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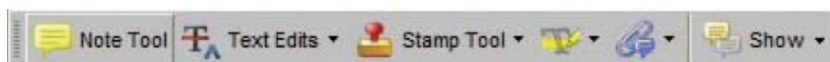
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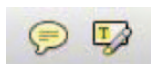
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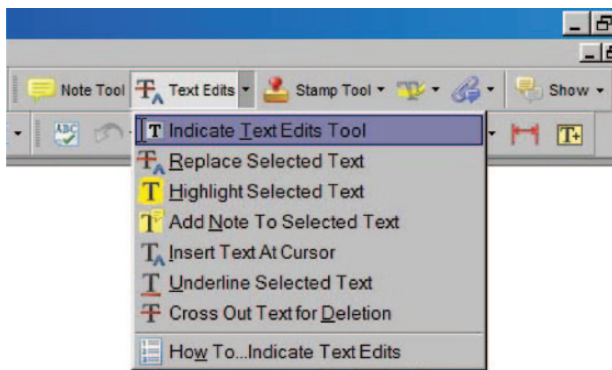


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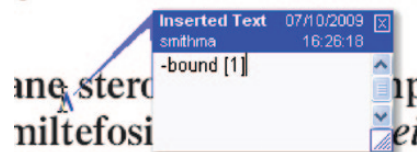
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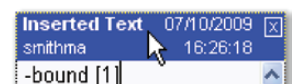
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Changes in Support Networks in Late Middle Age: The Extension of Gender and Educational Differences

Claude S. Fischer and Lauren Beresford

Department of Sociology, University of California, Berkeley.

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AQ1 *Objectives.* This paper tests whether differences by gender and by educational attainment in contact with friends and family and in support expected from friends and family narrow or widen in late middle age.

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Methods. The data are drawn from about 4,800 members of the Wisconsin Longitudinal Survey who answered questions about their frequency of contact with social ties and expectations of 3 kinds of help in both 1993, when they were in their early 50s, and again in 2004.

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Results. Using lagged dependent variable models, we find that between their 50s and 60s women’s network advantages over men and college graduates’ network advantages over high school graduates in frequency of social contact widened. The same was roughly true for expectations of social support, although here the divergences depended partly on the type of the support: Women gained relative to men in “talk” support and in help from nonkin if ill, but lost ground in financial support. The college-educated gained ground in all sorts of support from nonkin.

Discussion. These results reinforce concern that late middle age is a period when men and the less educated become yet more disadvantaged in social support, making attention to connectedness yet more critical.

Key Words: Education—Gender—Inequality—Middle age—Networks—Social support.

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1.40 1.95
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AQ3 IN the growing literature on personal support networks, one long underdeveloped topic is network change over time (Feld, Sutor, & Hoegh, 2007; Sutor, Wellman, & Morgan, 1997); rates of network disruption, turnover, and replacement; how life events affect networks; and how individual differences in networks develop. Early longitudinal studies (e.g., Bidart & Lavenu, 2005; Morgan, Carder, & Neal, 1997; Sutor & Keeton, 1997; Wellman, Wong, Tindall, & Nazera, 1997) delivered important findings, but they relied on small and usually specialized samples, such as widows, and typically covered only short durations. Now, new studies, with broader samples and often better network measures, some still ongoing, have begun to shed light on general patterns of change (e.g., Bloem, Tilburg, & Thomese, 2008; Cornwell & Laumann, 2013; Guiaux, Tilburg, Broese, & Groenou, 2007; Huisman et al., 2011; Luo, Hawkey, Linda, Waite, & Cacioppo, 2012; Mollenhorst, Volker, & Flap, 2014; Shaw, Krause, Liang, & Bennett, 2007; Terhell, Broese van Groenou, & van Tilburg, 2004; Thomas, 2011). To this work, we add a particular focus: inequalities in network change.

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AQ4 what intervening events produced such changes between the respondents’ early 50s and early 60s.

