Continuity and Change in Relationships with Neighbors: Implications for Psychological Well-being in Middle and Later Life

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Objectives. There is growing enthusiasm for community initiatives that aim to strengthen neighbor relationships to promote well-being in later life. Nevertheless, few studies have examined the extent to which relationships with neighbors are associated with better psychological well-being among midlife and older adults.

Methods. We used data from 1,071 noninstitutionalized, English-speaking adults, aged 40–70 years, who participated in both waves of the 1995–2005 National Survey of Midlife Development in the United States. Lagged dependent regression models were estimated to examine associations between changes in two dimensions of neighbor relationships (contact and perceived support) and psychological well-being.

Results. Few associations were found between relationships with neighbors and negative or positive affect. In contrast, having continuously low levels of contact with neighbors, or losing contact with neighbors over the 10-year study period, was associated with declining levels of eudaimonic well-being. Associations between contact and this aspect of well-being were explained, in part, by less perceived support from neighbors.

Discussion. Results suggest that continuity and change in relationships with neighbors is especially important for more developmental aspects of psychological well-being. Implications for future research on the meaning of neighbor relationships and aging in community are discussed.

Key Words: Aging in community—Community—Social networks—Social relationships—Well-being.

ECOGNIZING the importance of maintaining social Rrelationships in middle and later life, a growing number of aging services models have developed within the past several decades, seeking to strengthen social relationships among residents within a local area to help older adults remain in their own homes and communities. Examples of such models include Villages, Naturally Occurring Retirement Community (NORC) Supportive Service Programs, and Supportive Communities (Berg-Warman & Brodsky, 2006; Greenfield, Scharlach, Lehning, & Davitt, 2012). Despite the emergence of these place-based initiatives, there is still little research on the implications of neighbor relationships for psychological well-being. Research has continued to mainly focus on the role of families, or social relationships in general, in the lives of older adults.

To address the lack of research in this area, we used data from the 1995–2005 National Survey of Midlife Development in the United States (MIDUS) to examine associations between continuity and change in neighbor relationships and psychological well-being among adults in middle and later life. Guided by a multidimensional framework on social relationships, as well as on psychological well-being, we explored whether either aspect of neighbor relationships (frequency of contact and perceived support) is especially important for particular dimensions of wellbeing (negative affect, positive affect, and eudaimonic well-being).

Meaning of Relationships With Neighbors

Classic theorizing on the significance of neighbor relationships traditionally has emphasized their instrumental value. According to the theory of shared functions (Litwak and Szelenyi, 1969), neighbors are best suited for tasks that require proximity, immediacy, and menial instrumental tasks. Cantor (1979) also posited that neighbors are "third in line" behind family and friends to provide assistance to older adults. Recent qualitative studies have further highlighted the significance of helping among neighbors, with particular attention to anticipated support. In-depth interviews with older adults have found that neighbors are perceived as being especially important in case of an emergency and that being able to rely on neighbors can reduce concerns regarding personal safety (Lau, Machizawa, & Doi, 2012; Thomése, Tilburg, and Knipscheer, 2003; Walker & Hiller, 2007). Studies of caregiving among neighbors suggest that, most typically, neighbors assist each other with instrumental and nonintimate tasks, such as bill paying

© The Author 2014. Published by Oxford University Press on behalf of The Gerontological Society of America. All rights reserved. For permissions, please e-mail: journals.permissions@oup.com. Received December 5, 2012; Accepted June 2, 2014 Decision Editor: Merril Silverstein, PhD and transportation, although in some cases, they also are involved in personal care (Barker, 2002; Nocon & Pearson, 2000).

More recently, scholars have described the role of neighbors beyond their instrumental value. Some studies have indicated ways in which neighbors socialize with each other without exchanging any instrumental support. For example, observational and interview studies of older adults within their community indicate that neighbors' spontaneous interactions with each other in public spaces—such as at restaurants—provide a sense of community, structure and purpose, friendship, humor, and an outlet for personal expression (Cheang, 2002; Gardner, 2011). Studies on exchanged support among neighbors suggest that although the degree and complexity of help exchanged varies, neighbors who provide each other support typically are engaged in some degree of social activity with each other, such as going out for meals (Barker, 2002).

Neighbor Relationships and Psychological Well-being

Despite a preponderance of population research demonstrating that positive social relationships are beneficial for individuals' mental and physical health (e.g., Antonucci, Fuhrer, & Dartigues, 1997; Litwin & Shiovitz-Ezra, 2006; Uchino, 2004), quantitative studies that examine the contributions of relationships with neighbors for psychological well-being have been few in number. Many of these studies have been conducted outside of the United States (e.g., Farrell, Aubry, & Coulombe, 2004; Morita, Takano, Nakamura, Kizuki, & Seino, 2010; Pinquart, 2003) and have utilized regional or targeted samples. For example, a study of widowers over the age of 60 years found that more frequent social contact with friends and neighbors was associated with more positive affect and higher well-being, whereas contact with children and siblings was not (Balaswamy & Richardson, 2001). Taylor, Chatters, Hardison, and Riley (2001) found that when African Americans had higher frequency of contact with neighbors, their life satisfaction and happiness were greater (Taylor et al., 2001). Using population data from adults aged 70 and older in the Netherlands, Cramm, van Dijk, and Nieboer (2013) found that exchanging favors with neighbors and greetings among neighbors were associated with higher levels of well-being.

