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### Compassionate Motivation and Compassionate Acts across the Adult Life Course: Evidence from US National Studies

Nadine F. Marks and Jieun Song

... The human being is so constructed that he presses toward fuller and fuller being and this means pressing toward what most people would call good values, toward serenity, kindness, courage, honesty, love, unselfishness, and goodness. (—Abraham Maslow (1968, p. 155))

#### Introduction

"Compassionate love" is not yet a phrase typically in wide use in the fields of adult development and life-course sociology, yet related theoretical work in these areas of scholarship has led to population assessment of constructs related to the model of compassionate love guiding this volume (see Underwood, Chapter 1). For example, inclusion of measures for some types of compassionate norms that may be viewed as motivating factors for compassionate love, as well as measures for some types of compassionate acts (i.e., positive behaviors directed toward others) have become increasingly included in contemporary social science surveys (see also Tom Smith, Chapter 4, this volume).

The first aim of this chapter is to discuss links between the scientific study of compassionate love and other theoretical and empirical work related to adult development and life-course studies that has included attention to issues of generativity, social responsibility, and giving to others (both social support and caregiving). Specifically, we suggest that the biopsychosocial model of compassionate love is compatible with contemporary overarching biopsychosocial theories of human development, and we describe core ideas from Maslovian theory, Eriksonian theory, and social exchange theories that have led to measurement of constructs relevant to the science of compassionate love in US population surveys. Next, with the aim of contributing to an adult life-course population perspective on compassionate love, we provide exemplary descriptive analyses of how selected compassion-related norms (i.e., motivational factors: altruistic normative obligation, normative obligation to family and friends) and compassionate acts of love (i.e., positive behaviors: overall assessment of one's contribution to the well-being of others; volunteer work; giving emotional, instrumental, and caregiving support to kin and nonkin) vary by sociocultural location as indexed by age, gender, race/ethnic, educational, and income-group status among US adults participating in the National Survey of Midlife in the United States 1995 and the National Survey of Families and Households 1987–1993. We conclude with a discussion of directions for future complementary research.

#### Links between Constructs in the Compassionate Love Model and Constructs in Other Adult Developmental and Life-Course Research

The most prevalent contemporary overarching theoretical orientations to life-course development are biopsychosocial systems frameworks that emphasize biological, psychological, and social factors in reciprocal interaction over time to shape human development and action. Two major examples of such frameworks are Bronfenbrenner's bioecological systems theory (Bronfenbrenner, 1989; Bronfenbrenner & Morris, 1998) and the life-course perspective (Elder, Johnson, & Crosnoe, 2003; Featherman, 1983; Settersten, 2003).

The model of compassionate love guiding this volume is also very much a biopsychosocial model, and therefore is very compatible with these overarching models of human development and behavior. The biological element in the compassionate love model involves a consideration of the biological substrate that provides the basis for a socioemotional capacity for compassionate love, possibly through an evolutionarily adaptive capacity for empathy (e.g., Preston & de Waal, 2002) and/or attachment (Mikulincer & Shaver, 2005; Mikulincer, Shaver, & Gillath, Chapter 8, this volume).

The psychological domain in the compassionate love model emphasizes cognitive, motivational, and emotional factors whereby individuals consciously choose to be sensitive and responsive to the needs of others, value others, and sometimes respond to others at cost to self (see, Underwood, 2002; Underwood, Chapter 1, this volume). At least two theoreticians of life-span development have contributed ideas that lead to an expectation that compassionate love would be psychologically expectable among healthy adults – Abraham Maslow and Erik Erikson.

#### Maslovian Theory and Compassionate Love

Maslow was a germinal figure in helping to provide a foundation for what is today called "positive psychology" – that is, the study of positive subjective experience, positive individual traits, and positive institutions (Aspinwall & Staudinger, 2003; Keyes & Haidt, 2003; Peterson & Seligman, 2004; Seligman & Csikszentmihalyi, 2000; Seligman, Steen, Park, & Peterson, 2005; Snyder & Lopez, 2002). Maslow is most famous for his theory of human motivation, which posited a "hierarchy of needs." Specifically, Maslow suggested that individuals will be first motivated to satisfy basic physiological needs (e.g., for food and drink). Given satisfaction of physiological needs, motivation to satisfy safety needs comes into play; subsequently, belongingness and love needs, followed by esteem needs, predominate as motivating factors. When all of these basic needs are reasonably satisfied, Maslow suggested that the individual is motivated to further move toward "self-actualization" – i.e., the unique expression of a person's innate potentials (Maslow, 1954).

What is less understood about Maslow's work and theorizing is that when he empirically studied self-actualizers, he found that they almost invariably reported that they became intrinsically motivated by what he called the "Being-needs" – the needs for beauty, truth, justice, love, and care for others (Maslow, 1968). When self-actualizers described how they thought about what they felt most deeply "called" to do in their lives, there was almost always a theme of "service to others" in whatever the activity might be – whether it was homemaking, statemaking, art, or prayerful contemplation. Maslow became intrigued with the fact that among self-actualizers there was a synergetic process whereby doing what was most expressive of the highest potential of the individual self was also serving the greatest good of others and the community (Maslow, 1968).

