilken, 2009). These relationships tend to have a high degree of reciprocity and are enduring in nature (Hidalgo & Rodriguez-Sickert, 2008).

On the other hand, mobile phone research has typically focused on older style phones that lack Internet connectivity and the ability to install applications. The rapidly growing diffusion of smartphones implies that individuals now have greater access to applications such as e-mail and social media, which have been shown to prompt dormant tie reactivation. Moreover, smartphones permit the installation of applications that can be designed to specifically remind individuals to reactivate dormant ties. In the section that follows, we will discuss an innovative field experiment in which such an application was utilized. The results of this experiment will be used to examine whether Japanese respondents are less likely to reactivate dormant ties than United States respondents when prompted to do so by a smartphone application.

## **Hypotheses and Method**

Our study draws on the results of a field experiment conducted with 193 adults living in Japan and 132 adults living in the United States. All respondents installed a software application on their smartphones that collected nonidentifying voice call, texting, and e-mail log data and administered on-screen survey questions. The application also randomly placed half of the respondents into a treatment group that received regular on-screen reminders for approximately 60 days. These reminders asked respondents to reconnect with address book ties with whom there had been no logged calling, texting, and e-mail contact during the previous 60 days. Respondents in the control group received no such reminders. Respondents in both groups also received on-screen survey questions that asked them to give basic information on ties with whom they had communicated by voice, text, or e-mail in the past 24 hours. These surveys collected information on active ties because they were in regard to ties recently contacted, and they included questions about whether these ties were family members or known from work.

Our analysis focuses on respondents selected into the experimental groups in Japan and the United States. We compare the extent to which respondents in these two countries failed to reconnect with dormant ties after reminders had been given by the application. Dormant ties are defined as those ties with whom there had been no logged calling, texting, or e-mail exchange 60 days prior to the reminder.

As discussed, Yamagishi's argument regarding the importance of dependency and mutual monitoring in Japan implies that:

**Hypothesis 1:** Respondents living in Japan are less likely to reactivate dormant ties than respondents living in the United States after receiving on-screen reminders.

Moreover, Miller and Kanazawa (2000) argue that mutual monitoring in Japanese kin and work institutions decreases the opportunities to communicate with weaker relationships, as might occur through the reactivation of dormant ties. Although this monitoring works in conjunction with relational dependency to decrease social mobility, it is reasonable to expect controlling for higher levels of mutual monitoring in Japan might weaken the negative association between living in Japan and reactivating dormant ties stated in the first hypothesis. Accordingly, we hypothesize,

**Hypothesis 2:** Controlling for intensity of communication with kin and work ties will weaken the negative relationship between living in Japan and reactivating dormant ties.

### *Dependent Variables*

Reactivation of dormant ties was measured in two ways. First, the reactivation of dormant ties was measured using self-report survey questions. These questions were part of a survey that was completed by respondents at the end of the experiment. The results of the survey allow us to understand the various means by which reconnection may have occurred. Respondents were asked the question, “After the application suggested that you contact a person, how often did the following happen?” then, asked about reconnecting to these ties using a number media including phone calls, text messages, e-mails, social media contact, and face-to-face communication. For each of these media, respondents indicated the frequency to reconnection using categorical response options. Table 1 shows a breakdown of responses by country, as they relate to each medium. The number of respondents living in Japan and the United States is smaller than the total number of respondents in the study because we included only those in the treatment group. Pearson’s chi-squared tests show that U.S. respondents were significantly ( $p < .05$ ) more likely to reconnect by phone calls, text messages, and social media. No significant ( $p < .05$ ) differences in reconnecting were found between respondents living in the United States and Japan for face-to-face and e-mail contact.

The results of all of these self-report questions were summed into a single scale indicating overall amounts of reactivation. This continuous variable is used as the dependent variable in analysis relating to our hypotheses.

Although self-report measures have the advantage of including reactivation that occurs through a variety of means, it has been shown that respondents often overreport their communication tendencies (Boase & Ling, 2013; Kobayashi & Boase, 2012). For this reason, we also use a measure that draws on the anonymized voice calling, texting, and e-mail log data collected by the smartphone application used in this study. Using these data, we created a single dichotomous variable for each tie for which a reminder was given. This variable equals “1” when there is at least one outgoing voice call, text message, or e-mail from the respondents after a reminder was given, and “0” when no such communication was logged.

