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Felt Obligation to Help Others as a Protective Factor Against Losses in Psychological Well-being Following Functional Decline in Middle and Later Life

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This study examined felt obligation to help others in two domains (close others and society) as protective factors against losses in psychological well-being following functional decline. Lagged-dependent regression models were estimated using data from 849 respondents aged 35–74 years and without any functional limitations at baseline in the 1995–2005 National Survey of Midlife in the United States. Greater felt obligation to help close others protected against declining self-acceptance in the face of more severe functional decline, and greater felt obligation to help society protected against declining personal growth and self-acceptance. Greater felt obligation to help close others and society protected against increasing depressive symptoms at younger ages in adulthood. Findings suggest the importance for additional research on how aspects of altruism can promote psychological adaptation to declining functional health in middle and later life.

Key Words: Altruism—Compassionate love—Disability—Resilience—Social relationships—Social responsibility.

SCHOLARS have posited a variety of psychosocial resources that can facilitate an individual's adaptation to functional health decline (Bishop, 2005; Livneh, 2001), such as having a strong sense of control and receiving social support. This study aimed to extend understanding of psychosocial resources that promote psychological well-being in the face of declining functional health by examining a factor that previous scholarship has not yet addressed—felt obligation to help others. This study used prospective data from the 1995–2005 National Survey of Midlife in the United States (MIDUS) to investigate felt obligation to help others across two domains of social relationships (close others and society) as buffers against losses in psychological well-being following functional decline in middle and later life. This study also examined whether associations among functional decline, felt obligation to help others, and psychological well-being vary by age.

Felt Obligation to Help Others as a Psychosocial Resource in the Face of Functional Decline

Felt obligation refers to perceiving that one is expected to behave in particular ways toward others (Rossi & Rossi, 1990), with one type of behavior constituting helping others (Stein, 1992). Felt obligation to help others can be conceptualized as an aspect of altruism, which is a broader construct referring to a motivational state directed toward enhancing others' welfare (Batson, 1991). Despite a growing body of research on altruism and individual well-being (Post, 2005), there has been less attention to how an orientation toward helping others might be particularly important for adults facing particular conditions of adversity, such as declining functional health.

Recent theorizing on compassionate love—as a genuine concern for the welfare of others with intentions to alleviate their suffering and to promote their flourishing (Underwood, 2009)—offers preliminary insights regarding processes through which greater felt obligation to help others can serve as an asset in the face of functional decline. First, qualitative studies have found that experiences of compassionate love oftentimes involve a strong, potentially spiritual, sense of connection to others (Mastain, 2006; Monroe, 1996; Oliner & Oliner, 1988; Underwood, 2002). Such experiences might include connecting with a religiously identified transcendent and can also involve a more general view of one's self as connected to all humanity (Mastain, 2006). Being able to perceive one's self as part of a larger, meaningful life whole might facilitate individuals' ability to transcend their own physical self when faced with functional decline and help them to continue to derive feelings of meaning, growth, and a positive sense of self in relationship to others despite functional decline.

Another aspect of compassionate love involves individuals' valuing others at a fundamental level (Mastain, 2006; Monroe, 1996; Oliner & Oliner, 1988; Underwood, 2002). This quality manifests itself in valuing the human worth of all individuals—regardless of their needs for assistance—and recognizing the imperfections of being human (Monroe). Valuing others at a fundamental level further involves defining oneself and others beyond their functional contributions to society (Underwood, 2002). Perhaps having such a perspective can help individuals better accept themselves when

faced with limitations of their own through declining functional health.

Finally, experiences of compassionate love often involve a universalistic orientation that advocates for society to afford all people fundamental rights, such as freedom and health (Mastain, 2006; Monroe, 1996; Oliner & Oliner, 1988; Underwood, 2002). For example, Oliner and Oliner reported that individuals who helped targeted others to survive and escape Nazi-dominated Europe emphasized the importance of applying standards of equity and justice to all human beings and of helping others even when such assistance was likely to be unreciprocated. When individuals face circumstances that make them more dependent on others, such as declining functional health, having a strong belief in humanity's fundamental responsibility for the basic well-being of all others might prepare them to more comfortably accept being the recipient of other people's care and concern.

Functional Decline, Psychological Well-being, Felt Obligation to Help Others, and Age

Although much research on functional decline and psychological well-being has focused on older adults (e.g., Lenze et al. 2001), functional decline is a salient phenomenon to examine at earlier periods of adulthood as well. Previous work suggests that particular sociodemographic subgroups are more likely to experience functional decline earlier in the adult lifespan, including members of racial/ethnic minority groups, women, and adults with lower socioeconomic status (Cleary, Zaborski, & Ayanian, 2004; Kim & Miech, 2009). Furthermore, with increasing rates of obesity and associated health problems, scholars predict that indicators of morbidity—such as declining functional health—are likely to become increasingly common at earlier periods of adulthood (Sturm, Ringle, & Andreyeva, 2004). Moreover, longstanding lifespan developmental theories suggest age-related changes in individuals' orientation to the welfare of others (see, McAdams, 2001, for a discussion). Taken together, this scholarship suggests the importance of examining whether associations among functional decline, felt obligation to help others, and psychological well-being vary by age.