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Panel studies on egocentric networks find considerable turnover in network membership over even brief periods. Turnover in networks is due in part to methodological reasons (network “sampling” by respondents and unreliability) and in part because of real change: alters come and go; needs rise and fade (e.g., Bignami-Van Assche, 2005; Cornwell & Laumann, 2013; Leik & Chalkley, 1997; Mollenhorst et al., 2014; Morgan et al., 1997; van Duijin, van Busschbach, & Snijders, 1999; for an overview, Sutor et al., 1997). Yet, researchers find considerable stability in the overall profile of individuals’ networks and social support—for example, in the size of the reported networks, in access to support, and in the proportion of alters who are kin.

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Women generally report more and closer ties and giving and getting more social support, especially emotional support, than do men (e.g., Antonucci & Akiyama, 1987; Antonucci, Akiyama, & Takahashi, 2004; Fischer & Oliner, 1983; Hall, 2011; Liebler & Sandefur, 2002; Reis, 1998; Stevens & Tilburg, 2011; Wenger, 1997; an exception: Marsden, 1987). The studies reporting gender differences in social networks over time show mixed results (women better sustain ties: Field & Minkler, 1988; Hatch & Bulcroft, 1992; Stevens & Van Tilburg, 2011; women do not: Matt & Dean, 1993; Shaw et al., 2007). One of the most comprehensive analyses of various kinds of contact and support in a sample of elderly respondents followed over 10 years

finds that the gender gap on some network dimensions narrows (Shaw et al., 2007).

Network studies typically treat education as a control variable, so the advantage that the educated have in social ties—at least, in nonkin ties—and in the expectation of social support are taken for granted (explicit analyses include: Fischer, 1982; Marsden, 1987; Shaw et al., 2007; Stevens & Tilburg, 2011; Willmott, 1987). Some studies show that the educated receive less help because they need less help. A few studies of network change incidentally report that the better educated are more likely than the less educated to retain or initiate a network tie (Ikkinck & van Tilburg, 1999; Kohli, Hank, & Kunemund, 2009; Marin & Hampton, 2013). To our knowledge, only two studies explicitly test the interaction of aging with education. Stevens and van Tilburg (2011, Table 2) find no such interaction effect on the probability that elderly residents of Amsterdam report having a “friend” and Shaw et al. (2007) find only one statistically significant interaction of time with education in 11 tests with data from a 10-year study of the elderly.

We concentrate on change in two dimensions: at the level of ties, contact between respondents and key alters; and, at the level of networks, the degree of social support respondents expected to receive. The first tells us about the activity in networks and the second about its value to respondents. In each context, the WLS measures a rich variety of relationships and support. Another distinctive feature of this study is that we look at the correlates of aging among the late-middle-aged, mainly in their 50s. Most of the existing studies are of the elderly, tracking people as they moved into the years of serious physical and mental disability (e.g., Aartsen, Tilburg, Smits, & Knipscheer, 2004; Cornwell & Laumann, 2013). For the most part, we track changes in social support as affected by life experiences and aging prior to severe health events.

We compare the answers of WLS respondents to questions about the frequency of contact with relatives and friends, and to questions that ask whether and from whom they could expect practical and emotional support when they are about 53 and 64 years old. Prior analyses of the data show that the overall, net change was modest (Hauser & Roan, 2006, p. 102), but the attention here is on whose networks changed in which ways.

Networks have long been known to affect people’s psychological well-being and physical health (e.g., Berkman, Glass, Brisette, & Seeman, 2000) and loneliness is known to be stressful (e.g., Cacioppo & Patrick, 2009). Research on life crises such as divorce, unemployment, and psychological breakdowns continue to emphasize social ties that could be mobilized for coping (e.g., Jackson, 1998; Perry, 2011; Terhell et al., 2004). It is therefore important to understand whether and how inequalities of midlife carry on, narrow, or expand in later life. Access to a variety of social ties in one’s early 60s, for example, can smooth forthcoming transitions such as retirement, widowhood, and physical decline. In a

recent ethnographic study, Abramson (in press) found that, despite their sharing the common ails of aging, the elderly from higher-class backgrounds were better able to deploy their networks to protect their health than were those of lower standing. The WLS data allow us to assess developments in network access in a large sample as they approach retirement age.