### *Independent Variables*

Variables indicating communication with kin and work ties were created as follows. Each day during the experiment, the application selected a tie in the respondent’s address book with whom there had been logged voice, text, or e-mail communication in the past 24 hours. Once the tie was selected, the name of the tie was displayed on the screen and the respondent answered a number of questions about that tie, including whether it was a family member or someone known from work. The variable indicating overall levels of contact with kin ties was coded as the

percentage of ties selected by the application that the respondent identified as being family members. The variable indicating communication work ties was coded in the same manner. We used percentages of ties rather than total number of ties because the theory proposed by Miller and Kanazawa (2000) posits that it is the dominance kin and work ties within an individual's social sphere that suppresses communication with other ties outside of kin and work institutions.

**Table 1.** Self-Report Measures of Reactivation Following Reminders—Column Percentages.

	Phone call		Text message		E-mail		Social media		Face-to-face	
	United		United		United		United		United	
	Japan (%)	States (%)	Japan (%)	States (%)	Japan (%)	States (%)	Japan (%)	States (%)	Japan (%)	States (%)
Never	69	38	80	43	66	66	81	57	81	62
Once	17	32	5	21	15	15	5	10	12	19
Twice	9	15	7	7	11	6	4	12	3	10
3 to 4 times	3	12	7	24	7	10	8	13	3	7
5 or more times	1	3	0	6	1	3	1	7	1	1
N	95	68	95	68	95	68	95	68	95	68
Pearson chi-square	17.00**		29.49***		2.16		12.72*		8.32	

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

### *Control Variables*

As discussed, the smartphone application used in this experiment gave reminders for ties with whom there had been no logged communication by voice calling, text messaging, or e-mail in the previous 60 days. However, it is possible that some respondents prefer to communicate in person with their personal networks and could be given reminders for ties that were not actually dormant. To control for this possibility, we developed a variable that indicated how often the smartphone application correctly identified dormant ties for which reminders were given. This variable was developed using questions from a survey questionnaire that was given to respondents in the treatment group after the experiment had concluded. It sums together responses to several questions regarding how often the application correctly identified ties with whom there had been decreasing levels of contact through various media, including in-person contact.

A control variable indicating the number of ties for which reminders were given was also included in the analysis. This is because, although respondents received reminders every day during the experimental period, for some respondents, there were more days in the experiment than ties fitting our definition of dormant (i.e., ties with no recorded voice, text, or e-mail contact in the previous 60 days). This meant that some respondents have more ties for which reminders were issued than other respondents. Given that the dependent measures are concerning the number of dormant ties with whom reactivation occurred, it is important to control for the number of ties to which reminders were given.

## Analysis and Results

We begin the analysis by examining our hypotheses using the self-report dependent measure of reactivation. Our first hypothesis states that respondents living in Japan are less likely to reconnect with dormant ties than respondents living in the United States after receiving on-screen reminders. To address this hypothesis, we start with a descriptive analysis of the self-report measure discussed in the previous section in which self-reported reconnection by several possible media (i.e., calling, texting, e-mailing, social media use, and in-person contact) are summed into a single scale. Approximately 47% of the values on this scale are 0, which means that the respondents reported “never” reconnecting with any of the reminded ties through any medium. Approximately 52% of the Japan based respondents reported “never” reconnecting, whereas 32% of the U.S.-based respondents reported “never” reconnecting. This descriptive analysis shows some support for the first hypothesis.

When excluding the zero values, the distribution of the scale is positively skewed and Poisson in nature, such that the mean and standard deviations are nearly equal ( $M = 4.80$ ,  $SD = 3.90$ ). Given that the values in this self-report scale of reconnection lack obvious meaning, it is not well suited to a discussion of the difference in absolute effect size between Japanese and U.S. respondents. Although we note that the Pearson’s  $r$  correlation between living in Japan (vs. living in the United States) and this self-report scale is  $-0.19$  ( $p < .05$ ), we caution that the atypical distribution of the scale does not lend itself to a simple interpretation of this correlation as an effect size.