A Multidimensional Perspective on Psychological Well-being

Much research on the psychological consequences of declining functional health has examined depressive symptoms (Bruce, 2001). Recent conceptualizations of mental health, however, suggest that mental ill-being is not synonymous with well-being (Keyes, 2002). Accordingly, in addition to examining increasing negative moods and emotions as a potential consequence of declining functional health, this study also considers two other aspects of well-being that address more positive aspects of well-being. These two dimensions include personal growth (feelings of continued growth and development as a person) and self-acceptance (positive evaluations of one's self and one's past life; Ryff & Keyes, 1995). Theorizing on concern for others as a foundation for continued growth and development in adulthood (Maslow, 1971), as well as for the acceptance of one's self (Underwood, 2005), suggests the importance of examining these particular dimensions of psychological well-being.

Hypotheses

Building from the above-reviewed scholarship, this study examined the following hypotheses (H) and research questions (RQ):

H1: Adults who experience more severe functional decline will report greater losses in psychological well-being than adults who experience less functional decline. *H2:* Adults who report greater felt obligation to help others (close others and society) will report fewer losses in psychological well-being than adults who report less felt obligation to help others. *H3:* Reports of greater felt obligation to help others will beneficially moderate problematic associations between more severe functional decline and greater losses in psychological well-being.

RQ1: Do associations between functional decline and psychological well-being vary by age? *RQ2:* Do associations between felt obligation to help others and psychological well-being vary by age? *RQ3:* Does the extent to which greater felt obligation to help others protect against losses in psychological well-being following more severe functional decline vary by age?

Method

This study used data from the National Survey of Midlife in the U.S. (MIDUS). The MIDUS national probability sample included English-speaking, noninstitutionalized adults who were between the ages of 25 and 74 years in 1995 (Time 1 [T1]). The sample was obtained through random digit dialing. Once a household was recruited into the study, a participant from the household was randomly selected, with older adults and men oversampled to ensure an adequate distribution on the cross-classification of age and gender. At T1, respondents were asked to complete a 30-min telephone survey, followed by a lengthier self-administered, mail-back questionnaire. A total of 3,024 in the MIDUS national probability sample responded to both the telephone survey and self-administered questionnaire (60.8% response rate), and 1,748 respondents completed a follow-up telephone survey and self-administered questionnaire in 2004–2005 (Time 2 [T2], approximately 62% of the respondents who participated in both the telephone survey and self-administered questionnaire at T1 who had not been confirmed deceased as of December, 2005). For a detailed technical report regarding the MIDUS study, see http://midmac.med.harvard.edu./tech.html.

Table 1. Descriptive Statistics for All Analytic Variables (N = 849)

Variable	Mean/percentage[a]	Range
Psychological well-being at T1		
Negative affect	1.40 (0.50)	1–5
Personal growth	6.09 (0.96)	1–7
Self-acceptance	5.72 (1.06)	1–7
Psychological well-being at T2		
Negative affect	1.42 (0.51)	1–5
Personal growth	5.61 (0.98)	1–7
Self-acceptance	5.63 (1.11)	1–7
Felt obligation at T1		
To close others	7.36 (1.71)	0–10
To society	5.90 (2.20)	0–10
Functional decline between T1 and T2	1.08 (2.56)	0–15
Sociodemographic covariates at T1		
Age	49.93 (9.93)	35–74
Female	47%	
Race/ethnicity		
White	89%	
Black	4%	
Latino	4%	
Other race/ethnicity	3%	
Education[b]		
<12 years	5%	
12 years	25%	
13–15 years	40%	
16+ years	29%	
Household income (in $10,000 units)	6.69 (5.32)	0–30
Married	71%	
Employed	80%	
Is a parent	87%	
Psycho-behavioral covariates		
Formal volunteer	49%	
Religious service attendance	2.49 (0.95)	1–4
Contact with friends and family	5.30 (1.82)	1–6
Agreeableness	3.45 (0.49)	1–4
Agency	2.72 (0.66)	1–4
Generativity	2.88 (0.60)	1–4
Parents' generosity to others in childhood	1.69 (0.62)	1–4
Parents' affection in childhood	2.01 (0.65)	1–4
Parents' use of rules in childhood	2.12 (0.58)	1–4

Notes: T1= Time 1; T2 = Time 2. Data are from the 1995–2005 National Survey of Midlife in the United States, including respondents who were at least 35 years old and without functional limitations at Time 1.

[a]Means are reported for continuous variables, and percentages are reported for nominal variables. Standard deviations for continuous variables are reported in parentheses.

[b]Percentages do not sum to 100 because of rounding error.

To limit this study's sample to respondents in middle and later life (Moen & Wethington, 1999), the analytic subsample was restricted to respondents who were at least 35 years old at T1, which excluded 306 respondents. To conduct prospective analyses regarding the psychological consequences of declining functional health, the analytic subsample was further restricted to respondents who reported no functional limitations at T1 (which excluded an additional 593 respondents; see measure of functional decline subsequently). These restrictions yielded a total sample size of 849 respondents. About one third of the analytic sample at T1 was between the ages of 35 and 44 years, 36% was between the ages of 45 and 54 years, 22% was between the ages of 55 and 65 years, and 8% was between the ages of 65 and 74 years.

