Chapter 8
Did Mobile Phones Increase Adult Children's Maternal Contact?

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Mobile phones have become an indispensable and inescapable part of our lives. Social scientists interested in the family largely overlooked the arrival of this revolutionary consumer technology. At least initially, mobile phones seemed to be little more than an extension of the familiar landline or pager. Being too bulky and expensive for personal use, they were first marketed largely as business applications. Even compact handhelds were often overshadowed by the glamour of the internet and the novelty of social media. Because mobile phones diffused so rapidly however, everyone had one before most researchers could even begin to formulate important questions about the impact on family life and gather data about how mobile phones might change intimate relationships.

In the developing world where landlines and good roads were scarce, it was readily apparent that mobile phones were filling a significant need. For instance, mobile phones allowed parents to communicate much more frequently with their grown children who lived far away. Among older Thai parents, having daily or nearly daily phone contact with a non-coresident child rose from 12 to 18.5% between 2007 and 2011. Given the evidence, previous speculation that family solidarity between adult generations was in decline was rejected by some (Knodel, 2014).

With the advantages of hindsight, this chapter asks how the introduction and use of mobile phones in advanced Western societies has impacted intergenerational family relationships in adulthood. We situate our investigation in the broader social science debates about the past and future cohesion of kin networks, as well as the influence of new communication technology on social life more generally. Although family solidarity has several aspects (Bengtson & Roberts, 1991), we focus on the *associational* dimension using an outcome variable on frequency of contact between

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mothers and their grown children. This maternal contact variable recognizes the lifelong strength of the mother–child bond (Rossi & Rossi, 1990). Frequency of maternal contact is not only linked to feelings of closeness but also facilitates concrete resource exchanges (Silverstein, Bengtson, & Lawton, 1997). Intergenerational contacts have many salutary effects, including promotion of the subjective well-being of older adults (Lowenstein, Katz, & Gur-Yaish, 2007; Silverstein & Bengtson, 1994).

Given repeated cross-sectional data for 1986 and 2001, the International Social Survey Program (ISSP) provides a serendipitous window on the neglected question of the family implications of the mobile phone rollout. Bracketing a critical 15-year period that captures the introduction and early diffusion of these phones in Western countries' consumer markets, the two survey years are a rare historical vantage on a natural quasi-experiment. Leveraging on the cross-national design of the ISSP, we exploit the differences between countries to evaluate the thesis that mobile phones increased the frequency of maternal contact. A series of analyses constitute an accumulation of support for a rise in intergenerational solidarity at the turn of the twenty-first century.

First, we lay out the 1986–2001 evidence showing an increase in the frequency with which adults had remote, but not in-person, contact with their mothers (Treas & Gubernskaya, 2012). Overall, compositional changes in populations were not found to account for increased contact. For several countries, there was a diminished influence of mother–child residential proximity on remote contacts. Strikingly, this is in line with the *end of geography* theorizing that new technology (e.g., mobile phones, and internet) makes distance less relevant for communication (Giddens, 1981; Graham, 1998; Harvey, 1990).

Second, we build on these results, which raised mobile phones as a possible driver of more frequent mother–child interaction at the start of the twenty-first century. We link 2001 ISSP maternal contact data for 24 developed nations with the country-level prevalence of mobile phones (Gubernskaya & Treas, 2016). There was substantial country-to-county variation in mobile phone saturation in 2001. As the analysis demonstrates, countries having a higher prevalence of mobile phones were also the ones where grown children had more frequent contacts with their mothers by letter, FAX, internet, or phone.

Third, we turn to the US data for further evidence regarding the role of new communication technology in promoting increased interaction between family members. Extending the analysis into the twenty-first century, we ask whether overall contact with kin increased. If so, was the increase in contact with kin linked to greater use of established means of communication or to the development of social media?