Although population studies have examined factors that predict the quality of relationships among neighbors (e.g., Cornwell, Laumann, & Schumm, 2008; Perren, Arber, & Davidson, 2004), few studies have used U.S. national data to examine associations between relationships with neighbors specifically and psychological well-being. For example, a study by Mair and Thivierge-Rikard (2010) used data from the 1994 Americans' Changing Lives study and found that higher scores on a measure that collectively assessed frequency of visiting with friends, neighbors, and relatives were associated with higher levels of psychological well-being among older adults. To the best of our knowledge, Shaw (2005) conducted the only study that used U.S. national data to examine associations between neighbor relationships specifically and one aspect of psychological well-being. Using cross-sectional data from adults in the 1995 National Survey of MIDUS and controlling for a variety of sociodemographic factors, this study found that greater anticipated support from neighbors was associated with a greater sense of control.

The Current Study

This study seeks to advance understanding of relationships with neighbors and psychological well-being in three primary ways. First, we utilized data from a longitudinal U.S. sample. Having a large and heterogeneous sample allows for statistical control of a variety of factors that might render associations between neighbor relationships and psychological well-being as spurious. Such factors include adults' quality of relationships with family and friends (Ensher & Murphy, 1997; Umberson et al., 1996), functional health (Shaw, 2005) and sociodemographic characteristics (Mroczek & Kolarz, 1998; Ryff & Keyes, 1995). Moreover, longitudinal data allow for drawing upon a primary insight from life course and life span perspectives: that social relationships potentially change over time (Antonucci, Fiori, Birditt, & Jackey, 2010). Unlike previous quantitative studies, which largely have examined neighbor relationships at a single point in time, our study considers that over a 10-year period, people's relationships with neighbors might change.

Also, this study examined several theoretically derived dimensions of psychological well-being. Guided by the idea that positive states of well-being are not synonymous with the absence of negative states (Seligman & Csikszentmihalyi, 2000), we examined both positive and negative affect. Negative affect involves experiences of distressing moods and emotions-such as feeling sadwhereas positive affect involves experiences of pleasant moods and emotions-such as feeling cheerful. Moreover, a growing body of research suggests that experiences of psychological well-being are not limited to affective states, or feeling good, but also include perceptions of how one is engaging with their psychosocial world, or doing well (Jayawickreme, Forgeard, & Seligman, 2012; Ryff, 1989). Following this theorizing, we examined eudaimonic wellbeing (Ryan & Deci, 2001), which addresses how adults view themselves with respect to important adult developmental issues, including having a sense of purpose, experiencing continued feelings of growth, and feeling mastery over one's own environment (Ryff & Keyes, 1995). Taken together, eudaimonic well-being addresses the extent to which adults are "... fully functioning or optimally developed" (Ryff, 2014, p. 11) and support the idea-originating from Aristotle's classic theorizing-that well-being is not simply the presence of pleasure and the absence of distress (Ryff & Singer, 2008). In other words, while positive and negative affect refer to people's feelings, eudaimonic well-being indicates their psychosocial functioning (Keyes & Annas, 2009). Eudaimonic well-being is consistent with an "aging in community" framework, which emphasizes psychosocial qualities that indicate aging well in one's own community, such as opportunities to engage in new activities and interests, contribute to one's community, and leverage the environment to meet one's needs (Scharlach & Lehning, 2013; Thomas and Blanchard, 2009).

In addition to considering multiple dimensions of psychological well-being, we also examined two dimensions of neighbor relationships: contact and support. Whereas contact is a structural aspect of social relationships, perceived support reflects, in part, the quality of interactions among relational actors (House, Umberson, and Landis, 1988). Given prior theorizing on the importance of relationships with neighbors both in terms of their instrumental utility, as well as their broader sociality, we expect that both dimensions of neighbor relationships will be associated with better psychological well-being.

In summary, we posited the following hypotheses (H) and research question (RQ):

- H1: Adults who experience continuously high levels of contact with neighbors and adults whose contact with neighbors increases over time will report better psychological well-being than adults who experience continuously low contact with their neighbors or who experience a loss in contact with neighbors.
- H2: Adults who experience continuously high levels of perceived support from neighbors and adults whose perceived support from neighbors increases over time will report better psychological well-being than adults who experience continuously low-perceived support from their neighbors or who experience a loss in perceived support from neighbors.
- RQ: Are associations between neighbor relationships and psychological well-being specific to one particular aspect of relationships (contact or perceived support)?