Given that nearly half of the values in the self-report dependent variable are 0 scores, and the remaining values fit a Poisson-type distribution, we conduct a multivariate analysis using zero-inflated Poisson regression. This allows us to examine the relationship between respondents in Japan and the United States and the dependent self-report scale in a way that leverages all available data, avoiding conflation and loss of data that can occur during a transformation of the dependent variable. The results of this analysis are given in Table 2. Model 1 shows that respondents living in Japan are significantly ( $p < .001$ ) less likely than those living in the United States to reconnect with dormant ties. Model 2 includes demographic variables to control for the possibility that differences in sample composition could contribute to these results. This model also includes controlled variables for the appropriateness of reminders and a number of ties for which reminders were issued. Even when including these control variables, respondents living in Japan were still significantly ( $p < .05$ ) less likely to reactivate dormant ties than respondents living in the United States. These results show support for the first hypothesis.

We also examine the first hypothesis using the measure of reactivation created using the log of voice, texting, and e-mail data. For this tie-level analysis, we created a dichotomous dependent measure in which “0” equals no logged reconnection with a tie after a reminder is given, and “1” equals at least one logged outgoing call, text message, or e-mail after a reminder is given. Because logged reconnection is at the tie level, and our independent demographic and control variables are at the respondent level, we use a clustering option to account for the nonindependence within respondent-level clusters. The results of this analysis are given in Table 3. Model 1 shows that respondents living in Japan are significantly ( $p < .05$ ) less likely to reactive dormant ties than respondents living in the United States. Converting these results to odds ratios shows that the odds of having logged reconnection are 1.39 times higher for respondents living in the United States than respondents living in Japan. Model 2 shows that this relationship stays significant when controlling for demographic factors. We did not include the

other control variables (i.e., variables regarding the appropriateness of the reminders or the number of ties for which reminders were issues) because they were in regard to all reminded ties, while the dependent measure was in regard to the reconnection with a specific tie. These results show further support for the first hypothesis.

**Table 2.** Zero-Inflated Poisson Regression—Predicting to Self-Report Scale of Reconnecting With Ties Following Reminders.

	Model 1	Model 2	Model 3
	Unstandardized coefficients	Unstandardized coefficients	Unstandardized coefficients
Living in Japan (0 = living in the United States)	−0.22*	−0.33**	0.16
Female		0.37*	0.44**
Working		0.12	0.18
Student		0.36	0.44
Married		0.33*	0.29
College degree or higher		0.10	0.10
Age		0.01	0.01*
Appropriateness of reminders		0.03**	0.04**
Percentage of active ties			
Family			−0.69*
Workmates			−0.24
Constant	1.70***	0.29***	0.45
Inflate constant	−0.14	−0.17	−0.18
Chi-square	3.21*	37.92***	42.88***
N	121	121	121

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Our second hypothesis states that controlling for intensity of communication with kin and work ties will weaken the negative relationship between living in Japan and reactivating dormant ties. The results of the self-report dependent measure given in Table 2, Model 3 support this hypothesis. These results show that when intensity of communication with kin and work ties is included in the analysis, respondents living in Japan are no longer significantly ( $p > .05$ ) less likely than those living in the United States to reactivate dormant ties. This result is consistent with Miller and Kanazawa's (2000), argument that high contact with kin and work ties decreases the opportunities to nurture relationships outside of this core group.

In contrast to the self-report measure, the results of the log data analysis presented in Table 3, Model 3 do not support this second hypothesis. They show that when intensity of communication with kin and work ties is included in the analysis, respondents living in Japan are still significantly ( $p < .01$ ) less likely than those living in the United States to reactivate dormant ties.



**Table 3.** Clustered Logit Regression—Predicting to Log Data Measure of Reconnecting With Ties Following Reminders.

	Model 1	Model 2	Model 3
	Unstandardized coefficients	Unstandardized coefficients	Unstandardized coefficients
Living in Japan (0 = living in the United States)	−0.33*	−0.35*	−0.44**
Female		0.02	0.00
Working		−0.08	−0.12
Student		−0.22	−0.32
Married		0.10	0.11
College degree or higher		−0.13	−0.11
Age		−0.00	−0.00
Percentage of active ties			
Family			0.28
Workmates			−0.21
Constant	−1.38***	0.00**	−1.11
Chi-square	5.31*	6.67	11.93
N	2,384	2,384	2,384

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## Discussion and Conclusion

The results of this analysis show strong support for the first hypothesis, which states that respondents living in Japan are less likely to reactivate their dormant ties than respondents living in the United States. This finding is robust even when controlling for demographic differences between respondents in both countries and the appropriateness of the reminders. Moreover, this finding is consistent between self-report and log-based measures of reactivation.

