# Longitudinal Patterns of Negative Relationship Quality Across Adulthood

# Kira S. Birditt, Lisa M. H. Jackey, and Toni C. Antonucci

Life Course Development Program, Institute for Social Research, University of Michigan, Ann Arbor.

Some theories suggest that negative relationship quality decreases with age, whereas others suggest that it remains stable. This study examined negative relationship quality over time, by relationship type, and by age. A total of 1,361 adults aged 20–93 years in 1992 and 840 adults in 2005 reported how much their spouse or partner, child, and best friend got on their nerves and made too many demands. Negative child relationship quality decreased over time among younger participants. Negative friend relationship quality decreased over time among people with a different friend but remained stable among people with the same friend. Negative spouse or partner relationship quality decreased over time among those who had a different partner but increased among those with the same partner. This study provides evidence of relationship-specific developmental trajectories in relationship quality.

Key Words: Longitudinal-Negative-Relationships.

LOSE social relationships often have both supportive and negative qualities (e.g., irritations, demands, criticism; Antonucci, 2001; Rook, 1984). Indeed, negative aspects of relationships are more highly associated with well-being than are positive aspects perhaps because negative interactions are more intense and occur less frequently (Newsom, Nishishiba, Morgan, & Rook, 2003; Rook, Sorkin, & Zettel, 2004). Gerontological theorists suggest that as people age they become better able to regulate their emotions and less likely to recall emotionally negative information (Carstensen, 2006; Labouvie-Vief, 2003), whereas social learning and personality theories suggest that relationship quality remains stable over time (Caughlin & Huston, 2006; Costa & McCrae, 1988; Jacobson & Margolin, 1979). The empirical research is inconsistent. Older people report fewer negative interactions than do younger people (Akiyama, Antonucci, Takahashi, & Langfahl, 2003; Fingerman & Birditt, 2003). Within individuals, however, negative aspects of social networks often remain stable over time (Krause & Rook, 2003; Shaw, Krause, Liang, & Bennett, 2007).

The present study examines negative relationship quality in close social ties over 12 years. Negative relationship quality refers here to an individual's perception of the extent to which social partners get on their nerves and make too many demands. Unlike most studies, we consider qualities of specific relationships (child, spouse or partner, and best friend) and include people across the adult life span. Longitudinal patterns of negative relationship quality may vary by type of relationship (e.g., spouse or partner, child) and by age group. In addition, negative relationship quality may vary depending on whether people have the same or different social partners over time (e.g., remarriage). The present study assessed patterns of negative relationship quality over time as a function of relationship type, age group, and relationship consistency.

## Theoretical Perspectives

Negative relationship qualities are hypothesized to decrease, increase, or remain stable over time depending on the theoretical perspective considered. Two theoretical perspectives suggesting decreases in negative relationship quality include socioemotional selectivity theory and the principle of dynamic integration. According to socioemotional selectivity theory, as people age they experience a decrease in future time perspective and an increased desire to maintain emotionally meaningful relationships (Carstensen, Isaacowitz, & Charles, 1999). Due to these motivations, older adults exhibit the "positivity effect," defined as a decrease in attention and memory for emotionally negative material and an increase in attention and memory for emotionally positive material (Carstensen, 2006). These processes may lead to decreases in the recollection of demanding or irritating interactions. In related work, the principle of dynamic integration indicates that aging leads to declines in cognitive complexity along with a de-emphasis on negative affect and enhancement of positive affect (Labouvie-Vief, 2003; Labouvie-Vief & Medler, 2002). Because older individuals may ignore negative information, perceptions of negative relationship quality may decrease over time.

In contrast, other theories suggest that negative aspects of relationships may remain stable or increase over time. Social learning theory approaches postulate that people learn ways of interacting early in a relationship that persist over time and become more evident when situations are ambiguous (Jacobson & Margolin, 1979; Whitbeck, Hoyt, & Huck, 1994; Whitbeck, Simons, & Conger, 1991). For example, Whitbeck and colleagues found that early experiences of parental rejection predicted poorer relationship quality in adulthood. Similarly, the enduring dynamics model suggests that couples enter marriage with stable dispositions toward antagonism or affection that may increase over time due to reinforcement (Huston, Caughlin, Houts, Smith, & George, 2001). For example, negative relationship quality before marriage predicts later negative relationship quality (see Caughlin & Huston, 2006). Individual differences in personality traits such as neuroticism may also predict consistent individual differences in negative relationship quality that remain stable over time (Asendorpf, 2002; Costa & McCrae, 1988; Robins, Caspi, & Moffitt, 2002).

## Relationship Types

The closest network members usually include spouse or partner, other immediate family (e.g., children), and best friends (Antonucci, Akiyama, & Takahashi, 2004). However, these relationships vary in their quality and influence on wellbeing. Family members typically provide instrumental and emotional support, whereas friends provide companionship and emotional support (Crohan & Antonucci, 1989; Messeri, Silverstein, & Litwak, 1993). Individuals often rate the spouse or partner most negatively and with greatest ambivalence, whereas individuals rate friends as the least negative and least ambivalent (Fingerman, Hay, & Birditt, 2004). People may view spouses as the most negative because spouses are very close and have the most contact; characteristics associated with more frequent negative interactions (Akiyama et al., 2003). The companionship of friends often increases daily well-being (Sherman, de Vries, & Lansford, 2000), whereas the spousal relationship is most highly associated with longterm well-being (Antonucci, Lansford, & Akiyama, 2001; Okun & Keith, 1998; Walen & Lachman, 2000).