We pose a general question rather than hypotheses: Which sorts of respondents, distinguished by gender and education, exhibit the most change in support networks and in which direction? We postpone discussion of what might explain such effects for later in the paper.

METHOD

Data

The WLS (<http://www.ssc.wisc.edu/wlsresearch/>) began with a random sample of over 10,000 Wisconsin high school graduates in 1957. (Over the years, the study expanded to cover parents, siblings, and spouses, but we focus on the graduates themselves.) The sample is not fully representative of Americans, even those who were teenagers in 1957, but it is “broadly representative of white, non-Hispanic American men and women who . . . completed at least a high school education” in 1957 (Hauser & Roan, 2006, p. 9). This remains an unusually rich sample, especially given the nearly 50-year span it covers. The WLS, using both mail and telephone survey instruments, followed the respondents for decades, attaining a surviving *n* of approximately 8,400 in 1993 and 7,230 in 2004. Analyses of the WLS attrition (our own and by Freese & Branigan, 2012, Table 2) suggest modest changes in the profile of respondents. To the extent that attrition was biased, the 1993–2004 dropouts tended to be less cognitively skilled, educated, and organizationally active than the 1993–2004 continuing set. We address the implications of that small bias in the discussion.

That we have only two points in time here, 1993 and 2004, is a drawback, given problems of statistically distinguishing change from unreliability in two-wave data (Alwin, 2007; Wiley & Wiley, 1970). To explain the results we get in terms of unreliability rather than substantive change, however, would require assuming systematic test–retest errors correlated with gender and education—a much more unlikely account than the one we offer.

Contact

We compare the 1993 and 2004 responses to questions, asked in mail and phone interviews, about how often the interviewees had contact with their siblings, their friends, and other relatives. (The WLS also asked about contact with a child, but because of a procedural error, the 2004 replication ended up losing approximately 12% of the sample.) (a) The sibling question is: “How often have you had contact either in person, letter, or phone with [selected

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Table 1. Descriptive Data 1993 and 2004^a

	1993			2004			
	Mean	SD	n	Mean	SD	n	
3.5	Network variables: contact						3.60
	Sibling: once a week, plus	0.18	0.38	7,249	0.25	0.43	5,572
	Relatives: once a week, plus	0.37	0.48	6,832	0.41	0.49	6,159
	Friends: once a week plus	0.43	0.50	6,836	0.41	0.49	6,262
	Network variables: support						
	A relative who would lend money	0.86	0.34	6,812	0.83	0.38	6,389
3.10	A nonrelative who would lend money	0.52	0.5	6,812	0.36	0.48	6,389
	A relative who would discuss problem	0.77	0.42	6,812	0.79	0.41	6,375
	A nonrelative who would discuss	0.71	0.45	6,812	0.60	0.49	6,375
	A relative who would care for if ill	0.86	0.34	6,812	0.87	0.34	6,398
	A nonrelative who would care for if ill	0.48	0.50	6,812	0.39	0.49	6,398
	Individual traits: time invariant						
3.15	Female	0.53	0.50	8,493	0.53	0.50	8,493
	More than a high school degree	0.38	1.10	8,492	0.38	1.10	8,492
	Number of children	2.73	1.46	7,543	2.73	1.46	7,543
	Individual traits: time variant						
	Primary residence outside Wisconsin	0.31	0.46	8,493	0.32	0.47	7,034
	Married	0.82	0.38	8,491	0.79	0.41	7,347
3.20	Lived alone	0.10	0.30	8,493	0.17	0.37	7,034
	Events						3.75
	Spouse died between 1993 and 2004	0	0	8,493	0.05	0.21	8,493
	Parent died between 1993 and 2004	0	0	8,493	0.21	0.41	8,493
	Retired between 1993 and 2004	0	0	8,493	0.47	0.50	7,034