Background

In the Western and developed world, the fate of family cohesion has long been a subject of debate. The French sociologist LePlay (1872/1982) was among the first to present a gloomy scenario for intergenerational support. He described aging

parents left alone on the family farm by children who deserted the countryside for the greater economic opportunities of the cities. Later, the American sociologist Ernest Burgess (1926) ascribed to modernization the emergence of a small family liberated from the broad kin network. Indeed, Parsons (1949) described the nuclear family of parents and minor children as the only functional family type given industrial demand for mobile workers.

More recent thinking pushes back on the decline-of-the-extended-family thesis (Settersten, 2007), if only because there is a high level of exchange, affection, and contact between parents and grown children today (Swartz, 2009). Adults are more likely to have a surviving parent (Watkins, Menken, & Bongaarts, 1987). Parents are more likely to have a child nearby (Gillespie & Treas, 2017; Hank, 2007). Most Americans describe relationships with their parents as close (Lawton, Silverstein, & Bengtson, 1994). Fully 80–90% of adults in Europe and the USA report weekly contact with their mothers (Kalmijn & De Vries, 2009). Parents and grown children actively exchange support and services (Albertini, Kohli, & Vogel, 2007). Unfortunately, beyond demographic estimates of kin availability (Watkins et al., 1987) and historical trends in multigenerational households (Ruggles, 2007), longitudinal data are lacking to assess the relative vitality of contemporary family networks. Speculation that intergenerational cohesion is on the rise typically reasons from documented shifts in the composition of populations (Bengtson, 2001; Uhlenberg, 2005). To take one example, the growing numbers of singles is said to imply increased solidarity between the generations (Swartz, 2009), not only because the competing demands of marriage limit couples' engagement with the broader kin contact (Hank, 2007; Sarkisian & Gerstel, 2008) but also because single offspring may need more parental help.

Research results on trends in family solidarity have been mixed. A classic study found that working-class Londoners socialized often with family members (Bott, 1957/2001), but research on couples living in new housing estates outside London reported little traditional reliance on kin support (Young & Wilmott, 1954/1986). A 1962–1975 drop in the frequency that older Americans saw adult children was described (Crimmins & Ingegneri, 1990), but other research could not infer a trend for the UK in the 1980s and 1990s (Grundy & Shelton, 2001). Recent studies have offered more consistent support for increased kin contact. Recent Dutch cohorts of older adults interact more often with their children than earlier ones (van der Pas, van Tilburg, & Knipscheer, 2007). Between 1979 and 1994, repeated cross-sections showed that Swiss older adults also interacted more frequently with kin (Vollenwyder, Bickel, d'Epiney, & Maystre, 2002). Considering four European countries and the USA, no change in the frequency that adults visited their mothers between 1986 and 2001 was found, but remote contacts trended up (Kalmijn & De Vries, 2009). A later study analyzing seven countries confirmed that the increases were limited to mediated contacts via letter, phone, FAX, or internet (Treas & Gubernskaya, 2012).

Did Maternal Contact Increase over Time?

Seven countries (Australia, Austria, West Germany, Great Britain, Hungary, Italy, and the USA) collected data on maternal contact in both the 1986 and 2001 ISSP. Pooling the two surveys, four countries saw significant ($p < 0.001$) increases in the frequency of remote contacts with mother (Treas & Gubernskaya, 2012). The four countries were notably diverse, including two market-oriented, individualistic cultures (Australia and Great Britain), a familistic society with more limited welfare provisions (Italy), and a country that was undergoing the transition from socialism (Hungary). Of the seven countries considered, Italians had the most frequent remote contacts and Hungarians the least. Italians averaged *at least once a week* in 1986 but edged up toward *at least several times a week* by 2001. Hungarians barely averaged *several times a year* in 1986; 15 years later, they reported between *several times a week* and *once a week*. The increase in interaction was limited to remote contacts. None of the seven countries saw a statistically significant change over the period in the mean frequency that adult children saw or visited mothers.