# *Age Differences in Negative Relations: Cross-Sectional Evidence*

In addition to varying by type of relationship, negative relationship quality differs by age. Older individuals report less stress, conflict, and ambivalence in their relationships than do younger people (Birditt & Fingerman, 2003; Birditt, Fingerman, & Almeida, 2005; Fingerman et al., 2004). Indeed, utilizing the first wave of data from the Social Relations and Health Over the Life Course study, Akiyama and her colleagues (2003) found that age was inversely associated with negative relationship quality in all relationship types except the spouse or partner relationship, in which negative relationship quality was actually greatest among people 75 years and older.

# Changes in Relationships Over Time: Longitudinal Evidence

In contrast to the cross-sectional age differences, longitudinal studies have often concluded that negative relationship quality with network members is stable over time. For example, Wheaton (1990) found stability in marital and parental problems over 2 years among people across the adult life span (18 years and older). Among older adults (older than 65 years), Krause and others have also found stability in negative relationship quality over 3- to 10-year spans (Boerner, Reinhardt, Raykov, & Horowitz, 2004; Krause, 1999; Shaw et al., 2007).

Longitudinal studies of negative relationship quality in specific relationships reveal that changes over time in negative relationship quality vary by developmental stage and type of relationship. Lindahl and her colleagues (Lindahl, Clements, & Markman, 1998) examined spouses over the first 9 years of marriage and found that negative communication patterns (expression of negative affect, overt conflict) increased over time. Marital conflict also increases with parenthood (Gottman & Notarius, 2000; Veroff, Douvan, & Hatchett, 1995). Negative relationship qualities with children tend to increase when children are in early adolescence but subsequently decrease across young adulthood (Paikoff & Brooks-Gunn, 1991; Steinberg, 1981). This decrease is consistent with solidarity theory, which suggests that parents and their children become increasingly positive about the relationship across adulthood (Bengtson, Giarrusso, Mabry, & Silverstein, 2002; Rossi & Rossi, 1990). Finally, to our knowledge, researchers have not examined negative relationship quality with friends over time among adults. Because friendships are voluntary, people may decrease contact with bothersome friends, leading to a decrease in negative relationship quality over time.

# Consistency in Negative Relationship Quality Across Relationships

Some theorists have suggested that negative relationship qualities are not only stable over time but also consistent across relationships due to personality characteristics (Costa & McCrae, 1988; Fingerman, Chun, Hay, Cichy, & Lefkowitz, 2006). For example, a person who is high in neuroticism may perceive all of his/her relationships as demanding. Researchers have found low to moderate correlations among negative relationship qualities in the spouse or partner, child, and best friend relationships (*rs* .06–.36; Akiyama et al., 2003). Therefore, we also examined whether individuals tended to have similar levels of negative relationship quality across relationships.

This study had two overall aims: (a) to examine patterns of negative relationship quality over time and whether those patterns varied by age group, relationship type, and relationship consistency; and (b) to assess whether people report similar levels of negative relationship quality across relationship types. Consistent with the marital literature, we predicted that the spousal relationship would increase in negative relationship quality in young and middle adulthood but not in older adulthood. In line with the parent–child research, we hypothesized that negative relationship quality with children would

	7
J	1

	Dropped			Odds Ratio Predicting	
	Wave 1 ( <i>n</i> = 1,361)	Out/Deceased $(n = 521)$	Wave 2 $(n = 840)$	Wave 2 Participation	
Wave 1 variables					
Women (%)	59.8	56.4	61.8	1.42**	
Young adults (20-39 years, %)	34.7	20.3	43.6	5.21**	
Middle aged (40-59 years, %)	29.0	19.0	35.2	4.19**	
Older adults (60+ years, %)	36.3	60.7	21.2		
White (%)	71.8	69.3	73.3	1.36*	
Years of education $(M, SD)$	12.77 (2.6)	11.82 (2.9)	13.36 (2.3)	1.18**	
Negative relations $(M, SD)$	2.25 (1.0)	2.11 (1.1)	2.33 (1.0)	1.03	

Table 1. Description of the Sample

*Note.* Older adults were the comparison group for the age effect in attrition analyses. p < .05; p < .01.

decrease over time especially among middle- and older-aged parents. Finally, because friendships are voluntary, we predicted that people would report lower negative relationship quality over time in their relationships with best friends. We predicted that participants who nominated different social partners (spouse, child, or friend) across waves would report a decrease in negative relationship quality over time (due to the exclusion of highly negative relationships). We also hypothesized that negative relationship quality would be correlated among relationship types (Akiyama et al., 2003).

# Метнор

# Participants

The data are from the Social Relations and Health Over the Life Course study, a regionally representative sample of people from the Greater Detroit metropolitan area (see Akiyama et al., 2003, for details). The selected sample used in this study included participants who were 20 years and older in the first wave (1992), who had at least one of the following relationships: spouse or partner, child, and best friend (N = 1,361). Participants were interviewed in their homes for approximately 1 hr.

In the second wave, collected in 2005 by telephone, 840 respondents completed the measures. Although there was some concern regarding the use of two methods, researchers have found that responses do not tend to vary between telephone and in-person survey methods (Herzog & Rodgers, 1988; Herzog, Rodgers, & Kulka, 1983). Of the nonrespondents, 296 were deceased, and the remainder (n = 225) did not participate for reasons including refusal or unable to locate. The response rate is 79% (840/1,065, number of participants alive in Wave 2). Participants were 20–93 years old at Wave 1 (M = 50.9, SD = 18.0) and 32–100 years old at Wave 2 (M = 58.2, SD = 15.1; see Table 1 for sample description).