3.25 *Notes.* SD = standard deviation. The values and *ns* reported in this table refer to the actual completed cases. In analyses below, data can only be used for cases in which the respondent had nonmissing values for dependent variables at both time periods. AQ7 3.80

3.30 sibling] during last 12 months?” (variables named rk059ssf and gk059ssf). Respondents offered numbers that the WLS then re-coded into ranges. We dichotomized the responses at once a week or more. (b) The question for friends reads: “How many times, if at all, during the past 4 weeks have you gotten together with friends? We mean like going out together or visiting in each other’s homes” (mz023rer and iz023rer). We dichotomized the answers into four or more times in the past 4 weeks (at least once a week) and three or fewer times in the past 4 weeks (less than once a week). (c) Finally, the question about relatives, which we divided the same way, asked: “How many times, if at all, during the past 4 weeks have you gotten together socially with relatives?” (mz024rer and iz024rer). We dichotomized the answers to these questions rather than use the whole range because the probes asked respondents to estimate frequencies without benchmarks and such estimates are prone to great unreliability. Treating these variables as true ratio measures would introduce false precision. We do not claim that dichotomizing these variables improves precision, but it helps us to more meaningfully differentiate those who experienced a lot of contact with alters from those who did not. Although we considered treating these variables as collapsed ordinal categories, as provided in WLS coding, we decided against doing so because that would prevent us from estimating hierarchical within-effects models (fixed effects models) in Stata, which we used as supplementary analysis to replicate the findings reported here. 3.55

Support

3.85 The WLS asked respondents about three kinds of support: obtaining a loan of money (\$250), talking to someone about a “personal problem,” and getting help if sick. For each topic, the survey asked respondents whether they could get assistance from children, siblings, parents, other relatives, or nonrelatives. The [Supplementary Materials](#) present all the questions and coding. Examples include: 3.90 “Suppose you had to borrow \$250 for a few weeks because of an emergency. Could you ask for help from relatives other than children, parents, or siblings?” and “Suppose you had a personal problem, and you wanted to talk to someone about it. Could you ask a friend, neighbor or co-worker for help or advice?” Unfortunately, as is common in panel and longitudinal surveys (see, e.g., [Fischer, 2011](#)), the questions were subtly modified between 1993 and 2004 (see [Supplementary Materials](#)). For example, only in 2004 did the WLS ask whether the help could be gotten from grand-children. Nonetheless, the response categories remained the same across waves. Such wording changes may affect the gross time trend, but are unlikely to affect the interaction of t_1-t_2 differences with respondent traits or experiences, as tested here. 3.95 3.100 3.105

3.110 *Table 1* lists the distributions for the dependent variables and key independent variables. We explored other predictor variables, but narrowed the list to the ones that were measured the same way on both waves and were predictive.

We focus not on the net differences in the distributions of the network measures, which may be, even if statistically significant, a result of aging, period effects, or methods effects, but on *differences among respondents* in network changes.

Models

We employ lagged dependent variable models (LDV, with supplementary analyses using random intercept models and fixed effects models; see Halaby, 2004). In these models the endogenous variable is lagged, but the other explanatory variables are dated contemporaneously with the dependent variable. The LDV model estimates the effects of events on changes in the frequency of contact with alters or on social support. Rather than viewing a social network variable at time t as a linear function of the independent variables, the LDV procedure allows us to model the frequency of contact with alters or amount of social support at time t as a function of the same social network measures at $t-1$ as modified by new information (e.g., divorce, retirement). For example, the frequency of contact with a sibling in 2004 is a function of contact with that same sibling in 1993 as modified by the marital status of the respondent in 2004. LDV models tend to be conservative, delivering coefficients that are closer to zero than do other change models because the estimates now have a different interpretation: the estimated effects of the covariates after controlling for the previous response. LDV models test how much of the change in social networks is due to intervening events rather than past circumstances or behavior. The lagged dependent variable dictates the timing of the effect of x (e.g., divorce) on y (e.g., social support). The LDV model is appropriate for our purposes because it tests the theoretical assumption that the effects of x variables (gender, education, marriage, divorce, widowhood, etc.) persist into the future.