Figure 8.1 shows 1986–2001 net differences by country. They are based on multivariate, seemingly unrelated regressions (SUR) that simultaneously estimate frequencies of remote contacts and in-person visits. Even adjusting for a host of predictive covariates (gender, age, marital status, number of siblings, years of

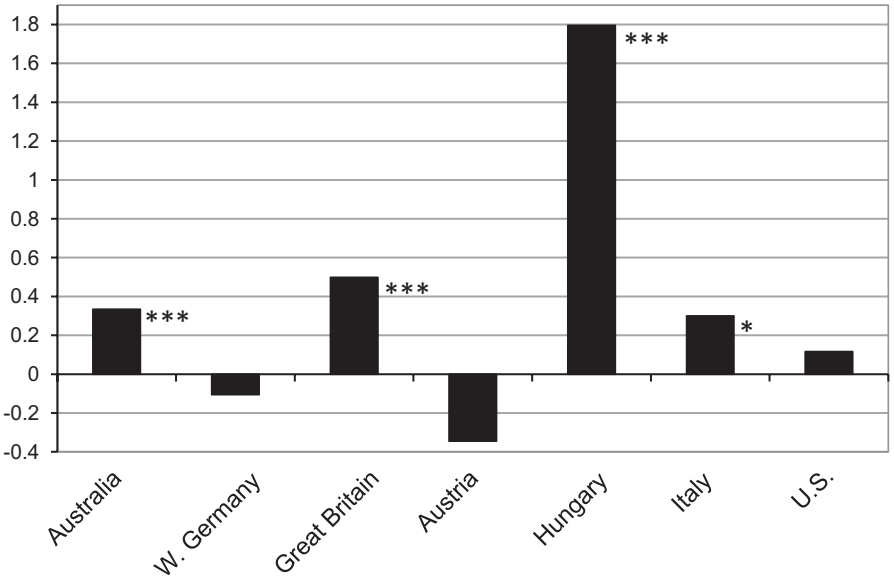


Fig. 8.1 Difference in predicted contact with mother between 1986 and 2001 by country. ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$. From the seemingly unrelated regression models (Treas & Gubernskaya, 2012, Table 2) adjusted for gender, age, marital status, number of siblings, years of education, family income, employment status, religiosity, and travel time

education, family income, employment status, religiosity, travel time to mother, and time squared), Australia, Great Britain, Hungary, and Italy still displayed statistically significant increases in remote contacts over the 15-year period. Thus, the results of the multivariate analysis inspire further confidence that there was an increase over time in contacts mediated by phone, internet, fax, or mail.

Did Population Changes Account for Increases in Maternal Contact?

Changes over time in the composition of national populations are plausible explanations for trends in intergenerational relationships (Bengtson, 2001; Settersten, 2007; Treas, 1977). A number of individual-level factors, most of which have increased over time, are positively related to having more frequent maternal contact. These include being female (Hank, 2007; Treas & Cohen, 2006), having fewer siblings (Grundy & Shelton, 2001; Hank, 2007), being unmarried (Hank, 2007; Sarkisian & Gerstel, 2008), embracing secular values (Silverstein, Gans, & Yang, 2006), and being young or old rather than middle aged (Grundy & Shelton, 2001; Treas & Cohen, 2006). Theoretically, individuals with these characteristics might be expected to have increased maternal contact over time.

Of course, there are other factors that increased over time but are negatively related to contact, at least for visits. They include education (Kalmijn, 2006; Spitze & Logan, 1991) and residential distance between the generations (Hank, 2007; Mok, Wellman, & Carrasco, 2010). Evidence is inconclusive for income (Sarkisian & Gerstel, 2008; Waite & Harrison, 1992), perhaps because it both facilitates interaction and makes kin exchanges less essential. Nor has employment provided consistent results (Ikkink, van Tilburg, & Knipscheer, 1999; Waite & Harrison, 1992) despite arguments that the time demands of employment compete with extended kin (Treas, 1977).