Maslow's last book, *The Farther Reaches of Human Nature* (published posthumously after his sudden death in 1970) outlined even more of his ideas about how society might be structured to provide for basic needs and thereby contribute toward the evolution of more self-actualizers who, in turn, would also be expected to act synergetically to promote the greatest good of others (Maslow, 1971). Maslow's theoretical orientation and empirical work is therefore compatible with the view that human nature is intrinsically designed to facilitate greater motivation toward compassionate acts if basic survival, safety, psychological, and social needs are satisfied.

#### Eriksonian Theory and Compassionate Love

In a somewhat kindred vein, Erik Erikson (1950) developed a very influential developmental theory in the early 1950s that emphasized stages of development with potential relevance for conceptualizing the evolution of compassionate love in adulthood. For Erikson, the first developmental stages of childhood included resolving challenges of security (vs. insecurity), autonomy (vs. shame and doubt), initiative (vs. guilt), and industry (vs. inferiority). In adolescence and young adulthood the challenges shifted to establishing a coherent identity (vs. role confusion), and then moving on to intimacy (vs. isolation). The next developmental challenge, expected to occur after identity and intimacy were achieved in adulthood, was generativity (vs. stagnation). (The final posited developmental challenge was ego integrity vs. despair, expectable in late adulthood.) Generativity was defined by Erikson as a stage characterized by "care for the next generation."

It is important to remember that when Erikson was first formulating this theory, it was one of the first developmental theories to attempt to map out developmental expectations across the entire life span. Historically, as Erikson developed his theory in the late 1940s and early 1950s, he was doing so during a period when the vast majority of US adults were getting married in their early 20s and beginning to have children quite quickly thereafter. The typical challenge of life after getting married (i.e., resolving the challenge of intimacy) that he observed for adults around him was concern for taking care of children – i.e., taking care of the next generation. Erikson noted that in taking on the social role of parent, most adults made what he postulated to be a healthy adult developmental shift to a focus beyond the self, to self-sacrifice, and to the expression of compassionate love toward children. Parenting was then and is still now a significant role experience for the vast majority of adults (about 90% of current middle-aged US adults are biological, adoptive, and/or stepparents; Marks, Bumpass, & Jun, 2004).

However, Erikson (1950) also expanded his concept of generativity beyond parenting – suggesting that work in the world on behalf of future generations and other contributions to society were also evidence of the generativity that is developmentally appropriate during middle adulthood. For example, he wrote a psychobiography of Gandhi (Erikson, 1969) to illustrate generativity that was instantiated in other work in the world in service and care for others that might well also be considered self-transcending compassionate love for others.

Dan McAdams and his colleagues have led the way in bringing renewed conceptual and empirical attention to generativity (de St. Aubin, McAdams, & Kim, 2004; McAdams 2001, 2006; McAdams & de St. Aubin,

1992; McAdams, Hart, & Maruna, 1998). McAdams and de St. Aubin's (1992) theoretical formulation conceptualizes generativity as a "configuration of seven psychosocial features constellated around the personal (individual) and cultural (societal) goal of providing for the next generation" (p. 1004). Cultural demand and inner desire are posited as motivational sources for generativity. These two factors then combine to promote a conscious concern for the next generation. If grounded in a supportive belief in the goodness of the human species, concern may stimulate generative commitment. Generative action may be motivated directly by cultural demand or inner desire, but also can be derived from the adult's commitments to generative activities and goals. Generative action - which includes the behaviors of creating, maintaining, and offering to others - may reciprocally influence later generative commitments. Finally, the model suggests that a person's *narration* (i.e., subjective verbal account) of their life story related to generativity is important to consider, because it holistically synthesizes the meaning of the complex relations among the other six features of the generativity model for a given individual.

Generativity, with its focus on providing for the next generation as outlined by the McAdams and de St. Aubin model, is not synonymous with the concept of compassionate love guiding this volume. Yet the two concepts do share some overlap in their emphasis on care for others and action that moves beyond a focus only on care for self.

## Anthropological and Sociological Theory and Research on Giving to Others

The social components of the compassionate love model enter most prominently as part of the situational factor substrate, where social, environmental, and cultural factors (including norms) are posited to influence compassionate motivation and discernment, which, in turn, influence positive behaviors (compassionate acts, e.g., giving to others). Sociologists and anthropologists have specialized in considering such factors and have had a longstanding interest in studying giving to others – yet this interest has been guided by diverse additional theoretical models.

Sociologists and anthropologists have long recognized the ubiquity of social exchange – both giving and receiving – in all human societies (Sabatelli & Shehan, 1993). Various motives and functions for social exchange have been posited. Often, guided by utilitarian social exchange theory with links to classical economic theory, social exchange theory has emphasized the importance of giving so that you also receive (e.g., Homans, 1961; Thibaut & Kelley, 1959). Guided by a more functionalist approach to social exchange, sociologists and anthropologists have also posited that giving and receiving have a structural benefit for society by

linking people together and promoting social solidarity (Lévi-Strauss, 1969; Mauss, 1954). The benefit of giving in this view is more global and societal – and is not so isolated to an individual benefit. In contrast to a biological basis for motivation, sociologists and anthropologists emphasize the importance of socially generated socialization processes that lead to the internalization of cultural norms that motivate behavior. Most sociologists conceptualize norms as consisting of widely acknowledged rules that specify what a society or social group considers appropriate or inappropriate behavior in particular circumstances (Blake & Davis, 1964). Further, norms are considered to be statements of obligatory actions or evaluative rules (Rossi & Rossi, 1990). The actual measurement of social norms can be challenging, but one approach is to infer norms from strength of perceived obligation to action in specific situations (Rossi & Rossi, 1990).