AQ8 We estimated the following logistic LDV model,

$$Y_{it} = B_0 + \gamma Y_{i-1,t} + B_2 X_i + B_3 S_{it} + \epsilon_{it}$$

where Y_{it} is a binary social network variable (see discussion of measures above), $Y_{i-1,t}$ is the lag-1 response, X is a set of time invariant variables including sex, educational attainment, and number of children, S is a set of dummies for life transitions variables, and ϵ_{it} is the error term clustered on the respondent ID. Estimates are interpreted as the effects of covariates on the response after controlling for the previous response. This model tests for dynamic change. (We could have estimated change-score models to control for unobserved heterogeneity. Yet we chose to estimate LDV models because they are more efficient and preserve causal order. Change-score models also conceptualize respondents as having no inertia such that change produces change, while LDV models take respondent's residual effect of habit into account. Because we assume that there is some

stickiness in how people interact with alters across the life course, we selected LDV models rather than change-score models. Also, time-invariant variables like gender cannot be included directly in change-score models and our goal is to directly model the effect that gender, education, and life events have on contact with alters and social support.)

RESULTS

We turn first to our findings on contact with siblings, friends, and relatives and then to respondents' perceptions of support. We do not discuss the year effects in these models given the problems of strict comparability discussed earlier. Also, given the large sample size and the multiple comparisons we are making in these results, we focus our discussion on coefficients significant at $p < .01$ or better (although the table indicates those significant at $p < .05$ as well).

Contact

There are some strikingly consistent and strong results in Table 2. First, other things being equal and holding constant whether respondents were in frequent contact with people in their networks in 1993, women sustained or increased their interaction with siblings, relatives, and friends compared to men in 2004. The logit coefficients shown in Table 2 are respectively, .54 ($p < .001$), .43 ($p < .001$), and .42 ($p < .001$), which translate into odds ratios (ORs)—that is, effect sizes—of 1.71, 1.54, and 1.53.

Second, respondents with at least some college widened their advantage in contact with *friends* compared to the high school graduates. The logit coefficients for education are statistically significant for all three categories of ties, but are noticeably stronger for contact with friends (.28, $p < .001$), representing an OR of 1.32. That is, the odds of frequent contact with friends in 2004 were 32% greater for those with some college or more compared to those with only a high school degree, other things, including their 1993 levels of contact, being equal. The results for siblings and relatives indicate that the more educated at least keep or expand their advantages there, as well.

Although secondary to our interests here, we note several other significant effects in Table 2, largely understood as reflections of demographic or practical factors. Those with more children reported an increase in contact with relatives, which likely reflects the marriages and parenting of their grown children, but reported a decline in sibling contact. Those living alone in 2004 saw kin more often. Those widowed between 1993 and 2004 were much likelier to have frequent contact with siblings and friends than those who did not suffer such a loss. (We speculate that they experienced no jump in contact with relatives more generally because they may have lost touch with in-laws.) Widows' increased sociability is consistent with research literature showing that many expand their social lives once they get past the initial mourning stage (e.g., Donnelly & Hinterlong,

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2010; Ertel, Glymour, & Berkman, 2009, p. 77; Ferraro, 1984). Respondents who lost a parent between 1993 and 2004 also lost some contact with relatives. Finally, respondents who retired between 1993 and 2004 reported sustaining or expanding the frequency of seeing friends compared to those who kept working. Connecting this finding with the relevant literature (e.g., Allan & Adams, 1989; Bosse, Aldwin, Levenson, Spiro, & Mroczek, 1993; Mor-Barak, Scharlach, Birba, & Sokolov, 1992; Van Tilburg, 1992, 2003) suggests that the retirees may have lost touch with work associates but, in net, increased contact with friends overall.