Using the Blinder–Oaxaca method (Jann, 2008), the 1986–2001 increase in frequency of remote maternal contacts was algebraically decomposed into two components: (1) differences due to changing characteristics of the population (i.e., changes in means) and (2) differences due to changing weights for those characteristics (i.e., changes in coefficients; Treas & Gubernskaya, 2012). Population shifts registered in the changing means for sociodemographic characteristics of non-coresident adult children, including gender, age, marital status, number of siblings, years of education, family income, employment status, religiosity, and travel time. Following prior research and theorizing, these sociodemographic changes in population composition were hypothesized to account for the over-time increase in remote maternal contacts.

The results of the demographic decomposition exercise did not find compositional shifts to matter much for overall changes in the frequency of contact between mothers and grown children. Taken together, the various changes in population composition accounted for only 19% of the 1986–2001 increase in frequency of

remote maternal contacts. Sociodemographic changes largely offset one another. Increased employment and declining religiosity depressed remote maternal contacts, but their effects were swamped by the positive influence on contact of increases in unmarried persons, education, and family income, as well as declines in numbers of siblings. Gender, age, and travel time did not register statistically significant contributions to the increased frequency of remote maternal contacts. Although many variables had predictable influences on remote intergenerational interaction, explanations based on overall changes in the demographic composition of populations were inadequate explanations of this change, if only because different trends worked against one another.

Are Mobile Phones a Plausible Explanation for Increased Maternal Contact?

We find limited support for theorizing that links the increase in intergenerational solidarity to overall population shifts. Findings emerging from our prior analyses, however, do point to mobile phones as a neglected explanation for why Europeans in several diverse countries saw contact with their mothers increase at the end of the twentieth century.

First, due to the serendipity of the ISSP's 1986 and 2001 survey years, the observed increase in the frequency of maternal contact can be dated to the historical period that coincides with the growth of the mass market for mobile phones (Agar, 2013). The pervasiveness of mobile handheld devices rests on many innovations accomplished in a remarkably short period of time. These included the refinement of the underlying technology, the creation of cellular phone systems connected to existing public telephone systems, a build-out beyond big cities, and miniaturization transforming clunky cordless devices into genuinely mobile phones. On the road to transforming social relationships, there was the need for pricing that not only made cell phones attractive for business as well as personal use but also allowed handheld phones to compete with popular consumer technology such as pagers. Again, in much of the developed world, these innovations were largely accomplished between 1986 and 2001. In the Nordic countries that had introduced mobile cell phones to Europe, only about 2% of the population in 1987 had the devices, which were primarily for use on the job (Agar, 2013).

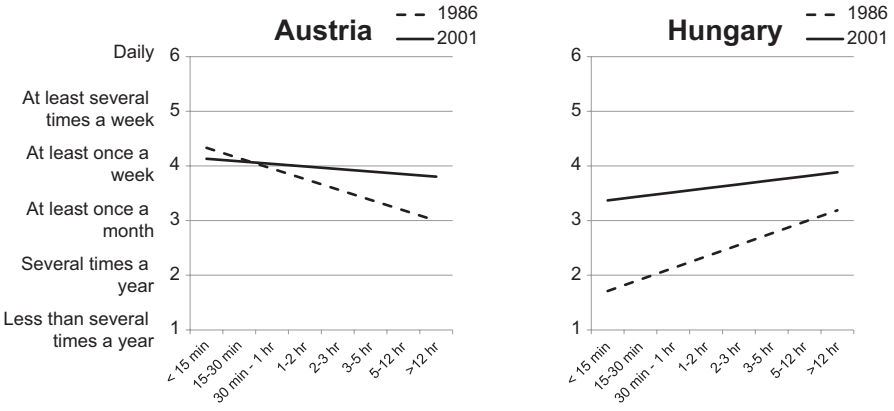
Second, recall that no country saw a statistically significant increase in the frequency of children seeing or visiting mothers. Increases in maternal contact were limited to *other* contacts that did not require face-to-face presence. This discounts the notion that contact frequency was driven by some unmeasured "taste" variable that increased grown children's desire to interact with mothers. Changing contact preferences would no doubt have registered on both in-person and remote contacts. Mobile phone technology was developed specifically to further remote communication. We would not expect mobile phones to have an impact on the frequency of