In life-course studies, interest in social exchanges has led to a considerable literature studying what is often labeled "social support." The main interest here typically has been to see how receipt of social support can be of benefit to individuals – both in routine daily life as well as a protective factor under risk. Life-course sociologists, influenced by both utilitarian and structural-theoretical social exchange models, have therefore often included measures of giving and receiving social support in studies of adults (e.g., Eggebeen & Hogan, 1990; Rossi & Rossi, 1990; Spitze & Logan, 1992). Psychologists interested in adult resilience have also often included measures of receiving support in their studies (although less often measures of giving support; for a review see Cohen & Wills, 1985).

Interestingly, in work on aging, where social support has been expected to be a critical factor in maintaining well-being for the elderly, empirical work has begun to suggest that even among elders, it is usually more valuable for well-being to be on the giving end of social support than on the receiving end. For example, at least for US midlife and older adults, overall, being able to give to adult children, whether reciprocated or not, is associated with better psychological well-being than being overbenefited in exchanges with adult children (Davey & Eggebeen, 1998; Marks, 1995; Mutran & Reitzes, 1984; Stoller, 1985). This finding does not fit with what utilitarian social exchange theory might predict.

Evidence that "it is better to give than to receive" for adult well-being has also led to additional interest in the role that volunteering and other productive activities may provide for well-being (e.g., Keyes & Ryff, 1997; Krause, Herzog, & Baker, 1992; Musick, Herzog, & House, 1999). Research is increasingly documenting that volunteering for others is an important way in which adults may continue to age well and successfully – mentally and physically (Greenfield & Marks, 2004; Moen, Dempster-McClain, & Williams, 1992; Morrow-Howell, Hinterlong, Rozario, & Tang, 2003; Musick et al., 1999; Oman, Thoresen, & McMahon, 1999; Omato, Malsch, & Barraza, Chapter 9, this volume). Individuals report various motives for volunteering (Allison, Okun, & Dutridge, 2002) – but the finding that volunteering leads to better mental and physical well-being is congruent with an Eriksonian developmental perspective that might view volunteering as an instantiation of generativity (broadly construed, as providing care to others), and perhaps even a Maslovian perspective that might guide us to consider volunteering as activity chosen, in some cases, to instantiate elements of self-actualization.

In addition to growth in interest in social support and volunteering, life-course scholars have begun giving more attention to caregiving for persons of all ages who are not able to take complete care of themselves owing to a mental or physical illness or disability. Demographic trends toward greater longevity, more years spent with potentially chronic diseases (in contrast to quick deaths due to acute illnesses), smaller families, and higher rates of marital dissolution (leading to a larger number of single adults, especially women, at midlife and older ages) have all contributed to a relatively high prevalence of caregiving by adults in contemporary societies (Biegel, Sales, & Schulz, 1991; Caregiving in the US, 2004; Marks, 1996). Health-care institutional changes emphasizing earlier hospital discharge and greater reliance on informal health care also have contributed to a greater need for family and friend caregivers (Biegel et al., 1991). Caregiving research has mushroomed since the early 1980s, and there is now more inclusion of measures of caregiver status in social science surveys (Hirst, 2005; Marks, 1996; Turner, Killian, & Cain, 2004; Wolff & Kasper, 2006).

In sum, although population studies of human development and human behavior have not typically assessed "compassionate love" per se, guided by contemporary psychological and sociological theoretical and empirical interest in adult development and aging, constructs related to caring about others and giving to others (both kin and nonkin) *have* been included in some larger population studies. Analyses of data from extant studies that include such related measures can contribute to the current scientific understanding of compassionate love and may also help inform the future scientific study of compassionate love. Likewise, continued explicit research on compassionate love stands to make a major contribution to future work on life-course development and aging.

#### Constructs from Contemporary Social Science Surveys Considered in this Chapter

The social elements of the compassionate love model emphasize the fact that compassionate love is expressed *in relation to others* and that motivation, discernment, and actions are shaped, in part, through *interaction*  with others in specific cultural settings and milieux (social, environmental, cultural factors of the situational factor substrate; see Underwood, Chapter 1, this volume). This chapter aims to contribute to understanding how both motivation and positive behaviors may be contingent on physical, social, and cultural factors (also denoted in Underwood's Compassionate Love model) as indexed by age, gender, race/ethnic status, educational status, and income status across the US adult population.

In the next section, we describe analyses of US national data focusing on three constructs related to *motivation* for compassionate love. Specifically, we examine similarities and differences across age, gender, race/ethnic, educational, and income groups in *altruistic normative obligation* (sense of obligation to contribute to the "common good"), *normative obligation to family*, and *normative obligation to friends*, using data from the National Survey of Midlife in the United States (MIDUS) 1995.

We then focus on similarities and differences across age, gender, race/ ethnic, educational, and income groups in one global perceptual construct and seven behavioral constructs assessing *positive behaviors* (compassionate acts). These include *overall self-assessment of one's contribution to the* welfare and well-being of other people; formal volunteer work; giving emotional support to primary kin; giving emotional support to secondary kin and friends; giving instrumental support to primary kin; and giving instrumental support to secondary kin and friends (using data from the MIDUS); as well as providing unpaid caregiving to family; and providing unpaid caregiving to friends and other nonkin (using data from the National Survey of Families and Households [NSFH] 1987–93).