# Measures

Demographics.—Participants reported their date of birth, gender, highest grade of school completed, and their race

(White, Black, Native American, Asian, Hispanic, and other). We used these variables to determine chronological age, years of education, gender 0 (*women*) or 1 (*men*), and race 0 (*not-White*) or 1 (*White*). We divided age into three groups that represented three stages in the life span: young adult (20–39), middle aged (40–59), and older adults (60 and older; Almeida & Horn, 2004; Walen & Lachman, 2000). Although we included adults aged 80 and older, we did not include a separate category for them because there were so few people in this category (n = 78 in Wave 1 and n = 5 in Wave 2).

Negative relationship quality.-Participants rated the negative qualities of their relationships with their spouse or partner, child, and best friend. Spouse or partner included spouses and cohabitating partners. Participants with one child reported on that child, whereas participants with more than one child reported on the child they relied on the most. Children included natural, adopted, or stepchildren. We limited best friends to those of the same sex because of the small sample of individuals with an opposite-sex friend across the two waves (n = 5). The negative quality scales included two items: "My (spouse/partner) gets on my nerves" and "My (spouse/partner) makes too many demands on me." Participants rated each item from 1 (agree) to 5 (disagree). The items were scored so that higher scores represented more negative relationships. The items were averaged to create a negative spouse or partner, negative child, and negative friend relationship quality score (Wave 1:  $\alpha = .60, .69, .51$ ; Wave 2:  $\alpha = .56, .58, .38$ , respectively). The reliability of the negative relations scale may be underestimated due to the small number of available items (Carmines & Zeller, 1979). Similar reliability estimates are found in research using the same or similar items (Schuster, Kessler, & Aseltine, 1990; Umberson, 1992). The low estimate for best friends in Wave 2 may be due to the small number of participants who reported that their friend made too many demands. We examined whether only including the "getting on nerves" item was a better option and found the same pattern of results.

*Contact frequency.*—Participants indicated how often they were in touch with each social partner: 1 (*every day/live* 

Table 2. Types of Relationships and Their Characteristics by Age Group

	Young		Middle		Older	
	Wave 1 ( <i>n</i> = 472)	Wave 2 ( <i>n</i> = 366)	Wave 1 ( <i>n</i> = 395)	Wave 2 ( <i>n</i> = 296)	Wave 1 ( <i>n</i> = 494)	Wave 2 $(n = 178)$
Spouse/partner, n (%)	292 (61.9)	292 (79.8)	268 (67.8)	221 (74.7)	227 (46.0)	98 (55.1)
Contact, $M(SD)$	4.98 (.23)	4.99 (.10)	4.98 (.18)	4.96 (.24)	4.96 (.25)	4.95 (.30)
Child, <i>n</i> (%)	343 (72.7)	316 (86.3)	346 (87.6)	269 (90.9)	446 (90.3)	163 (91.6)
No. of children, M (SD)	2.3 (1.2)	2.6 (1.4)	2.9 (1.5)	3.0 (1.6)	3.3 (2.3)	3.2 (1.8)
Contact, M (SD)	4.90 (.41)	4.66 (.75)	4.46 (.77)	4.29 (.83)	4.28 (.76)	4.32 (.66)
Child age, $M(SD)$	9.6 (5.4)	21.0 (7.2)	22.5 (8.9)	33.9 (8.7)	42.0 (9.6)	48.5 (9.9)
Best friend, $n$ (%)	363 (76.9)	226 (61.7)	287 (72.7)	198 (66.9)	328 (66.4)	96 (53.9)
Contact, $M(SD)$	4.13 (.83)	3.97 (.93)	3.92 (.84)	3.77 (.98)	4.06 (.83)	3.76 (.83)

Note. Contact frequency ranged from 1 (irregularly) to 5 (every day/live together).

*together*), 2 (*once a week or more*), 3 (*once a month or more*), 4 (*once a year or more*), or 5 (*irregularly*). We reverse coded this item so that higher scores represented more contact.

*Consistency of relationships.*—People may have nominated different spouse or partners, best friends, and children in each wave when completing the negative quality assessments. Thus, we created a variable indicating whether the participant nominated the same or a different person in each wave (1 = same person, 0 = different person). This was accomplished by examining the name of the person nominated. If the name did not clearly establish consistency, we used other data including age and gender of the person to determine likeness. Of those that could be confidently classified as the same or a different partner, 13.8% of spouse or partners, 38.2% of children, and 65.3% of friends were different at Wave 2. Multilevel analyses revealed that negative relationship quality at Wave 1 did not predict consistency of relationships in Wave 2.

## RESULTS

Preliminary analyses involved an examination of attrition and descriptive statistics. We then estimated multilevel models to examine within-person patterns of negative relationship quality over time, by type of relationship, and by age group. We assessed whether the patterns of negative relationship quality varied depending on whether the relationship was with the same or a different person in Waves 1 and 2. Finally, we assessed whether people reported similar levels of negative relationship quality across relationship types.

## Sample Description

Logistic regressions determined whether completion of Wave 2 (1 = completion, 0 = dropout, mortality) varied by gender, age, race, years of education, and negative relationship quality (mean across relationship types). People who completed the second wave were more likely to be women, young or middle aged (compared with older), White, and more highly educated (Table 1). Negative relationship quality, in contrast, did not predict completion. We controlled for possible selection biases by including gender, race, and education as covariates.

Table 2 provides a description of the types of relationships reported by age group. More young and middle-aged participants had a spouse or partner than older adults. Most participants had children and reported having a great deal of contact with them. More young adults reported having a best friend than older adults.