Support
 Tables 3–5 report the results for the questions asking respondents if there are people with whom they can talk over a personal problem, whom they could ask for help if sick, and whom they might ask for a loan of money. As explained in the [Supplementary Materials](#), we combined

various versions of the questions to differentiate affirmative answers to questions about help from relatives and help from nonrelatives. Also as explained there, subtle variations in wording from 1993 to 2004 make strict comparisons of central tendencies difficult, but our interest is in comparing the effects of gender and education as respondents age.

In general, we once again see the advantages of women and of the better educated as they aged, although there are variations by the kind of help needed and to whom the respondents would turn. Table 3, on finding someone to talk to, shows, first, an expanding female advantage in reporting emotional support from both relatives ($b = .31, p < .001, OR = 1.37$) and nonrelatives ($b = .44, p < .001, OR = 1.56$). Indeed, given two otherwise comparable people who provided similar reports of social support in 1993, a woman was more than two times as likely to claim support from *someone* in 2004 than a man (data not shown). Second, the educated sustained or widened their advantage in receiving conversational support, but only from nonkin ($b = .47, p < .001, OR = 1.60$).

Table 2. Models of Contact With Network Alters: More Than Once a Week in 2004

	Siblings		Relatives		Friends	
	Coefficient	Odds ratio	Coefficient	Odds ratio	Coefficient	Odds ratio
More than once a week in 1993	2.24***	9.41	.95***	2.58	1.32***	3.76
Female	0.54***	1.71	.43***	1.54	0.42***	1.53
More than a high school degree	0.20*	1.22	.16*	1.17	0.28***	1.32
Number of children (count)	-0.09***	0.91	.11***	1.12	-0.02	0.98
Resides outside Wisconsin in 2004	-0.16	0.85	-.13	0.88	-0.00	1.00
Married in 2004	0.05	1.05	.37*	1.44	0.06	1.06
Lived alone in 2004	0.04	1.04	.49**	1.64	0.32	1.38
Spouse died 1993–2004	0.56***	1.75	-.06	0.94	0.52***	1.69
Parent died 1993–2004	-0.01	0.99	-.24***	0.78	0.07	1.07
Retired 1993–2004	0.13	1.13	.15*	1.17	0.35***	1.42
Constant	-1.90***	0.14	-1.66***	0.19	-1.66***	0.19
<i>n</i>		4,987		4,764		4,843
Wald test		794.8		361.2		544.5
Pseudo- <i>R</i> -squared		0.16		0.06		0.09

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3. Models of Whether Respondent Could Talk With Someone in 2004

	Relative		Nonkin	
	Coefficient	Odds ratio	Coefficient	Odds ratio
Could talk with _____ in 1993	1.39***	4.03	1.37***	3.95
Female	0.31***	1.37	0.44***	1.56
More than a high school degree	0.07	1.07	0.47***	1.60
Number of children (count)	0.12***	1.12	-0.05*	0.95
Resides outside Wisconsin in 2004	-0.30***	0.74	0.35***	1.42
Married in 2004	0.39*	1.48	-0.50**	0.61
Lived Alone in 2004	0.17	1.19	-0.18	0.84
Spouse died 1993–2004	0.27	1.31	0.07	1.07
Parent died 1993–2004	-0.13	0.88	0.11	1.11
Retired 1993–2004	0.19*	1.21	-0.18**	0.83
Constant ^a	-0.41	0.67	-0.40	0.67
<i>n</i>		4,876		4,876
Wald test		387.0		593.4
Pseudo- <i>R</i> -squared		0.08		0.10

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Table 4. Models of Whether Respondent Could Get Help if Sick in 2004