Biopsychosocial overarching theoretical frameworks guided the development of both these national population studies. The Eriksonian and Maslovian concepts of adult generativity and self-actualization, as well as sociological social exchange perspectives emphasizing social solidarity expressed through the giving and receiving of social support, led scholars developing the MIDUS and NSFH to include these measures of compassionate norms and compassionate acts in these surveys.

# Compassionate Norms and Compassionate Acts in the US Adult Population

#### Compassionate Norms across the Adult Life Course

*MIDUS data and sample.* MIDUS 1995 was undertaken by the John D. and Catherine T. MacArthur Foundation Network on Successful Midlife Development (MIDMAC). This interdisciplinary research network was a research initiative of the MacArthur Foundation beginning in the late

1980s and continuing for more than a decade. Its goal was to foster greater understanding of optimal and successful functioning during the relatively understudied midlife decades – roughly ages 40–60 (Brim, Ryff, & Kessler, 2004).

MIDUS 1995 respondents are a nationally representative US population sample of noninstitutionalized persons ages 25 to 74 who have telephones. The sample was obtained through random digit dialing, with an oversampling of older men to guarantee a good distribution on the crossclassification of age and gender. We used a sample weighting variable for our population estimates, which allows the MIDUS sample to match the proportionate composition of the US population on age, sex, race, and education in 1995, and thus helps to correct for differential sample selection probabilities and nonrandom nonresponse to the survey.

MIDUS respondents first participated in a telephone interview that lasted approximately 40 minutes; response rate for the telephone questionnaire was 70%. Respondents to the telephone survey were then asked to complete two self-administered, mail-back questionnaires. The response rate for the mail-back questionnaire was 86.8% of those answering the telephone questionnaire. This yielded an overall response rate of 60.8% for the analytic sample used here, which includes respondents who responded to both parts of the survey (N = 3,032; 1,318 men, 1,714 women). (See http://midmac.med.harvard.edu/research.html for more details on survey design and weighting.)

MIDUS measures of compassionate norms. In the development of MIDUS, MIDMAC member Alice Rossi took leadership in formulating several new measurement items and indices related to social responsibility. (See also Rossi, 2001 for an overview of all the domains and dimensions of social responsibility included in MIDUS, as well as complementary descriptive analyses of some measures included here.) Using the measurement precedent of inferring social norms from the assessment of levels of obligation endorsed across specific situations (Rossi & Rossi, 1990), the new MIDUS measures included some new measures of normative obligation to others.

There is no one consistently agreed-upon definition of altruism (see Post, Underwood, Schloss, & Hurlbut, 2002), but most definitions include some compatibility with Comte's early formulation of altruism as a type of motivational state with the ultimate goal of increasing another's welfare (Batson, 2002). The newly developed MIDUS assessment of *altruistic normative obligation* analyzed for this chapter consisted of a four-item scale. Respondents were asked, "Here is a list of hypothetical situations. Please 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.' If the situation does not apply to

you, please think about how much obligation you would feel if you *were* in this situation." "How much obligation would you feel (a) to pay *more* for your health care so that *everyone* had access to health care? (b) to vote *for* a law that would help others worse off than you but would increase your taxes? (c) to volunteer time or money to social causes you support? (d) to collect contributions for heart or cancer research if asked to do so?" (Cronbach's alpha = .80).

*Normative obligation to primary kin* was assessed with a five-item index also new to MIDUS. Respondents were asked (using the same instruction as for altruism items), "How much obligation would you feel (a) to drop your plans when your children seem very troubled? (b) to call, write, or visit your adult children on a regular basis? (c) to drop your plans when your spouse seems very troubled? (d) to take your divorced or unemployed adult child back into your home? (e) to call your parents on a regular basis?" (Cronbach's alpha = .76).

*Normative obligation to friends* was assessed with three items (developed for MIDUS). Respondents were asked (using the same instruction as for altruism items), "How much obligation would you feel (a) to raise the child of a close friend if the friend died? (b) to take a friend into your home who could not afford to live alone? (c) to give money to a friend in need, even if this made it hard to meet your own needs?" (Cronbach's alpha = .79).

The correlations among the three measures of compassionate norms ranged from .36 (altruistic normative obligation with normative obligation to primary kin) to .57 (normative obligation to kin with normative obligation to friends). These moderate levels of association indicate that these indices are related, yet relatively distinct measures of compassionate norms.

A description of results from analyses of altruistic normative obligation, normative obligation to family, and normative obligation to friends across US adults aged 25–74 in 1995 is provided in Table 5.1. This table provides crosstabulations of weighted means for each of these indices by gender, age, race/ethnic, educational attainment, and household income groups. *T*-tests (across gender groups) and analyses of variance (ANOVA) across other sociodemographic groups were evaluated for each crosstabulation (column of subcategories of a demographic status); where significant overall differences were noted for groups with more than two categories (i.e., all sociodemographic statuses other than gender), post hoc Scheffe tests were conducted to identify significant group differences.

Altruistic normative obligation. The second column of Table 5.1 provides results related to the four-item index of altruistic normative obligation. The overall mean score on the altruistic normative obligation scale was 5.86 (SD = 2.23), indicating a relatively normal distribution for this

scale. Women reported a significantly higher level of altruistic obligation than men (M = 6.10 vs. 5.56). This gender difference finding is congruent with some related previous work that has indicated women rate higher on compassionate love for strangers as well as close others (Sprecher & Fehr, 2005).