# Negative Relationship Quality Over Time by Type of Relationship and Age Group

We used multilevel modeling with the SAS PROC MIXED procedure to assess whether negative relationship quality varied by time, age group, and relationship type. The model included three levels: individual (Level 3), time (Level 2), and relationship types (Level 1). Time was nested within participant, and the relationship types were nested within time. The outcome was the rating of negative relationship quality. Before including predictors, we examined between- and within-person variance in negative relationship quality with intraclass correlations (ratios of the between- and within-person covariance parameters over the total variance). Of the total variance, 23% of the variance was between individuals, whereas 76% was within individuals. In contrast, personality studies find that 84%-87% of the variance in personality is between individuals (Terracciano, McCrae, Brant, & Costa, 2005). Negative relationship quality does not appear to be the result of individual differences (like personality) but rather seems dependent on the specific context, thus the greater withinrather than between-person variance.

Next, we estimated a model with age, time, and relationship type as predictors of negative relationship quality controlling for gender, race, and education. Predictors included age group (young adults and middle-aged adults, with older adults as the comparison group), time (Wave 1 = 1, Wave 2 = 2), relationship type (1 = spouse or partner, 2 = child, 3 = best friend) as well as all possible interactions between and among time, age group, and relationship type. We found

	Overall		Same Partner		Different Partner	
	B (SE)	F	B (SE)	F	B (SE)	F
Spouse/partners						
Time	0.01 (0.12)	0.03	0.03 (0.14)	4.06*	-0.41 (0.20)	4.15*
Age group		2.42		0.41		1.44
Young	0.17 (0.14)		0.18 (0.18)		0.43 (.38)	
Middle	0.24 (0.14)		0.25 (0.18)		0.65 (.38)	
Time × Age Group		2.07		1.18		
Time × Young	-0.11 (.15)		0.08 (.17)			
Time × Middle	0.13 (.15)		0.24 (.17)			
Between-person variance	0.70 (.07)	$Z = 10.01^{**}$	0.73 (.09)	$Z = 8.59^{**}$	0.22 (.19)	Z = 1.18
Within-person variance	0.80 (.05)	Z = 15.25 **	0.69 (.05)	Z = 13.29 **	1.15 (.21)	$Z = 5.34^{**}$
Child						
Time	-0.15 (0.11)	77.85**	-0.29 (0.16)	39.94**	-0.38 (.21)	41.56**
Age group		56.98**		15.73**		13.08**
Young	0.61 (0.13)**		0.58 (0.18)**		0.58 (0.22)**	
Middle	0.35 (0.13)**		0.34 (0.17)*		0.25 (0.22)	
Time × Age Group		10.15**		2.34†		2.34†
Time × Young	-0.63 (.14)**		-0.44 (.21)*		-0.58 (.27)*	
Time × Middle	-0.40 (.14)**		-0.21 (.21)		-0.33 (.27)	
Between-person variance	0.39 (.06)	Z = 6.38 **	0.40 (.08)	$Z = 4.88^{**}$	0.32 (.10)	$Z = 3.12^{**}$
Within-person variance	1.10 (.06)	$Z = 17.84^{**}$	1.03 (.08)	$Z = 12.88^{**}$	1.12 (.11)	Z = 10.20 **
Friend						
Time	-0.37 (0.10)	56.15**	-0.16 (0.21)	2.59	-0.71 (0.18)	21.02**
Age group		11.89**		5.43**		0.07
Young	0.30 (.11)**		0.66 (0.25)**		0.13 (0.18)	
Middle	0.36 (0.12)**		0.67 (0.25) **		0.37 (0.20)	
Time × Age Group		2.09		0.12		5.10**
Time × Young	-0.09 (.12)		0.06 (.25)		0.29 (.21)	
Time × Middle	0.12 (.13)		-0.04 (.25)		0.68 (.23)**	
Between-person variance	0.33 (.05)	Z = 7.29 **	0.40 (.09)	$Z = 4.61^{**}$	0.31 (.07)	$Z = 4.51^{**}$
Within-person variance	0.61 (.04)	$Z = 14.92^{**}$	0.43 (.06)	Z = 7.55 **	0.62 (.06)	Z = 10.19**

Table 3. Multilevel Models of Negative Relationship Quality by Age Group, Time, and Relationship Type

Note. Control variables (gender, education, and race) are included in all models. The time by age interaction for different spouse or partners was not included due to small cell sizes.

 $\dagger p < .10; *p < .05; **p < .01.$ 

a significant three-way interaction among age group, time, and relationship type (F = 2.90, p < .05). To examine this further, we estimated models separately for each relationship type. We included time, age group, and the interaction between time and age group as predictors along with the covariates.

The age and time effects on negative relationship quality varied by the type of relationship (see Table 3 and see Table 4 for the estimated means). Negative relationship quality with spouse or partner did not vary by time or age group. There were significant main effects of age and time as well as an interaction between time and age group when predicting negative relationship quality in the child relationship. Young and middle-aged respondents reported greater negative relationship quality than did older respondents. Negative relationship quality decreased over time. Follow-up tests to examine the interaction revealed that negative relationship quality with children decreased over time among young (F = 71.22, p < .01) and middleaged adults (F = 36.87, p < .01) but not among older adults (F = 1.97, p = .16). These effects remained significant after the Tukey adjustment for Type 1 error. To address

whether these effects were due to the age of children or frequency of contact, or both, we estimated multilevel models including child age and frequency of contact as predictors. Participants reported less negative relationship quality with older children and children with whom they had less frequent contact. However, the interaction between parent age and time remained significant. In addition, young children are more dependent on their parents and may have qualitatively different relationships with parents than do adolescent and adult children (e.g., Furman & Buhrmester, 1992). Because age 13 typically represents the beginning of adolescence and efforts to achieve autonomy, we examined whether omitting children younger than 13 years influenced the results and found the same effects.

There were significant main effects of time and age group when predicting negative relationship quality in the friend relationship. Negative relationship quality decreased over time. Tukey post hoc comparisons revealed that older people reported less negative friend relationships than did young (B = .35, t = 4.74, p < .01) and middle-aged people (B = .30, t = 3.86, p < .01).