We found somewhat mixed evidence for the second hypothesis. On the one hand, our analysis of the self-report measure of reconnection was consistent with arguments made by Hechter and Kanazawa (1993) and Miller and Kanazawa (2000) regarding the confining influence of kin and work ties. That is, controlling for the influence of communication with kin and work ties significantly weakened the negative relationship between living in Japan and reporting a reconnection with ties once reminders were given by the application. On the other hand, we found a different result in our analysis that exclusively used logged calling, texting, and e-mailing data. This analysis showed that controlling for kin and work ties did not significantly weaken the relationship between living in Japan and reactivating dormant ties after reminders to reconnect were issued by the application.

There are at least two possible ways of explaining the inconsistent results between self-report and log data analyses. One explanation that is consistent with arguments by Hechter and Kanazawa (1993) and Miller and Kanazawa (2000) focuses on the means by which reconnection most likely occurs. While both analyses included reconnection that occurred by voice calling, texting, and e-mail, the self-report analysis additionally included reconnection occurring in person and by social media. If either or both in-person contact and social media were critical means by which reconnection occurs, and communication with kin and work ties were most effective at suppressing one or both types of communication, then this would explain why the

suppression of reconnection by kin and work ties was only evident in the self-report models. Although there is no obvious reason to think that kin and work ties suppress reconnection by social media, it is quite possible that they suppress reconnection that occurs in-person. When compared with other media, in-person communication can be quite time consuming because it demands a physical and synchronous presence. This is precisely the type of engagement that would be difficult to achieve in the presence of constant monitoring by kin and work ties described by Miller and Kanazawa (2000).

To examine the possibility that communication not captured by the log data explains the conflicting results between the self-report and log data models, we created another variable based on the self-report measures that excluded reconnection occurring in person and through social media. This new self-report variable of reconnection was more directly comparable to the log data variable that only included reconnection occurring through calling, texting, and e-mail. Even with this more comparable self-report variable, the results did not change significantly: the association between living in Japan and reconnecting with dormant ties remained insignificant ( $p > .05$ ) when adding the kin and work tie variables to analysis. Given the results of this follow-up analysis, there is no empirical support for the argument that reconnection occurring in person or by social media explains the differing results between the self-report and the log data analyses.

A second explanation of the conflicting results between self-report and log data analyses could be in regard to the advantages of logged data over self-report data. Given that self-report data can yield results that are less accurate and more likely to inflate communication practices than logged interactional data (Boase & Ling, 2013; Kobayashi & Boase, 2012), it is possible that the results of the log data analysis are more accurate than the results of the self-report data analysis. However, if this were the case, it is unclear why the results of the self-report data analysis were consistent with the log data analysis in Models 1 and 2, in which living in Japan was negatively associated with reconnecting with dormant ties, but not in Model 3 when variables measuring communication with work and kin ties were added. Given that the variables measuring communication with work and kin ties were coded as a percentage of kin and work ties with whom there had been logged communication during the experiment, rather than overall levels of logged communication with kin and work ties, the results of Model 3 cannot be explained as a spurious relationship caused by gregariousness. Although it is still quite possible that the inconsistent results between the self-report and log data analysis are due to the inferiority of the self-report measures, our current data do not provide enough information for us to understand exactly why these inconsistencies did not occur across all models.