An evaluation of differences across age groups also revealed significant effects. Young and early midlife adults (ages 25–44) reported significantly less altruistic obligation than later midlife and young-old adults (ages 45–74). This result may reflect the fact that, on average, later midlife and older adults have greater resources than younger adults, and that this more secure resource base is conducive to developing more sense of altruistic obligation; this interpretation would be consistent with Maslovian theory. It may also be that younger adults are still focusing mainly on their own identity and intimacy issues, whereas later midlife and older adults have moved on developmentally to become more concerned with caring for others, as Eriksonian theory would predict. We must be cautious, though, about making developmental inferences here and in other cases of age differences; we cannot rule out cohort differences as an alternative explanation of any age differences found with these cross-sectional data.

Considering levels of altruistic normative obligation across different race/ethnic groups, results revealed that African Americans reported higher endorsement of altruistic normative obligation than both non-Hispanic whites (i.e., all Caucasians other than Latinos) and Latinos. There were no significant differences, however, in altruistic obligation across educational or income status groups.

The fact that African Americans, a historically very disadvantaged group in the United States, report higher altruistic obligation than either non-Hispanic whites or Latinos is noteworthy. (Supplementary analyses also confirmed that African Americans had the highest means on all four items comprising the scale.) Faced with greater structural constraints, Maslovian theory might have predicted that altruistic obligation ratings would be lower among African Americans. The fact that, instead, ratings are higher suggests there may be a particularly high cultural valuing of communitarianism and altruism in the African American community that is being reflected in this result (Baldwin & Hopkins, 1990). Such a normative explanation would be consistent with a structural social exchange perspective.

Normative obligation to primary kin. The third column of Table 5.1 provides results related to the normative obligation to primary kin index. The overall rating of normative obligation to primary kin for this sample was 8.18 (SD = 1.67). This relatively high rating on a scale of 0 to 10 is consistent with previous research that has demonstrated that the highest normative obligation ratings reported are for primary kin (Rossi & Rossi, 1990).

to Friends, and Overal Education, and House	Self-Assessmen hold Income	t of Personal Contributi	on to the Well-Being of	Others by Gender.	, Age, Race/Ethnicity,
	Unweighted N	Altruistic normative obligation (weighted mean (SD))	Normative obligation to primary kin (weighted mean (SD))	Normative obligation to friends (weighted mean (SD))	Overall personal contribution to the well-being of others (weighted mean (SD))
<i>Gender</i> Women Men	1561 1471	$6.10(2.18)^{a}$ 5.56(2.26)	8.45 (1.55) <sup>a</sup> 7.85 (1.75)	$6.81 (2.18)^{a}$ 6.21 (2.30)	6.85 (2.26) <sup>a</sup> 6.32 (2.19)
Age 25-34 35-44 45-54 55-64 65-74	627 727 720 596 335	5.61 (2.08)A 5.62 (2.16)A 6.11 (2.28)B 6.21 (2.25)B 6.13 (2.46)B	$\begin{array}{c} 8.33 \ (1.52) B \\ 8.09 \ (1.50) AB \\ 8.10 \ (1.79) AB \\ 8.37 \ (1.73) B \\ 7.98 \ (2.01) A \end{array}$	6.98 (1.89)C 6.57 (2.11)BC 6.46 (2.30)B 6.41 (2.45)B 5.80 (2.79)A	6.40 (2.26)A 6.68 (2.09)AB 6.75 (2.17)AB 6.91 (2.35)B 6.37 (2.48)A
Race/ethnicity Non-Hispanic white African American Latino Other race/ethnicity	2513 201 139 91	5.72 (2.19)A 6.89 (2.27)B 5.72 (2.19)A 6.24 (2.17)AB	$\begin{array}{c} 8.22 \ (1.61)^{\rm b} \\ 7.95 \ (1.96) \\ 8.31 \ (1.60) \\ 7.95 \ (1.92) \end{array}$	$\begin{array}{c} 6.50\ (2.24)^{\rm b}\\ 6.84\ (2.34)\\ 6.78\ (2.11)\\ 6.56\ (2.39)\end{array}$	6.56 (2.19) <sup>b</sup> 7.06 (2.52) 6.82 (2.34) 6.57 (2.30)

Table 5.1 Weighted Means for Altruistic Normative Obligation, Normative Obligation to Primary Kin, Normative Obligation

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Education					
Less than 12 years	300	5.83(2.43)n.s.	7.77~(2.00)A	$6.55(2.61)^{\rm b}$	6.41(2.54)A
12 years	888	5.83(2.26)	8.29 (1.66)B	6.67(2.30)	6.69 (2.26)AB
13–15 years	945	5.79(2.24)	8.17 (1.66)B	6.54(2.12)	6.45 (2.26)A
16 years and more	897	6.02(2.06)	8.25(1.44)B	6.36 (2.09)	6.81 (2.01)B
Household income					
Lowest quarter	720	6.02(2.39)n.s.	7.96 (1.91)A	6.76 (2.27)B	6.50(2.53)n.s.
2nd quarter	737	5.86(2.18)	8.31 (1.59)B	6.63 (2.27)AB	6.63(2.25)
3rd quarter	777	5.74(2.18)	8.17 (1.61)AB	6.36 (2.29)A	6.65(2.11)
Highest quarter	798	5.83(2.16)	8.30(1.50)B	6.45 (2.17)AB	6.71 (2.06)
Total sample	3032				
Mean		5.86	8.18	6.55	6.62
SD		2.23	1.67	2.25	2.25
Range		0 - 10	0-10	0-10	0-10
Mater From the National Sur	of Midlife	01 (STICIM) STI adt ai	0F		

Note: From the National Survey of Midlife in the US (MIDUS), 1995.