Measures

Negative affect.—A six-item scale new to the MIDUS was used to measure respondents' experiences of negative mood and emotion, or negative affect (Mroczek & Kolarz, 1998). In the self-administered questionnaires at T1 and T2, respondents were asked how much of the time during the past 30 days they felt: (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. Respondents reported their experiences with each of these indicators using a 5-point scale (1 = *all of the time*; 5 = *none of the time*). Scores on items were reverse coded and averaged such that higher scores indicated more negative affect. Cronbach's alpha for this index was .84 and .82 at T1 and T2, respectively. Table 1 displays descriptive statistics for this and all other analytic variables.

Personal growth and self-acceptance.—The self-administered questionnaires at T1 and T2 included indices to assess personal growth and self-acceptance (Ryff & Keyes, 1995). Ryff (1989) developed these indices as part of a larger measurement index on psychological well-being, constructing items based on theories of optimal human development and mental health. Respondents reported the degree to which they agreed or disagreed with statements on a seven-point continuum. A sample item for the measure of personal growth included "For me, life has been a continuous process of learning, changing, and growth." A sample item for the measure of self-acceptance included "When I look at the story of my life, I am pleased with how things have turned out." Out of consideration for survey instrument length, three-item scales were used at T1 and seven-item scales were used at T2. Scores across items for each subscale were averaged such that higher scores indicated more personal growth or self-acceptance. Cronbach's alpha for the personal growth index was .55 at T1 and .76 at T2, and Cronbach's alpha for the self-acceptance index was .59 at T1 and .85 at T2.

Functional decline.—In the self-administered questionnaires at T1 and T2, respondents were asked to indicate on a 4-point scale how much their health limits them when performing various tasks, including lifting or carrying groceries, bathing or dressing oneself, walking one block, walking several blocks, and climbing one flight of stairs (Lachman & Weaver, 1998). To allow for this study's prospective, longitudinal design, respondents who reported any degree of limitation at T1 were excluded from the analytic sample. Among remaining respondents, scores across the five items at T2 were reverse coded and averaged such that higher scores indicated more severe functional decline between T1 and T2. Cronbach's alpha for this scale at T2 was .88.

Felt obligation to help others.—Following previous studies' distinctions between individuals' orientation to helping

close others versus non–close others (Sprecher & Fehr, 2005), this study examined felt obligation to help others within two domains of social relationships: close others (which includes relationships with family and friends) and society as a whole. Measures of felt obligation in these two domains were collected by employing Rossi's (2001) indices of normative obligation to close others and society. These items, which were included only at T1 of the survey, assess the strength of respondents' internalized norms to help others at some expense to themselves.

Respondents were introduced to the items as a list of "hypothetical situations" and were asked to "rate how much obligation you would feel if they happened to you using a 0 to 10 scale where 0 means 'no obligation at all' and 10 means 'a very great obligation'." Items assessing *felt obligation to help close others* included the following: (a) to drop your plans when your children seem very troubled; (b) to drop your plans when your spouse seems very troubled; (c) to take a friend into your home who could not afford to live alone; (d) to give money to a friend in need, even if this made it hard to meet your own needs; (e) to raise the child of a close friend if the friend died; and (f) to take your divorced or unemployed adult child back into your home. Items assessing *felt obligation to help society* included the following: (a) to pay more for your health care so that everyone had access to health care, (b) to volunteer time or money to social causes you support, (c) to collect contributions for heart or cancer research if asked to do so, and (d) to vote for a law that would help others worse off than you but would increase your taxes. Cronbach's alphas for the indices regarding felt obligation to close others and to society were .80 and .81, respectively, and the correlation between scores on the two scales was .49.

Sociodemographic variables and other covariates.—Given findings from previous studies indicating that a variety of sociodemographic factors are associated with functional decline (e.g., Zimmer & House, 2003), felt obligation to help others (e.g., Marks & Song, 2009), and psychological well-being (e.g., Mroczek & Kolarz, 1998; Ryff & Keyes, 1995), this study included measures of several sociodemographic variables as covariates in multivariate models (see *Data Analytic Sequence*). These measures—which were assessed at T1—included a continuous variable for respondents' *age*, a dichotomous variable for *gender*, a multicategorical variable for *race/ethnicity* (non-Hispanic White, African American, Latina/o, and other race/ethnicity), a multicategorical variable for *educational attainment* (less than 12, 12, 13–15, and 16 or more years), a continuous measure of *household income*, a dichotomous variable for *marital status* (married vs. not), a dichotomous variable for *employment status* (employed vs. not), and a dichotomous measure for *parental status* (has at least one biological or adopted child vs. not).