visiting and seeing mothers. Although cheaper and more convenient phone calls make it easier to plan get-togethers, they also reduce the need for face-to-face visits to exchange information, for example. Thus, the decline or no change in in-person contacts is consistent with a unique role for handheld, cordless phones.

Third, *the end of geography* (Graham, 1998) and *time-space compression* (Harvey, 1990) have been central themes for new information and communication technologies. Together with developments in the faster movement of goods and people, the internet and mobile phones were argued to diminish the importance of distance. Remember that Austria and Hungary both demonstrated a 1986–2001 decline in the importance of proximity for the frequency of remote contacts between adult children and their mothers (Treas & Gubernskaya, 2012). This significant interaction between survey time and geographic space is what we would expect to see with new communication technologies that overcome the prior constraints of geography.

Figure 8.2 illustrates this interaction between survey year and mother–child residential distance, adjusted not only for the main effects of year and travel time, but also for gender, age, marital status, number of siblings, years of education, family income, employment status, and religiosity. The interaction terms for both countries were significant at the $p < 0.05$ level.

In the landline era of 1986, higher charges for long-distance calls discouraged remote contacts between those who lived far apart. In Fig. 8.2, the 1986 line for Austria shows just this pattern: The frequency of remote maternal contacts falls off from at least once a week for children living within 15 min of mother to once a month for those more than 12 h away. The 2001 line, however, is almost flat, indicating that distance had a considerably smaller effect on the frequency that Austrians contacted mothers remotely. In Hungary, the 2001 line was also notably flatter than in 1986. Although distance came to matter less for maternal contacts between the



Source: Treas & Gubernskaya, 2012.

Fig. 8.2 Predicted relationship between travel time and other contacts with mothers in 1986 and 2001. Source: Treas and Gubernskaya (2012)

two years, the Hungarian relationship between maternal contact and distance is paradoxically positive. This no doubt reflects the unique situation in socialist countries like Hungary where there were only seven landline phones per 100 persons in 1986 (The World Bank, n.d.-a). Grown children lived comparatively close to their mothers (results not shown), and public transportation was heavily subsidized. Hungarians most likely to call home were, therefore, likely to be those living far away. These two cases fall short of confirming that the diffusion of mobile phones led to the increases in remote contacts with mothers seen in 2001 versus 1986. Considering the time period observed and the lack of change in in-person visits, however, the evidence for the decline-of-geography thesis motivates a test of the notion that mobile phones had a positive effect on one key aspect of intergenerational solidarity.

Being so early in the diffusion process, the subscription variable can be thought of as measuring change from a zero baseline in the era of no mobile phones.

Did Mobile Phone Diffusion Account for Increased Maternal Contacts?

Ideally, a researcher interested in adult intergenerational cohesion at the dawn of the mobile phone era would have followed individuals over time to observe changes in maternal contact as they adopted the new technology. Studying the implications of mobile phones for intergenerational contact is frustrated by the general lack of individual-level, longitudinal data for this historical period. Instead, we leveraged on cross-national variation in cell phone adoption. The pace and timing of the early diffusion of mobile phones in various countries probably owed less to demand than supply, namely, the speed with which the new phone systems were developed. Cell phone subscriptions give a clear idea of the countries that led or lagged in the adoption of mobile phones. The World Bank (n.d.-b) provides country-specific data on mobile phone subscriptions. Figure 8.3 illustrates not merely the rapid growth in access to mobile phones but also the extent to which people in various countries had access to mobile phones at different time points. For instance, in 2000 the number of mobile phone subscriptions varied from 30 per 100 persons in Hungary to over 75 per 100 persons in the UK, Switzerland, and Italy. With only 39 subscriptions per 100 persons in 2000, mobile phones were not as prevalent in the USA during the early 2000s compared to other developed countries (Stanley, 1999).