<sup>a</sup> T-test revealed a significant gender difference.

<sup>b</sup> One-way ANOVA revealed a significant overall difference in mean scores among group (column) categories; no specific significant group differences revealed by post-hoc Sheffe test.

A, B, C: Overall ANOVA was significant and post-hoc Scheffe test revealed groups with the same letter to be a homogeneous subset (i.e., no different in means); groups with distinct letters have significantly different means.

n.s.: One-way ANOVA revealed no difference in mean scores among group (column) categories.

Similar to the results for altruistic normative obligation, an evaluation across gender groups demonstrates that women report significantly higher normative obligation to primary kin than men (M = 8.45 vs. 7.85). This is consistent with previously reported gender differences in normative attitudes toward "kinkeeping" (Rossi & Rossi, 1990).

In terms of age differences, the youngest age group (ages 25–34) and the later midlife group (ages 55–64) report the highest normative obligation to primary kin, and their levels of reported obligation are significantly higher than that of the young-old group (ages 65–74). It may be that upon reaching young-old age adults are beginning to feel they have "paid their dues" already at younger ages, and may feel that some other younger members of the family may now be able to carry more of the burden of family obligations, especially if health and other resources of the older adult are not optimal. Overall, however, the mean of 7.98 of 10 for young-old adults is evidence that normative obligation to primary kin is quite high for all young, midlife, and young-old adults.

ANOVA revealed overall significant race/ethnic group differences in mean scores of normative obligation to primary kin; in post hoc Sheffe analyses, however, significant specific between-group differences did not emerge. Latinos reported the highest mean score among race/ethnic groups (M = 8.31), consistent with a cultural emphasis on familism in Latino families (Vega, 1990).

Among educational groups, the lowest education group (less than 12 years) reported significantly less obligation to primary kin than the other three groups with higher education. A somewhat similar pattern emerged with income, where persons with household incomes in the lowest quarter of the population distribution reported lower normative obligation to primary kin than persons in the second quarter or the highest quarter of the distribution (persons in the third quarter were not significantly different from any of the other groups). These results suggest that having limited educational or income resources may reduce feelings of basic security that might be necessary to generate enhanced feelings of obligations to primary kin; this interpretation would be consistent with a Maslovian theoretical perspective.

Normative obligation to friends. For normative obligation to friends the overall mean is slightly lower than for the other measures of normative obligation – 6.55 (SD = 2.25). This finding is congruent with research indicating that normative obligation to nonkin tends to be lower than normative obligation to primary kin (Rossi & Rossi, 1990), as well as from other research on altruism and compassionate love that emphasizes the greater ease with which individuals tend to report compassionate love for family and "ingroup" members in contrast to nonkin and "outgroup" members (Sprecher & Fehr, 2005). Another possible methodological

reason for the lower rating is the potentially greater commitment suggested by the items tapping nonkin obligation in contrast to kin obligation – e.g., raising the child of a friend who has died vs. dropping your plans when your child is in trouble. Nonetheless, the mean rating for nonkin obligation is still well above the half-way point of the scale – indicating a considerable sense of obligation to support persons not closely linked by genes or marriage.

Consistent with the pattern observed across the other norm measures, women reported significantly higher normative obligation to friends than men (M = 6.81 vs. 6.21). Additionally, the highest normative obligation to friends occurred for the youngest age group (ages 25-34, M = 6.98); the lowest levels of normative obligation to friends was reported by the oldest age group (ages 65–74, M = 5.80). Young adults are more likely to be unmarried and without children, and therefore more involved in activities with nonkin (Gerstel & Sarkisian, 2006); this structural situation may lend itself to more salience of normative obligation to friends. Additionally, an item that asks, for example, about willingness to raise the child of a friend who died may also be more hypothetical and easier to idealistically affirm for younger adults than for older adults who know from more life experience the heavy burden such an actual commitment would entail. The lower ratings among older adults also might be due to their greater likelihood of health and/or structural constraints (e.g., low income, lack of transportation) that could interfere with their ability to generate an extremely high sense of obligation to persons outside the family. This latter interpretation would be consistent with Maslovian theory.

ANOVA results suggested there were overall race/ethnic group and educational attainment group differences in normative obligation to friends; however, post hoc analyses did not yield evidence of specific intergroup differences. Among race/ethnic groups, African Americans had the highest mean score on normative obligation to friends – 6.84. Among educational groups, high-school graduates reported the greatest normative obligation to friends (M = 6.67).

Examining household income group differences, there was evidence that persons in the lowest quarter of the population income distribution reported higher levels of obligation to friends than those in the third quarter of the income distribution (and the highest mean score overall). The second and top income quarter groups were not significantly different from other groups. Similar to the result for African Americans and altruistic obligation, the finding that lower-income persons report the highest obligation to friends is contrary to what a structural constraint or Maslovian perspective might suggest. However, structural need owing to lower income might also provoke more sense of interdependence with friends, and thereby lead to more sense of obligation to friends to promote joint well-being.