Метнор

A secondary data analysis was conducted with two-wave panel data from the main national sample of the 1995–2005 MIDUS. The sample was obtained initially in 1995–1996 (T1) through random digit dial sampling of noninstitutionalized, English-speaking adults, aged 25–74, living in the United States. A follow-up study was conducted in 2004– 2006 (T2). Participation at each wave involved an initial 30-min telephone interview, followed by a self-administered, mail-back questionnaire.

The analytic sample for this study consisted of adults aged between 40 and 70 years at T1 who also participated in the study at T2. We used data from adults of at least 40 years of age to focus this study on people in middle and later life.

At T1, there were 1,848 respondents who met our initial analytic sample criteria (i.e., aged between 40 and 70 years and completed both the self-administered questionnaire and telephone interviews). By T2, 194 of these respondents were identified as deceased. This yielded 1,654 potential respondents at T2, of which 1,118 participated (i.e., completed both a telephone interview and a self-administered questionnaire), making the longitudinal response rate 67.6%. We found that participants who reported more negative affect, more functional impairment, and who were black at T1 were more likely to be nonrespondents at T2. Of the 1,118 participants in our analytic sample, 4.2% (47 respondents) did not have complete data across all of the variables. Given this small amount of item nonresponse, as well as no evidence for systematic patterns of item missingness, we used listwise deletion to handle missing data on account of item nonresponse. Tables 1 and 2 display descriptive statistics for the 1,071 respondents included in the analytic sample.

Measures

Dependent variables.—At T1 and T2, negative and positive affect were measured through a series of six items each (Mroczek & Kolarz, 1998), which asked respondents how often during the past 30 days they felt various moods and emotions. Items for negative affect included (a) so sad nothing could cheer them up, (b) nervous, (c) restless or fidgety, (d) hopeless, (e) that everything was an effort, and (f) worthless. Items for positive affect included (a) cheerful, (b) in good spirits, (c) extremely happy, (d) calm and peaceful, (e) satisfied, and (f) full of life. These scales were developed for use in the MIDUS based on several prior widely used measures, and the six items for each were selected based on pretests for the MIDUS survey (see Carr, Friedman, & Jaffe, 2007, as well as Mroczek & Kolarz, for

Table 1. Descriptive Statistics for all Continuous Variables

	Mean (SD)	Range
Well-being at T1		
Eudaimonic well-being	5.56 (0.78)	1-7
Positive affect	3.38 (0.73)	1-5
Negative affect	1.51 (0.59)	1-5
Well-being at T2		
Psychological well-being	5.60 (0.81)	1–7
Positive affect	3.45 (0.71)	1-5
Negative affect	1.48 (0.55)	1-5
Contact and support at T1		
Contact with family and friends	9.29 (1.96)	2-12
Perceived support from family and friends	3.33 (0.54)	1-4
Other at T1		
Functional limitations	1.58 (0.73)	1-4
Age	52.38 (8.01)	40-69

Notes. T1 = Time 1 (1995); T2 = Time 2 (2005). Data are from 1,071 respondents who were aged between 40 and 70 years at T1 and who participated in two waves of data collection for the 1995–2005 National Survey of Midlife in the United States.

 Table 2. Descriptive Statistics for all Categorical Variables

1	6	
	Unweighted N(1,071)	%
Gender		
Male	493	46.0
Female	578	54.0
Education		
Less than high school	78	7.3
High school graduate	309	28.8
Some college	305	28.5
College graduate and higher	379	35.4
Race/ethnicity		
Non-Hispanic white	961	89.7
Non-Hispanic black	43	4.0
Latino/a or Hispanic	18	1.7
Other	49	4.6
Years lived in neighborhood		
<10 years	721	67.3
≥10 years	350	32.7
Contact with neighbors T1-T2		
Continuously high contact	184	17.2
Continuously low contact	170	15.9
Gain in contact	251	23.4
Loss in contact	466	43.5
Support from neighbors T1-T2		
Continuously high support	144	13.4
Continuously low support	163	15.2
Gain in support	230	21.5
Loss in support	534	49.9

Notes. Data are from 1,071 respondents who were aged between 40 and 70 years at T1 and who participated in two waves of data collection for the 1995–2005 National Survey of Midlife in the United States. Median splits were used to create the multicategorical variables regarding contact and perceived support with neighbors from T1 (1995) to T2 (2005). All other measures were taken from T1 except for race/ethnicity and length of residence, which were used from T2.

further discussion). Respondents answered each question on a 5-point scale (1 = all the time; 5 = none of the time). Scores on all items were averaged together and coded such that higher scores indicated more negative or positive affect. Cronbach's alpha at T2 was .84 for negative affect and .90 for positive affect.