Furthermore, to investigate associations between felt obligation and psychological well-being net of other psychobehavioral and childhood factors associated with felt obligation (Rossi, 2001) and functional limitations (e.g., Li & Ferraro, 2006), as well as psychological well-being (e.g., Musick & Wilson, 2003), this study included an additional set of statistical controls measured at T1. These variables included a continuous measure of respondents' frequency of *religious service attendance* (1 = *never*; 4 = *more than once a week*), a dichotomous measure indicating whether respondents engaged in *formal volunteer work* within the past year, and a continuous measure of respondents' *contact with friends and family outside of their household* (0 = *never or hardly ever*; 7 = *several times a day*). Scores on two additional scales were used to measure personality characteristics that have been found to be correlated with felt obligation, including a five-item index of *agreeableness* (Cronbach's alpha = .81) and a five-item index of *agency* (Cronbach's alpha = .82; Lachman & Weaver, 1997). Finally, this study included statistical controls for respondents' retrospective reports of three aspects of their childhood family background (Rossi), including a four-item index regarding the extent to which their mothers and fathers were generous toward others (e.g., "How generous and helpful was [your mother] to people outside the family?"; Cronbach's alpha = .75), a 12-item index of mothers' and fathers' affection toward respondents in childhood (e.g., "How much love and affection did [your mother] give you?"; Cronbach's alpha = .91), and a four-item index of mothers' and fathers' use of rules (e.g., "How strict was [your mother] with rules for you?"; Cronbach's alpha = .81).

Data Analytic Sequence

This study estimated a series of ordinary least squares (OLS) models to examine its hypotheses and research questions. Each of the T2 measures of psychological well-being (negative affect, personal growth, and self-acceptance) was regressed on the complete block of covariates, as well as on the corollary measure of psychological well-being at T1. Scores on psychological well-being, functional decline, age, and felt obligation to help close others and society were standardized at their means for ease of interpretation. OLS models employed listwise deletion for missing data; no more than 2% of the analytic sample was missing on any one variable, and less than 10% of the sample was missing across all variables.

To test H1 regarding more severe functional decline as a risk factor for losses in psychological well-being, as well as H2 regarding linkages between higher levels of felt obligation and psychological well-being, Model 1 was estimated in which each dimension of psychological well-being was regressed on functional decline between T1 and T2 as well as on felt obligation to help close others and society. To explore RQ1 and RQ2 regarding potential age differences in

these associations, additional models were estimated that added each two-way interaction term, including *Age* × *Functional limitations* (Model 2), *Age* × *Felt obligation to help close others* (Model 3), and *Age* × *Felt obligation to help society* (Model 4). To test H3 regarding felt obligation as a protective factor against associations of risk between functional decline and more rapidly declining psychological well-being, Models 3 and 4 also included two-way interaction terms between functional decline and each of measures of felt obligation. To explore RQ3, Models 5 and 6 were estimated that added three-way interaction terms among functional decline, age, and each respective measure of felt obligation to help others. To interpret the highest order statistically significant interaction terms, predicted scores were calculated for estimated average change in the given aspect of psychological well-being among relevant subgroups of respondents. The baseline model included respondents in the reference categories on categorical measures of covariates and at the sample mean on continuous measures of covariates.

Results

Functional Decline and Psychological Well-being

Models 1 in Tables 2–4 indicate that respondents who reported more severe functional decline between T1 and T2 also reported greater increases in negative affect ($\beta = .25$, $p < .001$), greater decreases in personal growth ($\beta = -.11$, $p < .001$), and greater decreases in self-acceptance ($\beta = -.07$, $p < .01$). Models 2 in Tables 2–4 provide no evidence for statistically significant interaction terms between functional decline and age (for negative affect, $\beta = -.04$, *ns*; for personal growth, $\beta = -.00$, *ns*; and for self-acceptance, $\beta = .04$, *ns*). In summary, these results provide consistent evidence that functional decline is a risk factor for greater losses in psychological well-being (H1), and results provide no evidence that such associations differ by age (RQ1).

Felt Obligation to Help Others and Psychological Well-being

Models 1 in Tables 2–4 provide no evidence of associations between greater felt obligation to help close others at T1 and change in any of the three dimensions of psychological well-being (for negative affect, $\beta = .04$, *ns*; for personal growth, $\beta = -.00$, *ns*; and for self-acceptance, $\beta = -.03$, *ns*). Moreover, reports of greater felt obligation to help society also were not associated with change in any of the three dimensions of psychological well-being (for negative affect, $\beta = -.05$, *ns*; for personal growth, $\beta = .06$, *ns*; and for self-acceptance, $\beta = .01$, *ns*). Furthermore, Models 3 and 4 in Tables 2–4 provide no evidence for statistically significant two-way interaction terms between age and felt obligation to help close others (negative affect, $\beta = -.01$, *ns*; personal growth, $\beta = .04$, *ns*; and self-acceptance, $\beta = .01$, *ns*), nor evidence for statistically significant interaction terms between age and felt obligation to help society (negative affect, $\beta = .02$, *ns*; personal growth, $\beta = .01$, *ns*; and self-acceptance, $\beta = -.04$, *ns*). In summary, these results provide no evidence that felt obligation to help others is associated with changes in psychological well-being (H2), as well as no evidence that such associations differ by age (RQ2).