	Relative		Nonkin			
	Coefficient	Odds ratio	Coefficient	Odds ratio		
6.5	Could get help from _____ in 1993	1.44***	4.24	1.35***	3.84	6.60
	Female	0.06	1.06	0.21**	1.23	
	More than a high school degree	0.03	1.03	0.21***	1.24	
	Number of children (count)	0.32***	1.38	-0.08***	0.92	
	Resides outside Wisconsin in 2004	-0.54***	0.58	0.31***	1.36	
	Married in 2004	0.41	1.50	-0.32	0.72	
6.10	Lived alone in 2004	0.06	1.06	-0.10	0.91	6.65
	Spouse died 1993–2004	0.27	1.31	-0.24	0.78	
	Parent died 1993–2004	-0.22*	0.80	0.01	1.00	
	Retired 1993–2004	0.07	1.08	0.00	1.00	
	Constant ^a	-0.15	0.86	-0.90***	0.41	
	<i>n</i>	4,897		4,897		
6.15	Wald test	388.9		572.8		6.70
	Pseudo- <i>R</i> -squared	0.11		0.10		

Table 5. Models of Whether Respondent Could Borrow Money in 2004

	Relative		Nonkin			
	Coefficient	Odds ratio	Coefficient	Odds ratio		
6.20	Could borrow from _____ in 1993	1.38***	3.96	1.55***	4.73	6.75
	Female	0.22*	1.24	-0.40***	0.67	
	More than a high school degree	0.18	1.19	0.27***	1.31	
	Number of children (count)	0.11***	1.11	-0.08***	0.92	
6.25	Resides outside Wisconsin in 2004	-0.06	0.94	0.22**	1.25	6.80
	Married in 2004	0.42*	1.52	-0.45**	0.64	
	Lived alone in 2004	0.11	1.11	-0.22	0.80	
	Spouse died 1993–2004	0.12	1.13	0.02	1.02	
	Parent died 1993–2004	-0.16	0.85	0.02	1.03	
	Retired 1993–2004	0.00	1.00	-0.14*	0.87	
6.30	Constant	-0.18	0.84	-0.72***	0.49	6.85
	<i>n</i>	4,892		4,892		
	Wald test	235.8		691.7		
	Pseudo- <i>R</i> -squared	0.05		0.13		

6.35 Beyond these findings, Table 3 shows patterns that largely reflect the practicalities of turning to kin versus nonkin: Respondents with more children and those who were still married in 2004 increasingly turned to relatives and decreasingly to nonrelatives; respondents who retired reported a decrease in access to nonkin for sensitive conversations; while those who had moved out of state showed the reverse trend, toward greater reliance on nonkin. The last result is consistent with research showing that residential mobility leads, not to the absence of ties, but after a period of transition, to a shift from kin to nonkin ties (e.g., Bloem et al., 2008; Fischer et al., 1977; Magdol & Bessel, 2003; Viry, 2012).

6.40 Table 4 shows that getting practical help if ill is somewhat different, probably because, unlike discussing personal issues, people turn overwhelmingly to relatives for demanding help. Women sustained or expanded their anticipated help compared to men, but only from nonrelatives ($b = .21, p < .001, OR = 1.23$). The same is true for the better educated compared to high school graduates ($b = .21, p < .001, OR = 1.24$).

6.90 The other noteworthy results in Table 4 indicate that more children meant more help as the years passed and out-of-state movers relied less and less on relatives and more on nonrelatives.

6.95 Table 5 displays the results for whether the respondent could ask someone for a loan. This sort of question has the complication that many people would turn first, and perhaps only, to institutions for money (Fischer, 2011, p. 65). Here we find, for the first and only time in our results, a growing disadvantage for women—a 33% drop relative to men in the chances that they could expect a nonrelative to help ($b = -.40, p < .001, OR = .67$). (It appears that women widened their advantage in family sources of money, a 24% gain, although the effect is significant at only $p < .05$). The better educated widened their advantage in getting loans from nonrelatives ($b = .27, p < .001, OR = 1.31$). Otherwise, the results for children, marriage, and residence show a now familiar pattern of increasing reliance on kin or nonkin depending on practical circumstances.