The measure of eudaimonic well-being was a composite of participants' ratings of their psychosocial functioning across six interrelated domains (Ryff & Keyes, 1995), which has been used within other studies of social factors and psychological well-being (e.g., Bookwala & Boyar, 2008; Human, Biesanz, Miller, Chen, Lachman, & Seeman, 2013; Son & Wilson, 2012). Each domain was assessed with three items, including purpose in life ("I have a sense of direction and purpose in life"), environmental mastery ("In general, I feel I am in charge of the situation in which I live"), personal growth ("For me, life has been a continuous process of learning, changing, and growth"), autonomy ("In general, I feel I am in charge of the situation in which I live"), self-acceptance ("I like most parts of my personality"), and positive relations with others ("People would describe me as a giving person, willing to share my time with others"). Respondents answered each question using

a 7-point scale (1 = agree strongly; 7 = disagree strongly), and scores were averaged together and coded such that higher scores indicated more eudaimonic well-being. The Cronbach's alpha for the 18-item scale at T2 was .83.

Relationships with neighbors.—To measure relationships with neighbors, four items were used from the self-administered questionnaire at T1 to create two variables: contact and perceived support. Contact with neighbors was created from two questions: "How often do you have any contact, even something as simple as saying 'hello', with any of your neighbors?" and "How often do you have a real conversation or get together socially with any of your neighbors?". Responses were provided on a 6-point scale $(1 = almost \ every \ day; 6 = never \ or \ hardly \ ever$). Scores for these two questions were reverse-recoded and averaged together such that higher scores indicated more frequent contact with neighbors.

Perceived support from neighbors was measured based on responses to two items from a 4-item scale inquiring about the participant's personal beliefs on neighborhood at T1 (Keyes, 1998): "I could call on a neighbor for help if I needed it" and "People in my neighborhood trust each other." Respondents answered both questions on a 4-point scale (1 = a lot; 4 = not at all). Scores for these items were reverse coded and summed such that higher scores indicated higher levels of perceived support from neighbors.

To create variables indicating continuity and change in relationships with neighbors, we conducted a median split on the variables at T1, whereby participants were assigned to either the top or the bottom 50th percentile on contact and support at T1, as well as at T2. For contact, the median at both T1 and T2 was 4.0. For support, the median was 3.5. Using these dichotomous scores at T1 and T2, participants were then coded into one of four mutually exclusive categories for contact: continuously high contact (in the top 50th percentile at both T1 and T2), continuously low contact (below the 50th percentile at both T1 and T2), gained contact (in the bottom at T1 and in the top at T2), and lost contact (in the top at T1 and in the bottom at T2). The same process was used to create a four-category variable for perceived support.

Covariates.—Measures of covariates included gender (female or male), education (less than high school, high school graduate, some college, or college graduate and higher), age, and race/ethnicity (non-Hispanic white, non-Hispanic black, Hispanic, or other race/ethnicity). We also included a measure of functional limitations at T1, which was assessed with seven items referring to particular tasks, such as "lifting or carrying groceries" and "walking several blocks." Participants answered the extent to which their health limited them on each item on a 4-point scale, and scores were averaged together such that higher scores indicated greater functional limitations. Furthermore,

we included a measure at T2 that indicated whether participants reported living in their current residence for less than 10 years, which served as a proxy for whether or not respondents had moved between T1 and T2. (Because of the secondary nature of this analysis, we did not have a direct measure of whether participants relocated between waves.)

Finally, we included a measure of contact with family and friends, as well as a measure of perceived support from family and friends at T1. Scores on contact were calculated as the average of participants' responses to two questions regarding how often participants were in contact "including visits, phone call, letters, or electronic mail messages" with (a) any members of their family and (b) any of their friends (1 = never or hardly ever; 6 = several times a day). Scores on perceived support were calculated as the average of participants' responses to four questions regarding support with family, as well as four parallel questions regarding support with friends, such as "Not including your spouse or partners, how much do members of your family really care about you?" (Schuster, Kessler, & Aseltine, 1990; Whalen & Lachman, 2000). Responses were given on a 4-point scale, averaged together, and coded such that higher scores indicated more support from family and friends (1 = not atall; 4 = a lot).

Data Analytic Strategy

We estimated ordinary least squares multivariate regression models. All models included the covariates and the respective dependent variable at T1 (negative affect, positive affect, or eudaimonic well-being) as independent variables. We standardized scores on psychological well-being for ease of interpretability across the multiple dimensions. The multicategorical variables indicating relationships with neighbors were entered as a block of three dichotomous variables-continuously low, loss, and gain-with continuously high as the reference group. The coefficients in the models, therefore, indicate whether people in each of the three former relationship categories differ in psychological well-being from people who reported continuously high contact or perceived support with neighbors. We first present models for contact with neighbors, followed by perceived support from neighbors, and then a final model with both contact and perceived support when prior models indicated statistically significant associations for both contact and perceived support.