	Young		Mi	Middle		Older	
	1992	2005	1992	2005	1992	2005	
Spouse, M (SE)							
Overall	2.71 (0.07)	2.61 (0.07)	2.55 (0.07)	2.68 (0.08)	2.44 (0.08)	2.44 (0.12)	
Same	2.52 (0.10)	2.62 (0.10)	2.43 (0.10)	2.70 (0.10)	2.42 (0.15)	2.45 (0.15)	
Different	2.85 (0.22)	2.22 (0.22)	2.81 (0.28)	2.70 (0.28)	2.23 (0.42)	1.98 (0.42)	
Child, M (SE)							
Overall	3.08 (0.07)	2.30 (0.08)	2.60 (0.07)	2.05 (0.08)	1.84 (0.06)	1.69 (0.10)	
Same	3.02 (0.11)	2.29 (0.11)	2.55 (0.10)	2.05 (0.10)	2.00 (0.14)	1.71 (0.14)	
Different	3.20 (0.14)	2.24 (0.14)	2.61 (0.13)	1.90 (0.14)	2.03 (0.17)	1.66 (0.17)	
Best friend, M (SE)							
Overall	2.03 (0.05)	1.57 (0.06)	1.87 (0.06)	1.62 (0.07)	1.63 (0.05)	1.26 (0.09)	
Same	1.89 (0.13)	1.79 (0.13)	2.00 (0.13)	1.80 (0.13)	1.29 (0.21)	1.13 (0.21)	
Different	1.88 (0.09)	1.46 (0.09)	1.73 (0.11)	1.71 (0.12)	2.04 (0.16)	1.34 (0.16)	

Table 4. Estimated Means of Negative Relationship Quality by Type of Relationship, Age Group, and Time

# Negative Relationship Quality as a Function of Relationship Consistency

We further examined whether time and age group differences in negative relationship quality varied depending on whether the participant nominated the same individual as spouse or partner, child, or friend in Waves 1 and 2. These models are presented in Table 3.

The findings varied depending on relationship consistency. There was a main effect of time when predicting negative relationship quality with the same spouse and with a different spouse but in opposite directions. People who reported having the same spouse or partner in Waves 1 and 2 rated their spouse or partner more negatively over time. In contrast, people with a different spouse or partner in Wave 2 reported a decrease in negative relationship quality over time. We were not able to estimate the interaction between time and age group when predicting negative quality with a different spouse due to the small number of older participants with a different spouse or partner. When predicting negative relationship quality with either the same or a different child, there were significant main effects of age and time, and the interactions between time and age group approached significance. Younger individuals reported greater negative relationship quality than older individuals, and negative relationship quality decreased over time. As shown in Tables 3 and 4, young adults reported a decrease in negative relationship quality over time.

The friend relationship was more complicated. There was a main effect of age group among people with the same best friend in both waves. Older people reported less negative relationship quality with friends than young (B = .63, t = 2.90, p < .01) and middle-aged adults (B = .69, t = 3.18, p < .01). Among people who nominated a different best friend in the two waves, there was a significant main effect of time and an interaction between age and time. Negative relationship quality decreased over time. A post hoc analysis of the time effect for each age group revealed that young (F = 14.94, p < .01) and old adults (F = 15.03, p < .01) decreased in negative relationship quality over

time when they changed best friends, but middle-aged adults did not (F = 0.03, p = .86). These effects remained significant with Tukey adjustments.

# Consistency in Negative Relationship Quality Across Relationships

We conducted three post hoc multilevel analyses to (a) more directly examine associations between negative relationship qualities across different relationship types and (b) assess changes in relation-specific negative relationship quality independent of the individuals' overall tendency to be negative. We estimated the overall models in Table 3 (overall spouse, child, best friend) with the mean negative relationship quality in the two omitted relationships as a covariate. For example, we estimated the spouse model with the mean negative relationship quality across child and friend relations as a covariate. The models indicated that greater negative relationship quality in the omitted relationships predicted greater negative relationship quality in the predicted relationship. In addition, the main effects of time remained significant in the friend and child model, and an increase in spousal negativity over time emerged. These models indicated that there are correlations among negative relationship quality in different relationships and changes over time irrespective of individuals' tendency to have negative relationships.

## DISCUSSION

The purpose of this study was to examine whether negative relationship quality changes across the adult life span and over time. The findings highlight the importance of examining within-person patterns of negative relationship quality over time. Although individuals tend to rate their relationships as having low to moderate levels of negative relationship quality, patterns of negative relationship quality varied depending on the type of relationship and the age of participants. Relationships with friends and children often became less negative over time, whereas relationships with spouses or partners were either consistently negative or increased in negative relationship quality over time (except among those who acquired new spouses or partners). Developmental trajectories of negative relationship quality may be relationship specific.

Studies examining aggregates of negative relationship quality across relationships over time often reveal that negative aspects of relationships are relatively stable over time (Boerner et al., 2004; Rook, 2003; Shaw et al., 2007). The majority of these studies have examined people aged 60 and older using shorter longitudinal designs. Our examination of negative relationship quality suggests a great deal of variability in patterns of negative relationship quality by type of relationship, age group, and consistency. In addition, the majority of the variance in relationship quality existed within individuals rather than between them. Negative relationship quality may be more a function of the specific relationship context than due to individual differences.