For 24 countries (Australia, Austria, Brazil, Canada, Chile, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Hungary, Israel, Italy, Japan, Latvia, New Zealand, Norway, Poland, Russia, Slovenia, Spain, Switzerland, and the USA), we link country-specific data from the World Bank on 2001 mobile phone subscriptions per 100 persons and individual-level ISSP data for this year on grown children's maternal contact frequency. This permits a test of the hypothesis that countries where people had greater access to mobile phones were countries where grown children had more frequent remote contact with mothers.

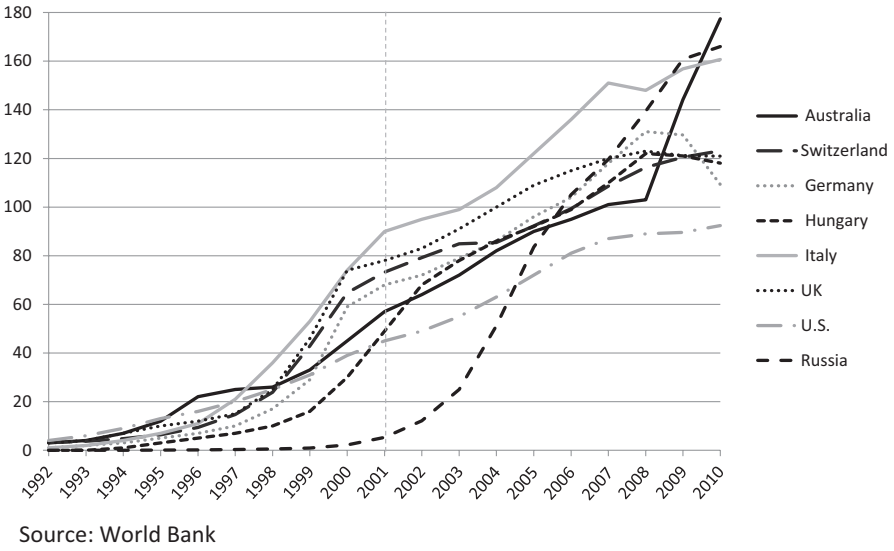


Fig. 8.3 Mobile phone subscriptions per 100 persons. Source: World Bank

The hypothesis was tested using a random intercept two-level model (Gubernskaya & Treas, 2016). The model predicted frequency of remote contact in 2001 based on country-level mobile phone subscriptions and GNP per capita, a control for country wealth that might facilitate consumer uptake of the new phones. At the individual level, the model controlled for gender, age, marital status, numbers of children and siblings, education, employment status, religiosity, familistic attitudes, and proximity. All things considered, the results showed that mobile phone subscriptions in respondent's country were positively and significantly ($p < 0.05$) associated with the frequency of *other* remote contacts with mother. Given the newness of the mass consumer technology, each of the 24 countries studied had only recently had zero mobile phone subscribers. So, starting with this base, we can also think of the results as suggesting that the speed of mobile phone adoption was positively related to frequent maternal contacts.

The positive relationship was also seen (<0.001) even after cross-level interactions of mobile subscriptions with respondent's gender, age, and education were added to the model (Gubernskaya & Treas, 2016). The findings were consistent not only with the diffusion of mobile phones increasing the frequency of remote maternal contacts but also with impacting who called home more frequently. In keeping with traditional kin-keeping roles, women were significantly ($p < 0.001$) more responsive to the prevalence of these phones than were men. Perhaps indicative of a digital divide in mobile phone uptake, younger people's maternal contacts were more sensitive and older people less sensitive to mobile phones than were the middle aged. Predictably, given that mobile phones reduced cost barriers to calling,

less educated respondents were more responsive to subscriptions than were more educated ones—so much so that there were no education differences for remote contacts where mobile phone access was very high.