Felt Obligation to Help Others as a Protective Factor

Models 3 and 4 in Tables 2–4 display results regarding felt obligation to help close others, as well as to society, as protective factors against more rapidly declining psychological well-being in the face of functional decline. Although the interaction of *Functional decline* × *Felt obligation to help close others* did not achieve statistical significance in the model for self-acceptance ($\beta = .05$, *ns*), the interaction did achieve statistical significance in the model for negative affect ($\beta = -.07$, $p < .05$, but note the three-way age interaction reported subsequently) and personal growth ($\beta = .06$, $p < .05$). Moreover, the interaction of *Functional decline* × *Felt obligation to help society* did not achieve statistical significance in the model for negative affect ($\beta = -.05$, *ns*, but note the three-way age interaction reported subsequently), but the interaction did achieve statistical significance in models with respect to personal growth ($\beta = .07$, $p < .01$) and self-acceptance ($\beta = .07$, $p < .05$).

Models 5 and 6 in Tables 2–4 display results with respect to RQ3 regarding the influence of age on the extent to which greater felt obligation to help others protects against losses in psychological well-being in the face of more severe functional decline. The three-way interaction among age, functional decline, and *felt obligation to help close others* achieved statistical significance in the model for negative affect ($\beta = .07$, $p < .05$), but not in the models for personal growth ($\beta = .02$, *ns*) or self-acceptance ($\beta = -.06$, *ns*). Similarly, the three-way interaction among age, functional decline, and *felt obligation to help society* also achieved statistical significance in the model for negative affect ($\beta = .07$, $p < .05$), but not in the models for personal growth ($\beta = .02$, *ns*) or self-acceptance ($\beta = -.06$, *ns*).

Figures 1 and 2, respectively, display predicted scores regarding the three-way interactions that achieved statistical significance in Models 5 and 6 for negative affect. Both figures indicate that among adults one standard deviation below the sample mean on age (i.e., adults aged 40 years at T1) and with lower levels of felt obligation to help close others or society, a standard deviation increase in functional decline was associated with nearly a half of a standard deviation greater predicted increase in negative affect. Among adults aged 40 years at T1 and with higher levels of felt obligation to help close others or society, a standard deviation increase in functional decline was associated with only

Table 2. Time 2 Negative Affect[a] Regressed on Age, Functional Limitations, and Felt Obligation to Help Close Others and Society

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	β	β	β	β	β	β
Age	−.12*** (.04)	−.12*** (.04)	−.12*** (.04)	−.12*** (.03)	−.13*** (.04)	−.13*** (.04)
Negative affect, T1	.39*** (.03)	.39*** (.03)	.39*** (.03)	.39*** (.03)	.39*** (.03)	.39*** (.03)
Functional limitations	.25*** (.03)	.26*** (.03)	.26*** (.03)	.26*** (.03)	.27*** (.03)	.25*** (.03)
Felt obligated to close others	.04 (.04)	.05 (.04)	.05 (.04)	.05 (.04)	.04 (.04)	.05 (.04)
Felt obligated to society	−.05 (.04)	−.05 (.04)	−.05 (.04)	−.05 (.04)	−.04 (.04)	−.05 (.04)
Age ×						
Functional limitations		−.04 (.03)			−.05 (.03)	−.05 (.04)
Felt obligated to close others			−.01 (.03)		−.01 (.03)	
Felt obligated to society				.02 (.03)		−.04 (.03)
Functional limitations ×						
Felt obligated to close others			−.07* (.03)		−.07** (.03)	
Felt obligated to society				−.05 (.03)		−.04 (.03)
Functional limits × Age ×						
Felt obligated to close others					.07* (.03)	
Felt obligated to society						.07* (.04)
Constant	.15 (.40)	.16 (.40)	.16 (.40)	.14 (.40)	.19 (.40)	.10 (.40)
R^2	.28	.28	.29	.29	.29	.29
Valid *n*	771	771	771	771	771	771

Notes: Data are from respondents who were at least 35 years old at T1 and who reported no functional limitations at T1 in the 1995–2005 National Survey of Midlife in the United States. All models included as covariates measures of respondents' gender, race/ethnicity, household income, education, marital status, work status, parental status, religious participation, formal volunteering, social integration, and parental generosity, affection, and use of rules in respondents' childhood.

[a] Scores on negative affect were standardized at the sample mean.

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$ (two-tailed).

about one fifth of a standard deviation greater predicted increase in negative affect. Among adults one standard deviation above the sample mean on age (i.e., adults aged 59 years at T1), a standard deviation increase in functional decline was associated with about one fifth of a standard deviation greater predicted increase in negative affect regardless of felt obligation to help close others or society.