Compared with other relationships, the spouse or partner relationship was the most consistently negative over time. Similarly, research indicates that ambivalence, that is, the presence of both positive and negative relationship qualities, is particularly common among spouses (Fingerman et al., 2004). Negative relationship quality may simply be more common in close ties involving frequent contact due to greater opportunities for negative interactions (Akiyama et al., 2003). In addition, spouses or partners have to make decisions and deal with daily life stresses together, both of which may lead to irritation with one another. Indeed, when the same spouse or partner was nominated in Waves 1 and 2, negative relationship quality increased over time. These findings are consistent with the social learning theory and the enduring dynamics models. The stability and increases in negative relationship quality over time may be indicative of learned patterns of interaction, which have been reinforced over time. Spouses or partners may become more comfortable and more expressive of negative emotions as they age (Lindahl et al., 1998).

The stability and increased negative spousal relationship quality over time and across age groups was somewhat surprising given prior cross-sectional findings that older adults' interactions with spouses are less negative and they are less like to recall negative information than are younger adults (Carstensen, 2006; Carstensen, Gottman, & Levenson, 1995). We did find, however, that relationships with spouse or partner become less negative among people who have a new spouse in Wave 2. The discrepancies with Carstensen and colleagues' findings may be due to variations in the samples and the study designs. In addition, there may be cohort differences in the spousal relationship along with increases in negative spousal relationship quality within individuals over time.

Although previous studies show that negative relationship quality with children increases when children are adolescents and steadily declines thereafter (Bengtson et al., 2002; Paikoff & Brooks-Gunn, 1991; Steinberg, 1981), our study indicated that relationships with children become less negative over time, especially among younger adult parents. Children may become less demanding as they move from childhood to adolescence and adolescence to young adulthood. For example, as children start school, move out of the home, marry, and gain employment, they are more likely to be seen as successfully launched, leading parents to feel less ambivalence (Fingerman et al., 2006; Luescher & Pillemer, 1998; Pillemer & Suitor, 2002).

Negative relationship quality with young versus older children may have qualitatively different meanings. For example, parents with young children may be annoyed by the everyday activities of living together, whereas parents who see their middle-aged children less often may be upset by different concerns. However, negative relationship quality continued to decrease over time after controlling for contact frequency and child age.

Interestingly, negative child relationship quality decreased over time irrespective of whether the same child was nominated in Waves 1 and 2. The decrease may reflect developmental changes in parents and families. For example, parents may view their children differently or experience changes in emotion regulation over time. Parents' investment in their children and solidarity tend to increase over time (Rossi & Rossi, 1990). In addition, aging may be associated with increases in the tendency to focus more on positive attributes rather than negative ones (Carstensen, 2006). Parents may be better able to practice the positivity effect in relationships characterized by less contact. Parents may also identify "demilitarized zones" in which they learn to steer clear of discussing certain topics as a way of avoiding tension and conflict (Hagestad, 1981). These findings do not support the social learning theory and enduring dynamics models, which suggest that interactions remain stable over time due to learned patterns of interactions that are reinforced (Whitbeck et al., 1991, 1994).

Consistent with previous literature, friend relationships were less negative than spouse and child relationships. Older people were less likely to report negative relationship quality with friends than were young and middle-aged people, and as predicted, friend negative relationship quality decreased over time (at least among the majority of individuals who had a different best friend in each wave). Older people may rate their friends as less negative because they have fewer roles and more time to invest in their friendships. Older adult friendships may have "stood the test of time" and thus may be extremely close and supportive. Friendships may represent an important source of support during older adulthood especially, as people are living longer and changing residences. The decrease in friend negative relationship quality over time may also be due to the voluntary nature of friendships (Crohan & Antonucci, 1989). Indeed, friend negative relationship quality decreased only among people who reported a new friend in Wave 2.

Consistent negative relationship quality with the same friend may be explained by the social learning theory or enduring dynamics models; people may create ways of interacting with friends that are maintained over time due to reinforcement.

# Consistency in Negative Relationship Quality Across Relationships

When examining associations between negative relationship qualities in different relationships, there were positive associations. People who reported greater negative relationship quality in one relationship reported greater negative relationship quality in other relationships. In addition, there are trajectories of negative relationship quality that occur over time in specific relationships irrespective of negativity in other relationships.

These findings emphasize the importance of considering interindividual and intraindividual variability in negative relationship quality. Although more of the variance was within than between individuals, both types of variability exist. For example, an individual may have a mean negative relationship quality of 4 with ratings ranging from 5 to 2 for each relationship type, whereas another person may have a mean of 2 with scores ranging from 3 to 1. Thus, there are individual differences in overall negativity and variation within individuals by relationship type.

### Directions for Future Research

Although this research offers several insights about negative relationship quality, there are limitations that should be addressed in future research. The relationship quality scores had low internal consistency reliability, most likely due to the small number of items. Future research should assess negative relationship quality with more items to identify precisely what it is about relationships that are irritating and demanding (Newsom et al., 2003). Research should also consider the influence of method variance (phone, face-to-face) on reports of negative relationship quality. In addition, individuals may feel uncomfortable reporting negative relationship quality. Future research should include controls for socially desirable responding. Moreover, social partners often have different perceptions of relationship quality (Antonucci & Israel, 1986). We would, therefore, like to examine dyadic perceptions of relationships. It is also unclear whether the change in negative relationship quality is linear or has some other trajectory, and the 12-year span may not be long enough to examine trait-like qualities in relationships. For instance, personality studies often span decades to examine whether there is stability or change in traits over time (Terracciano et al., 2005).

Overall, this study indicates that there are often changes in negative relationship quality over time. Spousal or partner relationships tend to remain consistently negative over time, whereas relationships with children and friends often become less irritating. It is also important to note that although relationships may be irritating, they are often simultaneously positive and supportive (Akiyama et al., 2003; Fingerman et al., 2004). With regard to quality of relationships, one size does not fit all relationships, age groups, or time periods. We consider these findings an important albeit initial step in understanding the underlying processes, causes, and effects of negative relationship quality. Indeed, an important next step will be to examine the implications of these patterns of negative relationship quality for wellbeing and health.