As an analytic check, we tested all possible interactions between the covariates and the focal independent variables regarding relationships with neighbors. Across the 108 interaction terms examined, only five were statistically significant (p < .05) and in no readily interpretable pattern. Therefore, we present results for the analytic sample as a whole.

Given this study's focus on multiple dimensions of psychological well-being, we examined the correlations among the dependent variables. Correlations among the dependent variables at T2 were between -.589 and .547, demonstrating that the three dependent variables were related to each other as aspects of psychological well-being, yet somewhat distinct in measuring different dimensions of psychological well-being.

Furthermore, we examined correlations among the items comprising the measure of contact with neighbors and perceived support from neighbors. The correlation between the two items regarding contact was .58, and the correlation between the two items regarding perceived support was .47. Given the relatively small size of this correlation, we estimated preliminary analyses to check whether multivariate results differed when perceived support from neighbors was measured by either one of the two items. No differences were found.

Finally, given the multidimensional nature of the measure of eudaimonic well-being, as well as controversy over how related-yet-distinct the component subdimensions are (see Abbott et al., 2006, for further discussion), we estimated models for each of the six subcomponents independently (i.e., autonomy, purpose in life, personal growth, self-acceptance, environmental mastery, and positive relations with others). Results indicated that the final pattern of results, which used the composite measure, were overall consistent across each individual subdimension.

RESULTS

H1: Contact with Neighbors and Psychological Well-being

Models 1a, 2a, and 3a in Table 3 present results from multivariate regression models that examined associations between frequency of contact with neighbors and changes in psychological well-being over the 10-year study period. No evidence of associations was found for negative affect or positive affect. In comparison with participants who reported continuously high contact with neighbors, negative affect did not differ at a statistically significant level among participants who reported (a) continuously low contact (b = .010, n.s.), (b) loss in contact (b = .068, n.s.), and (c) gain in contact (b = -.048, n.s.). Similarly, positive affect did not differ at a statistically significant level among participants who reported (a) continuously low contact (b = -.091, n.s.), (b) loss in contact (b = -.084, n.s.), and (c) gain in contact (b = .022, n.s.) in comparison with participants who reported continuously high contact with neighbors.

Associations were found, however, with respect to eudaimonic well-being. In comparison to participants who reported continuously high levels of contact with neighbors, participants who reported continuously low levels of contact reported less eudaimonic well-being (b = -.178, p < .01). Moreover, participants who reported declining levels of contact with neighbors also reported poorer eudaimonic well-being (b = -.151, p < .05). No difference in eudaimonic well-being was found between participants with continuously high levels of contact with neighbors and participants who gained in contact with neighbors (b = -.079, n.s.).

at	Model 1a; b (SE)		Positive affect 12	allect 1 2	Euda	Eudaimonic well-being 12	
Ssychological well-being at T1 Negative affect Positive affect Budaimonic well-being		Model 1b; $b(SE)$	Model 2a; b (SE)	Model 2b; b (SE)	Model 3a; b (SE)	Model 3b; <i>b</i> (<i>SE</i>)	Model 3c; b (SE)
Negative affect Positive affect 3udaimonic well-being							
Positive affect Eudaimonic well-being	0.528^{***}	0.523 * * *	Ι	Ι	Ι	Ι	I
Positive affect Budaimonic well-being	(0.029)	(0.029)					
Judaimonic well-being		Ι	0.487***	0.480^{***}	Ι	Ι	
Eudaimonic well-being			(0.029)	(0.028)			
:				I	0.521^{***}	0.512^{***}	0.514^{***}
					(0.028)	(0.028)	(0.028)
Contact with neighbors T1							
Continuously high contact ^a		I	Ι	I	I	I	I
Continuously low contact	0.010	I	-0.091	I	-0.178 **	I	-0.102
	(0.064)		(0.070)		(0.064)		(0.067)
Gain in contact	-0.048		0.022		-0.079	I	-0.050
	(0.070)		(0.077)		(0.070)		(0.071)
Loss in contact	0.068		-0.084		-0.151*		-0.105
	(0.068		(0.074)		(0.069)		(0.069)
Support from neighbors T1							
Continuously high support ^a				I	Ι	I	I
Continuously low support	Ι	0.092	I	-0.279^{***}	I	-0.295^{***}	-0.262^{***}
		(0.067)		(0.072)		(0.067)	(0.070)
Gain in support		-0.028		0.013	I	-0.094	-0.079
		(0.071)		(0.077)		(0.071)	(0.072)
Loss in support		0.041	Ι	-0.023	Ι	-0.202^{**}	-0.177^{**}
		(0.073)		(0.079)		(0.073)	(0.074)
Relationships with family and friends T1							
Contact	-0.009	-0.008	0.014	0.018	0.017	0.028	0.019
	(0.026)	(0.025)	(0.028)	(0.027)	(0.026)	(0.025)	(0.026)
Perceived support	-0.004	0.007	0.092^{**}	0.063*	0.106^{***}	0.079 **	0.078 **
	(0.027)	(0.028)	(0.030)	(0.030)	(0.029)	(0.029)	(0.029)
Covariates							
Gender							
Male ^c		Ι	Ι	Ι	Ι	Ι	Ι
Female	0.020	0.024	0.004	-0.007	0.041	0.019	0.031
	(0.051)	(0.050)	(0.055)	(0.054)	(0.051)	(0.050)	(0.050)
Age	-0.137^{**}	-0.139^{***}	0.164^{***}	0.162^{***}	-0.022	-0.016	-0.028
	(0.041)	(0.041)	(0.045)	(0.044)	(0.041)	(0.040)	(0.041)