Figures 3–5 display predicted scores with respect to the two-way interaction terms that achieved statistical significance (Table 3, Models 3 and 4; Table 4, Model 4). Figure 3 indicates that predicted decreases in personal growth among respondents who reported more severe functional decline were 64% larger among respondents who reported lower levels of felt obligation to help close others in contrast to

Table 3. Time 2 Personal Growth[a] Regressed on Age, Functional Limitations, and Felt Obligation to Help Close Others and Society

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	β	β	β	β	β	β
Age, T1	.03 (.03)	.03 (.03)	.03 (.03)	.03 (.03)	.03 (.03)	.03 (.03)
Personal growth, T1	.30*** (.03)	.30*** (.03)	.31*** (.03)	.31*** (.03)	.31*** (.03)	.31*** (.03)
Functional limitations	−.11*** (.03)	−.09*** (.03)	−.12*** (.03)	−.12*** (.03)	−.12*** (.03)	−.12** (.03)
Felt obligated to close others	−.00 (.04)	−.00 (.04)	−.01 (.04)	−.01 (.04)	−.01 (.04)	−.01 (.04)
Felt obligated to society	.06 (.04)	.06 (.04)	.05 (.04)	.06 (.04)	.05 (.04)	.06 (.04)
Age ×						
Functional limitations		−.00 (.03)			−.01 (.03)	−.03 (.03)
Felt obligated to close others			.04 (.03)		.04 (.03)	
Felt obligated to society				.01 (.03)		−.03 (.03)
Functional limitations ×						
Felt obligated to close others			.06* (.03)		.05 (.03)	
Felt obligated to society				.07** (.03)		.08** (.02)
Functional limits × Age ×						
Felt obligated to close others					.02 (.03)	
Felt obligated to society						.02 (.03)
Constant	−2.28*** (.39)	−2.28*** (.39)	−2.28*** (.39)	−2.25*** (.39)	−2.26*** (.39)	−2.24*** (.30)
R^2	.34	.34	.34	.34	.34	.34
Valid *n*	778	778	778	778	778	778

Notes: Data are from respondents who were at least 35 years old at T1 and who reported no functional limitations at T1 in the 1995–2005 National Survey of Midlife in the United States. All models included as covariates measures of respondents' gender, race/ethnicity, household income, education, marital status, work status, parental status, religious participation, formal volunteering, social integration, and parental generosity, affection, and use of rules in respondents' childhood.

[a] Scores on personal growth were standardized at the sample mean.

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$ (two-tailed).

Table 4. Time 2 Self-acceptance[a] Regressed on Age, Functional Limitations, and Felt Obligation to Help Close Others and Society

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	β	β	β	β	β	β
Age, T1	.13*** (.03)	.13*** (.03)	.13*** (.03)	.13*** (.03)	.13*** (.03)	.13***
Self-acceptance, T1	.44*** (.03)	.44*** (.03)	.44*** (.03)	.44*** (.03)	.44*** (.03)	.44*** (.03)
Functional limitations	−.07** (.03)	−.09** (.03)	−.08** (.03)	−.08** (.03)	−.09** (.03)	−.08** (.03)
Felt obligated to close others	−.03 (.01)	−.04 (.03)	−.04 (.03)	−.04 (.03)	−.03 (.03)	−.04 (.03)
Felt obligated to society	.01 (.03)	−.05 (.04)	.00 (.03)	.01 (.03)	.00 (.03)	.01 (.03)
Age ×						
Functional limitations		.04 (.03)			.04 (.03)	.04 (.03)
Felt obligated to close others			.01 (.03)		.01 (.03)	
Felt obligated to society				−.04 (.03)		−.04 (.03)
Functional limitations ×						
Felt obligated to close others			.05 (.03)		.06 (.03)	
Felt obligated to society				.07* (.03)		.06 (.03)
Functional limits × Age ×						
Felt obligated to close others					−.06 (.03)	
Felt obligated to society						−.06 (.03)
Constant	−1.41*** (.38)	−1.42*** (.38)	−1.40*** (.38)	−1.38*** (.38)	−1.45*** (.38)	−1.36*** (.38)
R^2	.40	.40	.40	.40	.40	.40
Valid *n*	778	778	778	778	778	778

Notes: Data are from respondents who were at least 35 years old at T1 and who reported no functional limitations at T1 in the 1995–2005 National Survey of Midlife in the United States. All models included as covariates measures of respondents' gender, race/ethnicity, household income, education, marital status, work status, parental status, religious participation, formal volunteering, social integration, and parental generosity, affection, and use of rules in respondents' childhood.

[a] Scores on self-acceptance were standardized at the sample mean.

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$ (two-tailed).

respondents who reported higher levels of felt obligation to help close others. Figure 4 indicates that among respondents low on felt obligation to help society, predicted decreases in personal growth among respondents who reported more severe functional decline were 76% larger than predicted decreases in personal growth among respondents who reported greater felt obligation to help society. Furthermore, Figure 5 indicates that predicted decreases in self-acceptance among respondents who reported more severe functional decline were 89% larger among respondents who reported lower levels of felt obligation to help society in contrast to respondents who reported higher levels of felt obligation to help society.

In summary, these results provide some evidence in support of greater felt obligation to help others as a protective factor against declining personal growth and self-acceptance following more severe functional decline. These results also provide evidence in support of greater felt obligation to help others as a protective factor against increasing negative affect following more severe functional decline among younger adults.