### Funding

This research was supported by grants AG025651 and MH066876.

#### ACKNOWLEDGMENTS

We thank the Life Course Development group for their helpful comments on earlier drafts of the manuscript.

#### Correspondence

Address correspondence to Kira S. Birditt, PhD, Institute for Social Research, University of Michigan, 426 Thompson Street, Ann Arbor, MI 48106-1248. Email: kirasb@umich.edu

### REFERENCES

- Akiyama, H., Antonucci, T., Takahashi, K., & Langfahl, E. S. (2003). Negative interactions in close relationships across the life span. *Journals* of Gerontology: Psychological Sciences and Social Sciences, 58, P70–P79.
- Almeida, D. M., & Horn, M. C. (2004). Is daily life more stressful during middle adulthood? In O. G. Brim, C. D. Ryff, & R. C. Kessler (Eds.), *How healthy are we? A national study of well-being at midlife* (pp. 425–451). Chicago: University of Chicago Press.
- Antonucci, T. C. (2001). Social relations: An examination of social networks, social support, and sense of control. In J. E. Birren (Ed.), *Handbook of the psychology of aging* (5th ed., pp. 427–453). San Diego: University of California; Center on Aging.
- Antonucci, T. C., Akiyama, H., & Takahashi, K. (2004). Attachment and close relationships across the life span. Attachment & Human Development, 6, 353–370.
- Antonucci, T. C., & Israel, B. (1986). Veridicality of social support: A comparison of principal and network members' responses. *Journal of Consulting and Clinical Psychology*, 54, 432–437.
- Antonucci, T. C., Lansford, J. E., & Akiyama, H. (2001). Impact of positive and negative aspects of marital relationships and friendship on well-being of older adults. *Applied Developmental Science*, 5, 68– 75.
- Asendorpf, J. B. (2002). Personal effects on personal relationships over the lifespan. In A. L. Vangelisti, H. T. Reis, & M. A. Fitzpatrick (Eds.), *Stability and change in relationships* (pp. 35–56). Cambridge, England: Cambridge University Press.
- Bengtson, V., Giarrusso, R., Mabry, J. B., & Silverstein, M. (2002). Solidarity, conflict, and ambivalence: Complementary or competing perspectives on intergenerational relationships? *Journal of Marriage* and the Family, 64, 568–576.
- Birditt, K. S., & Fingerman, K. L. (2003). Age and gender differences in adults' descriptions of emotional reactions to interpersonal problems. *Journals of Gerontology: Psychological Sciences*, 58, P237–P245.
- Birditt, K. S., Fingerman, K. L., & Almeida, D. M. (2005). Age differences in exposure and reactions to interpersonal tensions: A daily diary study. *Psychology and Aging*, 20, 330–340.

- Boerner, K. J. P., Reinhardt, J. P., Raykov, T., & Horowitz, A. (2004). Stability and change in social negativity in later life: Reducing received while maintaining initiated negativity. *Journals of Gerontology: Social Sciences*, 59, S230–237.
- Carmines, E. G., & Zeller, R. A. (1979). *Reliability and validity assessment*. London: Sage.
- Carstensen, L. L. (2006). The influence of a sense of time on human development. *Science*, 312, 1913–1915.
- Carstensen, L. L., Gottman, J. M., & Levenson, R. W. (1995). Emotional behavior in long-term marriage. *Psychology and Aging*, 10, 140– 149.
- Carstensen, L. L., Isaacowitz, D. M., & Charles, S. T. (1999). Taking time seriously: A theory of socioemotional selectivity. *American Psychologist*, 54, 165–181.
- Caughlin, J. P., & Huston, T. L. (2006). The affective structure of marriage. The Cambridge handbook of personal relationships (pp. 132–155). Cambridge, England: Cambridge University Press.
- Costa, P. T., & McCrae, R. R. (1988). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO personality inventory. *Journal of Personality and Social Psychology*, 54, 853–863.
- Crohan, S. E., & Antonucci, T. C. (1989). Friends as a source of social support in old age. In R. G. Adams & R. Blieszner (Eds.), *Older adult friendship: Structure and process* (pp. 129–146). Newbury Park, CA: Sage.
- Fingerman, K. L., & Birditt, K. S. (2003). Does variation in close and problematic family ties reflect the pool of living relatives? *Journals* of Gerontology: Psychological Sciences, 58, P80–P87.
- Fingerman, K. L., Chun, P., Hay, E., Cichy, K. E., & Lefkowitz, E. S. (2006). Ambivalent reactions in the parent and offspring relationship. *Journals of Gerontology: Psychological Sciences*, 61, 152–160.
- Fingerman, K. L., Hay, E. L., & Birditt, K. S. (2004). The best of ties, the worst of ties: Close, problematic, and ambivalent social relationships. *Journal of Marriage and the Family*, 66, 792–808.
- Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of networks of personal relationships. *Child Development*, 63, 103–115.
- Gottman, J. M., & Notarius, C. I. (2000). Decade review: Observing marital interaction. *Journal of Marriage and the Family*, 62, 927–947.
- Hagestad, G. O. (1981). Problems and promises in the social psychology of intergenerational relations. In Fogel, R., Hatfield, E., Kiesler S., Shanas R. (Eds.), *Aging: Stability and change in the family*. New York: Academic Press.
- Herzog, A. R., & Rodgers, W. L. (1988). Interviewing older adults: Mode comparison using data from a face-to-face survey and a telephone resurvey. *Public Opinion Quarterly*, 52, 84–99.
- Herzog, A. R., Rodgers, W. L., & Kulka, R. A. (1983). Interviewing older adults: A comparison of telephone and face to face modalities. *Public Opinion Quarterly*, 47, 405–418.
- Huston, T. L., Caughlin, J. P., Houts, R. M., Smith, S. E., & George, L. J. (2001). The connubial crucible: Newlywed years as predictors of marital delight, distress, and divorce. *Journal of Personality and Social Psychology*, 80, 237–252.
- Jacobson, N., & Margolin, G. (1979). Marital therapy: Strategies based on social learning and behavior exchange principles. New York: Brunner/ Mazel.
- Krause, N. (1999). Assessing change in social support during late life. *Research on Aging*, 21, 539–569.
- Krause, N., & Rook, K. S. (2003). Negative interaction in late life: Issues in the stability and generalizability of conflict across relationships. *Journals of Gerontology: Psychological Sciences*, 58, P88–P99.
- Labouvie-Vief, G. (2003). Dynamic integration: Affect, cognition, and the self in adulthood. *Current Directions in Psychological Science*, *12*, 201–206.