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Table 3 (continued)	Decitive offect TO
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	Negative	Negative affect T2	Positive	Positive affect T2	Euda	Eudaimonic well-being T2	
	Model 1a; b (SE)	Model 1b; b (SE)	Model 2a; b (SE)	Model 2b; $b(SE)$	Model 3a; b (SE)	Model 3b; <i>b</i> (<i>SE</i>)	Model 3c; <i>b</i> (<i>SE</i>)
Education							
High school graduate ^a	I	Ι					
Less than high school	0.059	0.054	0.176	0.177	-0.245**	-0.230*	-0.234*
	(0.09)	(0.099)	(0.108)	(0.107)	(660.0)	(0.09)	(0.00)
Some college	-0.040	-0.045	0.084	0.102	-0.061	-0.029	-0.037
	(0.062)	(0.062)	(0.068)	(0.068)	(0.063)	(0.062)	(0.063)
College graduate and higher	-0.129*	-0.130*	0.151^{*}	0.155^{**}	0.113	0.122*	0.117
	(0.060)	(0.060)	(0.065)	(0.065)	(0.061)	(0.060)	(0.061)
Race/ethnicity							
White ^a	Ι		Ι	Ι	Ι	Ι	Ι
Blacks	0.068	0.051	0.142	0.183	-0.093	-0.053	-0.068
	(0.121)	(0.121)	(0.132)	(0.131)	(0.121)	(0.120)	(0.121)
Latinos	0.057	0.052	0.177	0.185	0.241	0.250	0.251
	(0.183)	(0.183)	(0.200)	(0.198)	(0.184)	(0.183)	(0.183)
Other	0.070	0.070	0.091	0.099	-0.053	-0.029	-0.036
	(0.113)	(0.113)	(0.123)	(0.122)	(0.113)	(0.113)	(0.113)
Lived in residence for <10 years	-0.055	0.043	0.050	0.059	-0.022	-0.009	-0.00
	(0.051)	(0.029)	(0.056)	(0.055)	(0.051)	(0.051)	(0.051)
Functional limitations	0.045	-0.058	-0.048	-0.039	-0.064^{*}	-0.058*	-0.057*
	(0.029)	(0.051)	(0.031)	(0.031)	(0.028)	(0.028)	(0.028)
Constant	0.072	0.060	-0.106	-0.081	0.130*	0.146^{*}	0.186^{**}
	(0.065)	(0.063)	(0.071)	(0.068)	(0.065)	(0.062)	(0.067)
R^2	0.327	0.327	0.313	0.322	0.407	0.414	0.416
Valid <i>n</i>	1071	1071	1071	1071	1071	1071	1164

en from 11 (1995) except for race/etimicity an "Reference categories $*p \le .05; **p \le .01; ***p \le .001$ (two tailed). taken

In summary, these results provide partial support for H1 regarding associations between contact with neighbors and psychological well-being. Participants who reported continuously low levels of contact, in addition to participants who experienced losses in contact, were at greater risk for poorer psychological well-being, specifically with respect to eudaimonic well-being.

H2: Perceived Support With Neighbors and Psychological Well-being

Models 1b, 2b, and 3b in Table 3 present results from multivariate regression models that examine associations between perceived support from neighbors and changes in the three dimensions of psychological well-being. Similar to the results for H1 regarding contact, no evidence of associations was found for negative affect. In comparison to participants who reported continuously high contact with neighbors, negative affect did not differ at a statistically significant level among participants who reported (a) continuously low support (b = .092, n.s.), (b) loss in support (b = .041, n.s.), and (c) gain in support (b = -.028, n.s.).

For positive affect, only one statistically significant association was found. Participants who reported continuously low levels of perceived support from neighbors reported less positive affect over time (b = -.0279, p < .001.) in comparison to participants who reported continuously high support. Nevertheless, positive affect did not differ at a statistically significant level among participants who reported (a) loss of perceived support (b = -.023, n.s.) or (b) gain in perceived support (b = .013, n.s.).