#### Compassionate Acts across the Adult Life Course

*MIDUS measures of compassionate acts.* One global perceptual item assessing *overall personal contribution to the well-being of others* was also included in MIDUS. Respondents were asked, "Using a scale from 0 to 10 where 0 means 'worst possible contribution to the welfare and wellbeing of other people' and 10 means 'the best possible contribution to the welfare and well-being of other people,' how would you rate your contribution to the welfare and well-being of other people these days? Take into account all that you do, in terms of time, money, or concern, on your job, and for your family, friends, and the community."

Table 5.1 reports results for this global assessment. The overall rating for this item across the entire sample was relatively high (M = 6.62, SD = 2.25), with women scoring higher than men (M = 6.85 vs. 6.32). Across age, the highest rating of contribution was from persons aged 55–64 who rated this significantly higher than either the youngest adults (aged 25–34) or the young-old adults (aged 65–74). This may reflect, in part, the structural role expectations – and opportunities – that go along with the considerable range of family, work, and community roles that adults are typically enacting during the midlife years (Brim et al., 2004). For example, within families, midlife adults often occupy "sandwichgeneration" family roles that involve giving support to both children and adults. (See also Fleeson, 2001, for expanded age-related analyses related to the MIDUS measure of overall contribution to the welfare of others.)

ANOVA analyses suggested overall significant differences by race/ ethnicity, although post hoc analyses did not yield evidence of specific between-group differences. The mean rating of African Americans was the highest among race/ethnic groups -7.06.

Among educational status groups, there was clear evidence that persons with the highest education (16 or more years) rated their contribution to others significantly higher than persons with the lowest level of education (under 12 years) or third highest level of education (13–15 years). This finding may be a result of the greater leadership opportunities in work and community roles that are afforded to persons with higher education. Interestingly, however, there were no significant differences in ratings of personal contribution to others across household income groups.

Additional analyses of behavioral measures of compassionate acts across the adult life course were conducted using data from the MIDUS. *Volunteering* was assessed with four items. Respondents in MIDUS were asked, "On average, how many hours per month do you spend doing

formal volunteer work of any of the following types: (a) hospital, nursing home, or other health-care-oriented volunteer work, (b) school or other youth-related volunteer work, (c) volunteer work for political organizations or causes, (d) volunteer work for any other organization, cause or charity?" A dichotomous measure of "any volunteering" was created where respondents were coded 1 if they reported one or more hours of volunteering in any of these contexts. Additionally, a continuous measure of volunteering was created across all respondents (volunteers and nonvolunteers) where hours were summed across the four items. In many cases respondents to the MIDUS self-administered questionnaire only answered questions where they had something other than zero hours to report. Therefore, for this variable and all other variables that included multiple items assessing hours for different types of related activities, if respondents provided a valid answer (i.e., 0 to any number of hours) to any of the questions, a zero was imputed for any questions left without an answer, and they were assigned a valid score for the respective index. If respondents did not provide an answer for any of the questions for a respective index, they were considered missing on the index and were excluded from analyses.

*Emotional support to primary kin* was assessed with four items, and two measures (dichotomous and continuous) were created in a manner similar to the volunteering measures. Respondents were asked, "On average, about how many hours per month do you spend giving informal emotional support (such as comforting, listening to problems, or giving advice) to each of the following people? (If none, or if the question does not apply because, for example, you have no spouse or partner, enter "0"): (a) to your spouse or partner, (b) to your parents or the people who raised you, (c) to your in-laws, (d) to your children or grandchildren?"

*Emotional support to secondary kin and friends* was assessed with two items that were used to create both a dichotomous and a continuous measure. Respondents were provided the same prompt as for emotional support to primary kin, but were additionally queried about providing emotional support (a) to any other family members or close friends and (b) to anyone else (such as neighbors or people at church).

Dichotomous and continuous measures of *instrumental support to primary kin* were created using data from three items. Respondents were asked, "On average, about how many hours per month do you spend providing unpaid assistance (such as help around the house, transportation, or childcare) to each of the following people? (If none, enter "0"): (a) to your parents or the people who raised you, (b) to your in-laws, (c) to your grandchildren or grown children?"

Two similar measures of *instrumental support to secondary kin and friends* were created using data from two items. Respondents were queried similarly as for primary kin about instrumental support, but were

additionally asked about giving instrumental support (a) to any other family members or close friends, and (b) to anyone else (such as neighbors or people at church).

Correlations among the dichotomous MIDUS measures of compassionate acts ranged from .04 (volunteering with instrumental support to kin) to .42 (emotional support to kin with emotional support to nonkin). Correlations between compassionate norm measures and dichotomous measures of compassionate acts ranged from .02 (altruistic normative obligation with emotional support to primary kin) to .30 (altruistic normative obligation with overall contribution to the well-being of others).

The weighted percentage of respondents reporting any volunteering or giving support, as well as means for hours of volunteering and provision of support, are provided in Table 5.2. In addition to *t*-test and ANOVA analyses of group differences with follow-up post hoc Sheffe tests for continuous measures, chi-square tests of group differences were conducted for categorical (proportion) estimates.