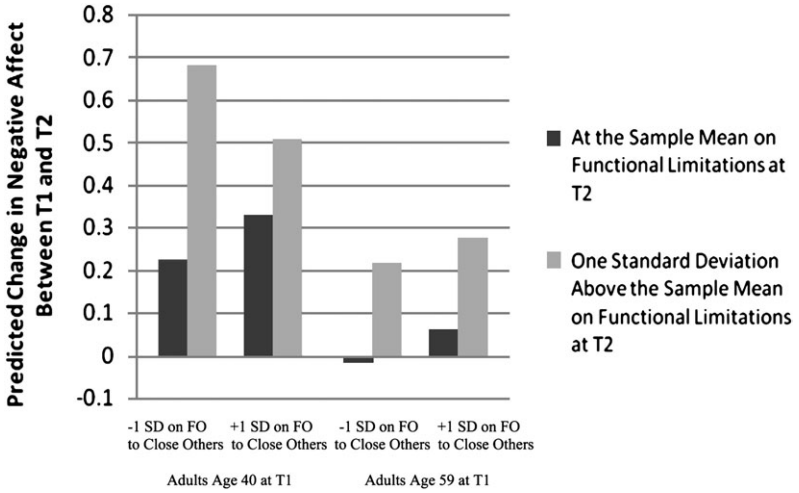

Figure 1. Predicted change in standardized scores on negative affect by age, functional decline, and felt obligation to help close others. SD = standard deviation; FO = felt obligation; data are from the 1995–2005 National Survey of Midlife in the United States.

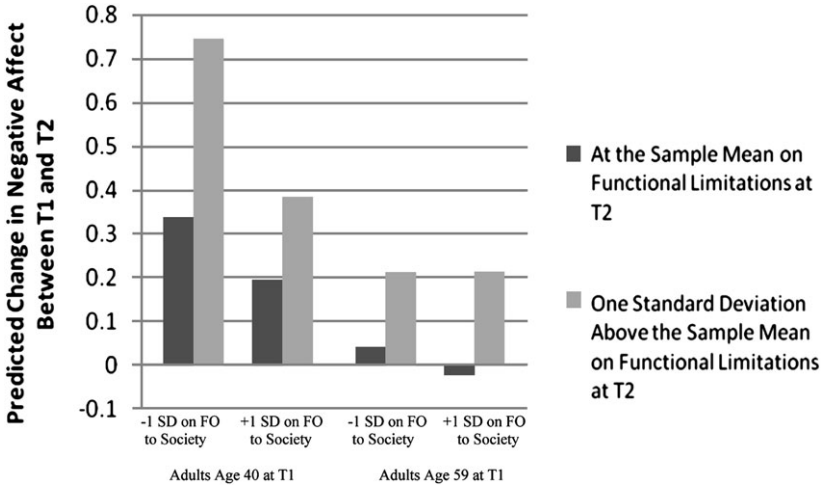

Figure 2. Predicted change in standardized scores on negative affect by age, functional decline, and felt obligation to help society. SD = standard deviation; FO = felt obligation; data are from the 1995–2005 National Survey of Midlife in the United States.

Discussion

The purpose of this study was to examine felt obligation to help others within two domains (close others and society) as protective factors against losses in psychological well-being following functional decline and to examine differences by age. Results provided evidence in support of felt obligation to help society as a protective factor against losses in personal growth and self-acceptance, as well as felt obligation to help close others as a protective factor against losses in personal growth. Also, younger adults reported a smaller increase in negative affect following more severe function decline if they reported greater felt obligation to help close others and/or society.

This evidence for felt obligation to help others as a protective factor against losses in psychological well-being following greater functional decline supports expanded conceptualizations of ways in which social relationships can influence individuals' psychological well-being. A longstanding body of work has addressed the mental health benefits of receiving others' support, particularly during times of stress (Uchino, 2004). Parallel to this area of research, a more recent body of scholarship has emerged regarding the potential mental health benefits of *giving* support to others (e.g., Liang, Krause, & Bennett, 2001; Thoits & Hewitt, 2001). Findings from this study suggest the importance of continuing to examine ways in which aspects of altruism, such as felt obligation to help others, can promote psychological well-being not only among adults in general but also particularly among those adults confronting particular challenges, such as declining functional health (for other examples, see Brown, Brown, House, & Smith, 2008; Li & Ferraro, 2007; Greenfield & Marks, 2004).

Findings from qualitative studies on experiences of compassionate love provide insights on processes through which felt obligation can protect against losses in psychological well-being following functional decline, such as by encouraging individuals' sense of connection and a universalistic orientation (Underwood, 2002). Theorizing on how more behavioral aspects of altruism—such as formal volunteering—promote psychological well-being has largely addressed other, yet related, factors, including self-efficacy and self-esteem (Thoits & Hewitt, 2001). Studies that employ more refined measures of various and theoretically informed aspects of altruism, as well as of psychosocial factors linking these aspects to psychological well-being, and that use data analytic techniques to model these factors as being related-yet-distinct from each other can help to better specify the complex causal pathways among various aspects of altruism, other psychosocial factors, functional health, and psychological well-being.