Associations also were found with respect to eudaimonic well-being. In comparison to participants who reported continuously high levels of perceived support from neighbors, participants who reported continuously low levels of support reported less eudaimonic well-being (b = -.295, p < .001). Moreover, participants who reported declining levels of perceived support from neighbors also reported poorer eudaimonic well-being (b = -.202, p < .01). No difference in eudaimonic well-being was found between participants with continuously high levels of perceived support from neighbors and participants who gained in perceived support from neighbors (b = -.094, n.s.).

In summary, these results provide partial support for H2 regarding associations between perceived support from neighbors and psychological well-being. Participants who reported continuously low levels of perceived support were at greater risk for less positive affect and less eudaimonic well-being. Participants who reported loss in perceived support were especially at risk for having lower levels of eudaimonic well-being.

RQ: Associations With Respect to Specific Aspects of Relationships With Neighbors

To examine whether contact and perceived support from neighbors are independent predictors of eudaimonic

well-being, we estimated a final regression model (Table 3, Model 3c) in which the multicategorical variables for contact and support were both included as independent variables. In this model, participants who reported continuously low perceived support, as well as those who reported loss in perceived support, demonstrated poorer eudaimonic wellbeing (b = -.262, p < .001, for continuously low; b = -.177, p < .01, for loss). However, associations between continuously low levels of contact, as well as loss in contact, and eudaimonic well-being were reduced in size and no longer statistically significant (b = -.102, *n.s.*, for continuously low; b = -.105, *n.s.*, for loss). In summary, these results suggest that perceived support from neighbors is a more robust predictor of eudaimonic well-being than contact with neighbors.

DISCUSSION

This study used U.S. population data to examine linkages between continuity and change in relationships with neighbors over a 10-year period and psychological wellbeing among midlife and older adults. Guided by a multidimensional perspective on social relationships (House, Umberson, & Landis, 1988), as well as on psychological well-being (Ryff, 1989; Seligman & Csikszentmihalyi, 2000), our study examined relationships with neighbors in terms of contact and perceived support, as well as psychological well-being in terms of negative affect, positive affect, and eudaimonic well-being. Overall, results indicated the importance of high levels of perceived support from neighbors for maintaining optimal levels of eudaimonic well-being.

More specifically, evidence was found that participants who had continuously low levels of contact or perceived support from neighbors over the 10-year study period, as well as those who lost contact or perceived support, were at risk for poorer eudaimonic well-being over time. Participants who experienced gains in relationships with neighbors had comparable levels of eudaimonic well-being in comparison with those who maintained continuously high levels of contact or perceived support with neighbors. This pattern of results emerged even after accounting for a variety of factors that could render such associations as spurious, such as gender, age, and contact and support from family and friends. Although prior theorizing on neighbors has suggested this relationship to be a more peripheral social tie for adults in the United States relative to family and friends (e.g., Cantor, 1979), qualitative studies have indicated that neighbors can serve as a central source of support and meaning in adults' lives (Gardner, 2011) and that people experience a sense of loss when such social network members move away, die, or become unavailable for other reasons (Rook, 2009; Walker & Hiller, 2007). Findings from this longitudinal, population-based study provide support for these ideas.

Accordingly, our study contributes additional empirical support for the importance of formal community initiatives that aim to help people develop and maintain strong relationships with neighbors. Results add nuance to this direction by suggesting that such initiatives are especially important for promoting the more positive aspects of adults' psychological well-being. Although no associations between relationships with neighbors and psychological well-being were found for negative affect, one association was found for positive affect, and several associations were found with respect to eudaimonic well-being. This pattern of findings suggests that supportive neighbor relationships are especially important for the positive and more developmental and functional aspects of mental health in middle and later life.

Overall, findings support an "aging in community" framework (Thomas & Blanchard, 2009), which emphasizes developing supportive relationships among community members not only for the sake of mitigating potential problems in later life but also for promoting optimal functioning and quality of life. In other words, results indicate that although strong ties with neighbors might not ward off feelings of depression, they can yield psychological gains by helping people to feel fully engaged in adult developmental tasks, such as maintaining a sense of purpose and finding opportunities for continued personal growth.

The domain specificity of associations between relationships with neighbors and psychological well-being can help to provide insight into somewhat competing theories on the consequences of social network changes in later life. On the one hand, classic social scientific and gerontological theory suggests that greater social integration-in terms of having more social relationship partners, a greater number of social roles, and engaging in more social activities-should be associated with psychological benefits (Adelmann, 1994). On the other hand, contemporary life-span developmental theory, specifically socioemotional selectivity theory, suggests that an overall shrinking of one's social network in later life does not necessarily jeopardize well-being (English & Carstensen, 2014). This perspective posits that fewer peripheral social relationships result from a motivational shift when people change how they perceive the amount of time in their lives; when viewing one's lifetime as more limited, people orient toward relationships, goals, and pursuits that are most meaningful to them (Carstensen, Isaacowitz, & Charles, 1999). Results of this study demonstrate that losses within more secondary relationships-such as those with neighbors-might not jeopardize more emotion-based aspects of well-being but still can jeopardize engagementbased and developmental aspects of well-being. Insomuch that eudaimonic well-being refers to how well one is functioning, results suggest that neighbors are indeed a salient part of many adults' "psychosocial worlds." At the same time, these relationships might not be as psychologically central as other ties-such as those with family and close friends—to influence one's moods and emotions across an extended period of time. Future research that focuses on continuity and change within a greater variety of social relationships is necessary to examine the extent to which associations between losses in social relationships and psychological well-being are specific to particular dimensions of well-being and domains of relationships.