Overall, the results presented in this study are consistent with the institutional approach to collectivistic culture proposed by Yamagishi et al. and somewhat consistent with Hechter and Kanazawa (1993) and Miller and Kanazawa's (2000) argument that kin and work ties play a key role in reinforcing relational dependency in Japan. These results are also somewhat contrary to the results of a study by Boase and Ikeda (2012) that used nationally representative data and found no evidence that core tie networks are more dominated by kin and work institutions in Japan than in the United States. However, the study by Boase and Ikeda focused only on core ties, while the results presented here are mostly in regard to the interaction with weaker ties. It is possible that although core kin and work ties are similar in Japan and the United States, the overall levels of institutional dependence are still higher in Japan than in the United States, and this is most evident when examining reconnection with weak ties. Further research that includes a combination of both strong and weak ties will be helpful in better understanding the broader network differences (and similarities) in Japan and the United States.

Finally, we conclude by considering the external validity of our findings. To what extent do these findings generalize to settings in which respondents do not receive reminders on their smartphones to reconnect with dormant ties? When considering this question, it is important to first remember social networking applications installed on smartphones—for example, Facebook or Twitter—often provide indirect reminders of dormant ties through the presentation of posts and messages by these types of individuals. Although these reminders do not explicitly and directly prompt individuals to reconnect with ties, they do provide a stimulus that will bring these dormant ties to an individual's attention. Moreover, it should be kept in mind that the purpose of this field experiment was to compare reconnection under circumstances that were directly comparable. Respondents in both countries received the same reminder messages selected using the same criteria. This allowed us to systematically uncover possible constraints to reconnection that could not simply be attributed to sample selection or extraneous influences. Nevertheless, further study in more natural settings examining dormant tie reconnection would be useful in confirming the external validity of these results.

## References

- Baxter, L. A. (1984). Trajectories of relationship disengagement. *Journal of Social and Personal Relationships*, 1(1), 29-48.
- Blumstein, P., & Kollock, P. (1988). Personal relationships. *Annual Review of Sociology*, 14, 467-490.
- Boase, J. (2008). Personal networks and the personal communication system: Using multiple communication media to connect. *Information Communication & Society*, 11, 490-508.
- Boase, J., Horrigan, J. B., Wellman, B., & Rainie, L. (2006). *The strength of internet ties*. Retrieved from [http://www.pewinternet.org/files/old-media/Files/Reports/2006/PIP\\_Internet\\_ties.pdf](http://www.pewinternet.org/files/old-media/Files/Reports/2006/PIP_Internet_ties.pdf)
- Boase, J., & Ikeda, K. i. (2012). Core discussion networks in Japan and America. *Human Communication Research*, 38, 95-119.
- Boase, J., & Ling, R. (2013). Measuring mobile phone use: Self-report versus log data. *Journal of Computer-Mediated Communication*, 18, 508-519.
- Boase, J., & Wellman, B. (2006). Personal relationships: On and off the Internet. In D. Perlman & A. L. Vangelisti (Eds.), *The Cambridge handbook of personal relationships* (pp. 709-723). Oxford, England: Blackwell.
- Bond, M. H. (2002). Reclaiming the individual from Hofstede's ecological analysis: A 20-year odyssey: Comment on Oyserman et al. (2002). *Psychological Bulletin*, 123, 73-77.
- Burt, R. S. (2000). Decay functions. *Social Networks*, 22, 1-28.
- Burt, R. S. (2002). Bridge decay. *Social Networks*, 24, 333-363.
- Cook, K. S., Yamagishi, T., Cheshire, C., Cooper, R., Matsuda, M., & Mashima, R. (2005). Trust building via risk taking: A cross-societal experiment. *Social Psychology Quarterly*, 68, 121-142.
- Dindia, K., & Canary, D. J. (1993). Definitions and theoretical perspectives on maintaining relationships. *Journal of Social and Personal Relationships*, 10(2), 163-173.
- Duck, S. (1982). *Personal relationships 4: Dissolving personal relationships*. London, England: Academic Press.
- Earley, P. C., & Gibson, C. B. (1998). Taking stock in our progress on individualism-collectivism: 100 years of solidarity and community. *Journal of Management*, 24, 265-304.