More Evidence from the US Data

Taken together, the analyses offer support for the hypothesis that the spread of mobile phone technology at the end of the twenty-first century resulted in greater remote contact between mothers and their adult children. The conclusion, of course, would be more persuasive if national surveys had longitudinal data on individuals' contacts and mobile phone adoption. We know of no such data for this time period. Lacking these data, we turn to a longitudinal US survey for additional evidence regarding the role of new communication media in promoting increased interaction between family members.

With three waves of individual data, Midlife in the United States (MIDUS) is a nationally representative, longitudinal survey of middle age adults. The first wave of data was collected in 1995–1996 on a representative sample of adults between ages 24 and 74 (Brim et al., 2016), followed by the second wave in 2004–2006 (Ryff et al., 2012). The third wave in 2013–2014 (Ryff et al., 2017) brought the analysis into the second decade of the twenty-first century when social media were ascendant. All three waves asked about the frequency of contact *through visits, phone calls, letters, or email* with family members who do not reside in respondent's household. The third wave also included a question about the frequency of contact with family members over *social media*, which included *Facebook*, *Twitter*, *MySpace*, *Skype*, *text messages*, *chat rooms*, etc. Although 23% of respondents were in touch daily with family members via social media in 2013–2014, these new platforms were not a factor in earlier waves. My Space did not launch until 2003, and Facebook was not available to the American public until 2006. Unlike mobile phones, not even country-specific rates for internet users were significant predictors of the frequency of maternal contact in 2001 (Gubernskaya & Treas, 2016).

MIDUS data are not directly comparable to the ISSP. They do not report visits and remote contacts separately. Nor do they distinguish mother–adult child contacts from contacts with other family members. The MIDUS data do offer insights on whether new communication media contributed to an increase in overall family contact over time, notably into the second decade of the twentieth century. And, importantly, they allow us to track changes in family contacts for individuals.

Using the three waves of MIDUS data, Table 8.1 presents the results from fixed effects regression models predicting the change in the mean frequency of contact with family members over time. The models estimate the average within-individual change between the waves while controlling for all *time-invariant* differences between the individuals, such as sex or education. The advantage of this MIDUS analysis is that we observe change in kin contact for individuals, rather than for populations whose members change across the repeated cross-sectional surveys of the ISSP. If the fixed effect results show an increase in the frequency of contact, we

Table 8.1 Fixed effects models predicting changes in the mean frequency of contact with family members over time: MIDUS

	Model 1	Model 2
Variables	Mean contact	Mean contact (+social media in W3)
Constant	5.855***	5.854***
	(0.016)	(0.016)
(Ref.: Wave 1, 1995–1996)		
Wave 2, 2004–2006	0.125***	0.127***
	(0.026)	(0.026)
Wave 3, 2013–2014	0.231***	0.418***
	(0.031)	(0.031)
N	12,873	12,874
n	6377	6377
SD (u)	1.802	1.796
SD (e)	1.168	1.161
Rho	0.580	0.582
Corr	0.007	0.006

***$p < 0.001$, $p < 0.01$, $p < 0.05$. Standard errors in parentheses

largely can discount the possibility that it occurred, because low-contact respondents died off and high-contact ones (e.g., young people) grew up to participate in later waves of the survey.

Asked in all three waves of MIDUS, the dependent variable in Model 1 is the mean frequency of contact with family members *through visits*, *phone calls*, *letters*, *or email*. Responses range from *never or hardly ever* (1) to *several times a day* (8); larger values correspond to higher frequency of contact. The dependent variable in Model 2 is the same for Wave 1 and Wave 2; in Wave 3, the mean frequency of contact was estimated based on the highest response on either contact *through visit*, *phone calls*, *letters*, *or email* or contact *over social media and text messages* measured on the same *1 to 8* scale (see Appendix for the exact wording of the questions and response categories).