- Labouvie-Vief, G., & Medler, M. (2002). Affect optimization and affect complexity: Modes and styles of regulation in adulthood. *Psychology* and Aging, 17, 571–588.
- Lindahl, K., Clements, M., & Markman, H. (1998). The development of marriage: A 9-year perspective. New York: Cambridge University Press.
- Luescher, K., & Pillemer, K. (1998). Intergenerational ambivalence: A new approach to the study of parent-child relations in later life. *Journal of Marriage and the Family*, 60, 413–425.
- Messeri, P., Silverstein, M., & Litwak, E. (1993). Choosing optimal support groups: A review and reformulation. *Journal of Health and Social Behavior*, 34, 122–137.
- Newsom, J. T., Nishishiba, M., Morgan, D. L., & Rook, K. S. (2003). The relative importance of three domains of positive and negative social exchanges: A longitudinal model with comparable measures. *Psychology and Aging*, 18, 746–754.
- Okun, M. A., & Keith, V. M. (1998). Effects of positive and negative social exchanges with various sources on depressive symptoms in younger and older adults. *Journals of Gerontology: Psychological Sciences*, 53, 4–20.
- Paikoff, R. L., & Brooks-Gunn, J. (1991). Do parent-child relationships change during puberty? *Psychological Bulletin*, 110, 47–66.
- Pillemer, K., & Suitor, J. (2002). Explaining mothers' ambivalence toward their adult children. *Journal of Marriage and the Family*, 64, 602– 613.
- Robins, R. W., Caspi, A., & Moffitt, T. E. (2002). It's not just who you're with, it's who you are: Personality and relationship experiences across multiple relationships. *Journal of Personality*, 70, 925–964.
- Rook, K. S. (1984). The negative side of social interaction: Impact on psychological well-being. *Journal of Personality and Social Psychology*, 46, 1097–1108.
- Rook, K. S. (2003). Exposure and reactivity to negative social exchanges: A preliminary investigation using daily diary data. *Journals of Gerontology: Psychological Sciences*, 58, P100–P111.
- Rook, K. S., Sorkin, D., & Zettel, L. (2004). Stress in social relationships: Coping and adaptation across the lifespan. In F. R. Lang & K. L. Fingerman (Eds.), *Growing together: Personal relationships* across the lifespan (pp. 240–267). New York: Cambridge University Press.
- Rossi, A. S., & Rossi, P. H. (1990). *Of human bonding: Parent-child relations across the life course*. New York: Aldine de Gruyter.
- Schuster, T. L., Kessler, R. C., & Aseltine, R. H. (1990). Supportive interactions, negative interaction, and depressed mood. *American Journal* of Community Psychology, 18, 423–437.
- Shaw, B. A., Krause, N., Liang, J., & Bennett, J. (2007). Tracking changes in social relations throughout late life. *Journals of Gerontology: Social Sciences*, 62, S90–S99.
- Sherman, A. M., de Vries, B., & Lansford, J. E. (2000). Friendship in childhood and adulthood: Lessons from across the lifespan. *International Journal of Aging & Human Development*, 51, 31–51.
- Steinberg, L. D. (1981). Transformations in family relations at puberty. Developmental Psychology, 17, 833–840.
- Terracciano, A., McCrae, R. R., Brant, L. J., & Costa, P. T. (2005). Hierarchical linear modeling analyses of the NEO-PI-R scales in the Baltimore Longitudinal Study of Aging. *Psychology and Aging*, 20, 493–506.
- Umberson, D. (1992). Relationships between adult children and their parents: Psychological consequences for both generations. *Journal of Marriage and the Family*, 54, 664–674.
- Veroff, J., Douvan, E., & Hatchett, S. J. (1995). Marital instability: A social and behavioral study of the early years. Westport, CT: Praeger.
- Walen, H. R., & Lachman, M. E. (2000). Social support and strain from partner, family, and friends: Costs and benefits for men and women in adulthood. *Journal of Social & Personal Relationships*, 17, 5–30.
- Wheaton, B. (1990). Life transitions, role histories, and mental health. *American Sociological Review*, 55, 209–223.

- Whitbeck, L., Hoyt, D. R., & Huck, S. M. (1994). Early family relationships, intergenerational solidarity, and support provided to parents by their adult children. *Journals of Gerontology: Social Sciences*, 49, S85–S94.
- Whitbeck, L., Simons, R. L., & Conger, R. D. (1991). The effects of early family relationships on contemporary relationships and assistance

patterns between adult children and their parents. Journals of Gerontology: Social Sciences, 46, S330–S337.

Received February 5, 2008 Accepted August 20, 2008 Decision Editor: Rosemary Blieszner, PhD