6.110 Stepping back from the details, the data on how WLS respondents' expectations for social support changed

7.5 between 1993 and 2004 show that, other things being equal, including earlier expectations of support, women either better sustained or even extended the support they could expect compared to men. The gender gap widened in women’s favor. The education gap similarly widened, but only for support expected from nonrelatives. These results are robust; they emerged in tests we conducted using other kinds of panel analyses that we do not report here.

7.10 **DISCUSSION**

7.15 The WLS sample reveals that between their 50s and 60s women’s advantage over men and college graduates’ advantage over high school graduates in frequency of contact with important associates expanded. The same was roughly true for WLS respondents’ expectations of social support, although here the divergences depended in part on the nature of the support: Women gained relative to men in “talk” support and in help from nonkin if ill, but lost ground in financial support. The college-educated gained ground in all sorts of support from nonkin.

7.20 Before turning to substantive explanations for our findings, we address again the issue of attrition. As noted earlier, less cognitively skilled, less educated, and less organizationally active respondents were most likely to drop out, whether by disappearance or refusal, between 1993 and 2004 (Freese & Branigan, 2012). We can assume that these respondents tended to have smaller networks. This would, other things being equal, weaken the observed 2004 association between education and social ties and thus work against our findings. (Gender was not associated with attrition.)

7.25 Taking the widening of gender and educational differences in social ties as a robust result, how would we explain them? A simple explanation is a version of the Matthew Effect: People who have accumulated ties and practiced social skills over the first 30 years of adulthood are better positioned to sustain or expand ties later. (And, as a reviewer suggested, given homophily, the associates of the educated are also likelier to survive and be socially active, see also Feld et al., 2007.) Dynamics particular to the gender and education may also come into play in later life. One account of gender differences (Fischer & Oliner, 1983; also, Moore, 1990) is that, in earlier stages of adult life, particularly for this cohort, men and women typically faced constraints and opportunities—employment, marriage, parenting—that structured their social ties in ways that typically advantaged men. In later life, as these formal roles faded or become less determinative, women’s generally greater sociability (whether rooted in biology, childhood, or culture) and the ties they had built outside of work become increasingly determinative and, therefore, gender differences widened.

7.50 Educational differences in nonkin ties and support can be similarly parsed into structural and dispositional sources. 7.55 Attending college means more opportunities to meet

people outside the family. But it is also associated with the resources and social skills (either through selection or through training effects) that empower individuals to form and sustain strong, supportive relationships with nonkin. Presumably, the farther people are from the school experience, the more important the social skills are, especially in the context of changing circumstances. This study reinforces the importance of the sociability that is associated with extended education.

7.60 Social scientists often ask whether the inequalities that arise early in life from personality, childhood socialization, and youth experiences extend, diminish, or amplify through the life course (Abramson, in press). Here, we see evidence suggesting that the social connections and social skills that women and the educated develop by midlife allow them to sustain or even extend their social lives as they approach their senior years in ways that are harder for men and the less educated to do. Given what we now understand as the net advantages of social support, these findings suggest another way that health and well-being disparities accumulate into older age.

7.65 Our findings confirm those few studies, reviewed above, that have reported aging by gender and aging by education effects. The major contradiction is with Shaw et al. (2007) who report some gender convergence and virtually no interaction effects between education and aging. There may be various ways of reconciling the WLS data with those results, in measures and methods, but a perhaps promising one might be the samples. Shaw et al. followed respondents from age 65 and older for 10 years; the WLS data cover aging from roughly 53 to 64. One speculation is that network inequalities do widen through middle age, but then narrow in old age. Examining that possibility will require samples that span much wider age ranges than are available in either study.

SUPPLEMENTARY MATERIAL

Supplementary material can be found at: <http://psychogerontology.oxfordjournals.org/>

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