The constant in the models is the mean contact in Wave 1 (1995–1996). On average, the respondents contacted their family members somewhat less that *several times a week* (5.855). A decade later (2004–2006), the average contact had increased by 0.125, approaching *several times a week*. Between the second wave and third wave (2013–2014), it increased 0.231, surpassing *several times a week*. On average, individuals increased kin contact by about 4% over the 20 years. As Model 2 shows, if contact over social media and text messages is taken into account, the average contact increased by 0.418 (that is, 7%) between the first and third wave.

The changes may seem modest. Over two decades, contacts went from slightly less than several times a week to slightly more. Adding social media, kin contacts bumped up a quarter of the distance to once a day. It is worth noting, however, that the average age at Wave 1 was 46. Because MIDUS oversampled middle age

individuals, respondents in their 20s—those who reported the most frequent maternal contacts and who are often early adopters of new technology—constituted only 10% of the sample. As indicated by rho (the intra-class correlation coefficient), about 58% of the variation in the mean contact is due to the differences between the individuals. A very low correlation (0.007) between the intercept and the slope suggests that the change in the frequency of contact over time does not depend on the initial level of contact. This suggests that the changes were wide spread and not particularly localized to those already inclined to keep in touch with kin.

Discussion

Cross-national analyses at the end of the twentieth century pointed to increases in remote contacts between mothers and their grown children. Because in-person visits did not increase and because the remote contact trend held even controlling for filial values, the cause does not appear to be a growing preference for maternal contact. Furthermore, decomposing the 1986–2001 difference in contact frequency into its demographic components did not find that the increase in remote contact was due to population changes. While some shifts in the composition of the populations promoted frequent contact, they were offset by shifts that discouraged it. Against a backdrop of classic theorizing on the decline of the extended family, an increase in the frequency of mother-and-adult-child contacts is striking. The puzzling failure of popular demographic explanations to account for this increase poses a challenge to our understanding.

In this chapter, we evaluate another plausible and seemingly obvious explanation: The diffusion of mobile phones is—at least in part—responsible for an increase in remote contact between kin. To the best of our knowledge, representative longitudinal data on individuals' mobile phone usage and frequency of kin contact are lacking for the critical period when mobile phones were diffusing rapidly through developed countries. This stands as a serious impediment to establishing definitively that the spread of mobile phones promoted family cohesion, as opposed to family cohesion stimulating the take-up of this new communication technology. Nonetheless, the contributions of communication technology to family solidarity is an important enough issue for us to exploit the existing, if piecemeal, data that can speak to the relation of kin communication and communication media.

The result is a set of findings, some significant and others not, that cumulatively bolster the argument that technology allowed us to realize a desire to stay in touch with family members. This argument no doubt resonates with individuals old enough to remember telephone landlines and the liberation offered by their first cell phone. Rather than withdrawing into virtual worlds, the evidence points to greater kin engagement at a distance for much of the developed world. If more recent results on social media and kin contact are any evidence, new forms of communication technology seem likely to continue to facilitate family solidarity.

Appendix

MIDUS questions:

"This question asks about contact with family through visits, phone calls, letters, or email. How often are you in contact with any members of your family, that is, any of your brothers, sisters, parents, or children who do not live with you through visits, phone calls, letters, or email?" (asked in wave 1, 2, and 3).

"This question asks about social media, which includes Facebook, Twitter, MySpace, Skype, text messages, chat rooms, etc. How often are you in contact using social media with any members of your family, that is, any of your brothers, sisters, parents, or children who do not live with you?" (asked in wave 3 only).

Several times a day.
About once a day.
Several times a week.
About once a week.
Two or three times a month.
About once a month.
Less than once a month.
Never or hardly ever.

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