- Fiske, A. P. (2002). Using individualism and collectivism to compare cultures: A critique of the validity and measurement of the constructs: Comment on Oyserman et al. (2002). *Psychological Bulletin*, 128, 78-88.
- Goffman, E. (1986). *Stigma: Notes on the management of spoiled identity*. New York, NY: Simon & Schuster.
- Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology*, 78, 1360-1380.
- Granovetter, M. (1983). The strength of weak ties: A network theory revisited. In P. Marsden & N. Lin (Eds.), *Social structure and network analysis* (pp. 105-130). Beverly Hills, CA: Sage.
- Granovetter, M. (1995). Afterword 1994: Reconsiderations and a new agenda. In M. Granovetter (Ed.), *Getting a job: A study of contacts and careers* (pp. 139-182). Chicago, IL: University of Chicago Press.
- Hampton, K., Goulet, L. S., Rainie, L., & Purcell, K. (2011). *Social networking sites and our lives*. Retrieved from <http://www.pewinternet.org/files/old-media/Files/Reports/2011/PIP%20-%20Social%20networking%20sites%20and%20our%20lives.pdf>
- Haythornthwaite, C. (2002). Strong, weak, and latent ties and the impact of new media. *Information Society*, 18, 385-401.
- Hechter, M., & Kanazawa, S. (1993). Group solidarity and social order in Japan. *Journal of Theoretical Politics*, 5, 455-493.
- Hidalgo, C. A., & Rodriguez-Sickert, C. (2008). The dynamics of a mobile phone network. *Physica A: Statistical Mechanics and Its Applications*, 387, 3017-3024.
- Hofstede, G. (1983). The cultural relativity of organizational practices and theories. *Journal of International Business Studies*, 14, 75-89.
- Jack, S. L. (2005). The role, use and activation of strong and weak network ties: A qualitative analysis. *Journal of Management Studies*, 42, 1233-1259.
- Kiyonari, T., Yamagishi, T., Cook, K. S., & Cheshire, C. (2006). Does trust beget trustworthiness? Trust and trustworthiness in two games and two cultures: A research note. *Social Psychology Quarterly*, 69, 270-283.
- Kobayashi, T., & Boase, J. (2012). No such effect? The implications of measurement error in self-report measures of mobile communication use. *Communication Methods and Measures*, 6, 126-143.
- Levin, D. Z., Walter, J., & Murnighan, J. K. (2011). Dormant ties: The value of reconnecting. *Organization Science*, 22, 923-939.
- Licoppe, C. (2004). "Connected" presence: The emergence of a new repertoire for managing social relationships in a changing communication technoscape. *Environment and Planning D: Society and Space*, 22, 135-156.
- Ling, R. (2008). *New tech, new ties: How mobile communications is reshaping social cohesion*. Cambridge: MIT Press.
- Ling, R., & Campbell, S. W. (2012). *Mobile communication: Bringing us together and tearing us apart*. New Brunswick, NJ: Transaction.
- Miller, A., & Kanazawa, S. (2000). *Order by accident: The origins and consequences of conformity in contemporary Japan*. Boulder, CO: Westview Press.
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 128, 3-72.
- Rollie, S. S., & Duck, S. (2005). Divorce and dissolution of romantic relationships: Stage models and their limitations. In M. A. Fine & J. H. Harvey (Eds.), *Handbook of divorce and relationship dissolution* (pp. 223-241). London, England: Psychology Press.

- Simmel, G. (1898). The persistence of social groups. *American Journal of Sociology*, 3, 662-698.
- Wilken, R. (2009). Bonds and bridges: Mobile phone use and social capital debates. In R. Ling & S. W. Campbell (Eds.), *Mobile communication: Bringing us together and tearing us apart* (pp. 127-149). New Brunswick, NJ: Transaction.
- Yamagishi, T. (1986). The provision of a sanctioning system as a public good. *Journal of Personality and Social Psychology*, 51, 110-116.
- Yamagishi, T., Cook, K. S., & Watabe, M. (1998). Uncertainty, trust, and commitment formation in the United States and Japan. *American Journal of Sociology*, 104, 165-194.
- Yamagishi, T., Hashimoto, H., & Schug, J. (2008). Preferences versus strategies as explanations for culture-specific behavior. *Psychological Science*, 19, 579-584.
- Yamagishi, T., Jin, N., & Miller, A. S. (1998). In-group bias and culture of collectivism. *Asian Journal of Social Psychology*, 1, 315-328.
- Yamagishi, T., & Yamagishi, M. (1994). Trust and commitment in the United States and Japan. *Motivation and Emotion*, 18, 129-166.

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