In addition to highlighting the importance of relationships with neighbors for eudaimonic well-being, results also suggest that perceived support with neighbors is especially salient in middle and later life. Although not an explicit hypothesis of our study, results for eudaimonic well-being provided evidence for perceived support as a mediator of the associations between contact and well-being, given that associations between perceived support and eudaimonic well-being accounted for the associations between contact and eudaimonic well-being. These results suggest that continuously low levels of contact with neighbors is associated with eudaimonic well-being because these participants have less perceived support from neighbors.

Findings for the relatively greater importance of perceived support in comparison with contact are consistent with findings from prior studies that have examined other outcomes. For example, Shaw (2005) found that anticipated support from neighbors, but not contact, was predictive of fewer physical limitations. This pattern of results might be explained by the differences between social processes versus structure. Whereas contact is a structural aspect of social relationships, perceived support is a process, which explains how the relationship was developed, how it is maintained, and its demands (House, Umberson, & Landis, 1988). Processual aspects of social relationships are likely important elements of the pathways through which relationships with neighbors influence adults' psychological well-being over time.

Despite the strengths of this study, including its use of longitudinal national U.S. data, limitations render some of its conclusions as tentative. For one, our sample consisted of mainly white and highly educated people. This lack of diversity limits our ability to generalize these findings across more racially/ethnic and socioeconomically diverse populations. Given prior studies' findings on racial/ethnic differences in the experiences of neighbor relationships (Bjornstrom, 2011; Cornwell, Laumann, & Schumm, 2008; Taylor et al., 2001), examining the implications of neighbor relationships in middle and later life with more racially/ethnically diverse samples is essential.

Furthermore, for the sake of analytic parsimony, this study examined relationships with neighbors independent of many factors that are associated with adults' psychological well-being, such as educational status, age, and functional limitations. Given the lack of available measures, we also were unable to test subgroup differences by community characteristics, such as urban versus rural, which has been the focus of some prior research (Mair & Thivierge-Rikard, 2010). Future studies guided by theory and research

on potential subgroup differences in neighbor relationships are necessary to address questions regarding the conditions under which neighbor relationships matter the most. One particularly important direction for such research is to draw upon social network techniques to examine how neighbor relationships might influence individual well-being in the context of other potentially salient social relationships (see Fiori, Antonucci, & Cortina, 2006). Such research might consider not only primary ties with family and friends but also more peripheral social relationships, such as those with coworkers, service providers, leisure partners, and co-congregants (Fingerman, 2009).

Another limitation was the items used to measure perceived support from neighbors. Given the secondary nature of the analysis, our study only had two questions available to measure this construct, which limited the reliability of this measure specifically. We also lacked the ability to measure the quality of contact (both positive and negative interactions) and received support, which previous studies have found to be associated with psychological well-being in ways that differ from overall contact and perceived support (Thoits, 2011; Uchino, 2009).

Finally, although this study used longitudinal data over a 10-year period, it presents correlations between changes in neighbor relationships and changes in psychological wellbeing. It is possible that declining levels of well-being precede changes in relationships with neighbors (e.g., declining levels of well-being cause losses in perceived support and contact with neighbors), making it infeasible for this study alone to completely separate processes of causation from selection. Also, systematic differences in longitudinal attrition might bias the figures presented in this study (see Radler & Ryff, 2010, for a full discussion of attrition in the MIDUS study).

Despite these limitations, findings provide support, in part, for current initiatives that focus on developing strong relationships among neighbors to promote well-being in later life. In addition to specific neighborhood-based aging services program models-such as the Village model and NORC programs (e.g., Greenfield et al., 2012)-leading frameworks for age-friendly communities emphasize the importance of opportunities for older adults' social participation and inclusion in activities with other community members (Fitzgerald & Caro, 2013). Results of this study suggest the need to foster more supportive neighborhoods where contact among neighbors is not only frequent but also supportive and fostered over time. Findings also indicate that enhancing relationships among neighbors is especially promising for optimizing developmental aspects of adults' psychological well-being. Continuing to advance research on the diverse processes and contexts through which neighbor relationships influence individual outcomes will help to better fulfill the promise of these relatively overlooked relationships as a potential resource for aging individuals and society.

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