This study also tested for age differences in its focal associations. Results indicated that felt obligation to help close others and/or society served as stronger protective factors against increasing negative affect following functional decline among younger adults. This finding, in part, is consistent with classic developmental theorizing, which suggests that concern for the welfare of others—particularly concern for future generations—is particularly salient in midlife relative to earlier and later periods of the life course (e.g., Erikson, 1950). Nevertheless, empirical evidence regarding the extent to which concern for others is most central in midlife has been mixed (see McAdams, 2001, for a review). This study's finding of some age-associated differences in the protective effects of felt obligation to help others suggests continued focus on lifespan contexts that might alter ways in which functional decline and various dimensions of altruism are associated with psychological well-being. The finding of a weaker protective effect with increasing age, specifically in terms of negative affect and not personal growth or self-acceptance, suggests the importance of considering multiple dimensions of psychological well-being within lifespan research on altruism and well-being.

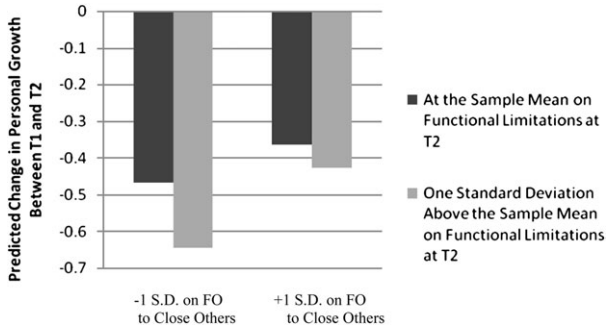

Figure 3. Predicted change in standardized scores of personal growth by functional decline at levels of felt obligation to help close others. SD = standard deviation; FO = felt obligation; data are from the 1995–2005 National Survey of Midlife in the United States.

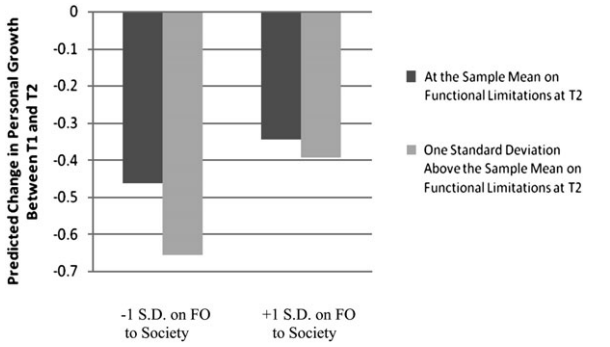

Figure 4. Predicted change in standardized scores of personal growth by functional decline at levels of felt obligation to help society. SD = standard deviation; FO = felt obligation; data are from the 1995–2005 National Survey of Midlife in the United States.

Despite this study's evidence for felt obligation to help others as a protective factor against losses in psychological well-being following functional decline, several of its features limit the extent to which conclusions can be drawn. First, this study draws on theorizing on compassionate love to specify processes through which felt obligation to help others might buffer against losses in psychological well-being following functional decline. Accordingly, additional studies that utilize direct measures of compassionate love (see Fehr & Sprecher, 2009, for an example) are necessary to examine the extent to which aspects of compassionate love account for the protective effects found and to advance understanding of processes underlying these associations.

Also, because the measure of felt obligation was included only at the first wave of the survey, this study was not able to account for potentially dynamic changes in felt obligation, which might, in part, be a function of changes in psychological well-being and functional health. Similarly, because functional health was assessed only at the beginning and end of a 10-year interval, this study was unable to include a more nuanced measure of dynamic trajectories of functional limitations and psychological well-being. (The 10-year interval between measurement occasions might also help to account for the relatively small sizes of associations among functional decline, felt obligation to help others, and psychological well-being.) Overall, research that collects measures of functional health, felt obligation, and psychological well-being at multiple time points is necessary for better understanding the sequencing of causal processes linking these experiences. An additional limitation is the potential for nonrandom response at T1 of the survey, as well as nonrandom attrition across the 10-year study period, to bias estimates of population parameters (Acock, 2005).

Despite these limitations, this study suggests the importance of additional research on how felt obligation to help others and other aspects of altruism can protect against losses in psychological well-being following functional decline. For example, although previous research has identified predictors of aspects of altruism within the U.S. adult population as a whole (Smith, 2009), studies are necessary to understand processes toward orientations to help others among individuals with impaired functional health. Additional studies are also necessary to identify the potentially complex processes through which felt obligation to help others promotes psychological well-being in the face of functional decline—particularly at diverse ages throughout adulthood. Advancing such understanding can help better inform efforts to optimize life quality among adults with functional impairments.

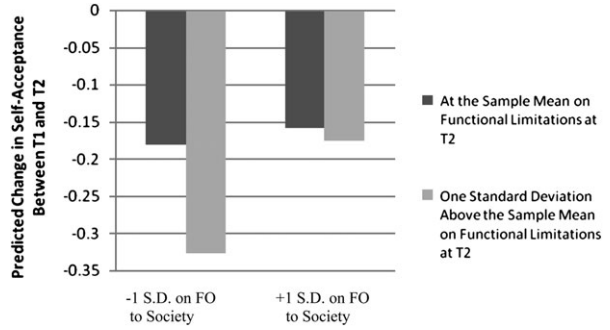

Figure 5. Predicted change in standardized scores of self-acceptance by functional decline at levels of felt obligation to help society. SD = standard deviation; FO = felt obligation; data are from the 1995–2005 National Survey of Midlife in the United States.

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