*Volunteering*. The first column of Table 5.2 provides information about the weighted percentage of persons indicating they provided any amount of formal volunteering during the last month; the second column provides information about the mean number of hours of volunteering reported per month. Across the entire sample, 40.8% of adults ages 25–74 reported some level of volunteering. This overall proportion is somewhat less than the 56% reported in a 1998 Gallup Poll for the Independent Sector (Wilson, 2000), but relatively comparable to prevalence rates in the 1989 Americans' Changing Lives Study, which used somewhat similar items to measure the construct (Wilson & Musick, 1997). The mean number of hours of volunteering during the last month reported across the entire sample (volunteers and nonvolunteers) was 5.8 (SD = 16.4).

A significantly higher proportion of women than men reported volunteering (40.1% vs. 36.0%), although mean hours spent volunteering per month did not differ by gender. There were significant differences across age groups in proportion volunteering, with midlife adults (ages 35–54) evidencing the highest rates. However, mean hours of reported volunteering did not differ across age groups.

There were race/ethnicity differences in proportion of respondents who volunteer, suggesting that non-Hispanic whites and persons of other race/ethnicity had the highest rates, and Latinos the lowest rates. Among race/ethnic groups, Latinos reported the fewest hours of volunteering, and this was significantly less than persons of "other" race/ethnicity.

Among education groups, there was a positive linear relationship between education and proportion of respondents reporting volunteering. In terms of mean hours spent volunteering during the last month, persons

			Emo	tional	Emotio	nal support	Instru	mental	Instrumer	ital support
	Volu (hrs	Inteering /month)	supp prim (hrs/i	ort to ary kin nonth)	to se kin/ (hrs/	:condary 'friends 'month)	supp prima (hrs/r	ort to ıry kin nonth)	to sec kin/ † (hrs	ondary riends :/mo)
	% any	mean (SD)	% any	mean (SD)	% any	mean (SD)	% any	mean (SD)	% any	mean (SD)
<i>Gender</i> Women	40.1 °	6.2	93.6n.5	95.7	88.6°	28.7	59.6 <i>m</i> .s	23.6	56.3°	15.0
		(16.6)n.s.		$(242.5)^{a}$		$(91.3)^{a}$		$(79.1)^{a}$		$(51.6)^{a}$
Men	36.0	5.2	91.8	54.2	78.6	11.4	59.1	15.4	61.6	9.7
		(16.1)		(115.7)		(27.8)		(56.4)		(31.1)
Аде										
25-34	33.8°	6.4	95.1°	105.1	92.2 <sup>c</sup>	28.7	56.6 <sup>c</sup>	19.9	66.7°	17.7
		(21.9)n.s.		(234.4)C		(70.3)B		(67.9)n.s.		(59.9)C
35-44	44.8	5.7	94.4	86.6	85.2	21.1	57.1	22.6	62.4	15.5
		(15.0)		(202.0)BC		(76.3)AB		(82.0)		(46.3)BC
45 - 54	40.7	6.1	95.9	63.6	84.4	18.9	65.5	19.9	55.7	8.2
		(15.1)		(204.6)AB		(84.6)AB		(75.5)		(30.0)AB
55-64	32.7	4.1	89.4	63.1	78.3	18.5	64.7	22.0	50.0	8.8
		(10.0)		(169.3)AB		(71.1)AB		(67.5)		(34.2)AB
65-74	37.3	6.2	83.5	34.2	71.0	11.8	53.1	10.3	47.5	6.4
		(13.5)		(68.6)A		(24.8)A		(24.5)		(16.5)A
										Continued)

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	Volun (hrs/i	tteering month)	Eme supp prim (hrs/	otional oort to ary kin month)	Emotiona to secc kin/fri (hrs/m	l support ondary iends ionth)	lnstru suppo prima (hrs/n	mental ort to rry kin nonth)	Instrument to secc kin/ fr (hrs/	tal support ondary riends (mo)
	% any	mean (SD)	% any	mean (SD)	% any	mean (SD)	% any	mean (SD)	% any	Mean (SD)
Race/ethnicity Non-Hispanic	39.3c	ער ער	94 1c	73.3	84 7n s	19.4	50 9n s	16.9	58 5n s	2 2
white		(15.1)AB		(180.8)n.s.		(64.0)b		(53.1)b		(37.1)b
African	35.3	8.4	86.4	97.1	81.8	35.9	58.6	33.3	57.1	21.6
American		(26.2)AB		(293.1)		(123.4)		(122.0)		(80.1)
Latino	25.6	3.5	90.2	93.6	84.9	16.7	59.2	34.6	58.3	9.3
		(9.1)A		(196.5)		(33.2)		(88.9)		(20.5)
Other race/	46.8	8.5	91.7	68.5	85.5	20.5	54.1	27.2	73.1	14.7
ethnicity		(15.6)B		(171.5)		(54.4)		(113.0)		(50.8)
Education										
Less than	$18.1^{\circ}$	3.5	85.2°	93.9	70.3°	33.1	58.2°	30.6	$51.2^{\circ}$	15.3
12 years		(24.0)A		(270.4)B		(116.8)C		(104.9)B		(42.9)AB
12 years	32.8	4.9	92.5	81.3	82.5	19.8	62.3	19.8	55.7	10.9
•		(12.3)AB		(194.6)B		(58.5)AB		(56.9)AB		(29.5)AB
13–15 years	40.9	6.4	94.6	92.6	89.4	25.1	61.3	24.7	62.4	17.6
		(18.1)BC		(229.0)B		(81.2)BC		(87.3)B		(67.7)B
16 years	55.8	7.8	95.5	44.7	88.7	12.7	53.3	9.5	63.0	8.8
and more		(14.9)C		(80.9)A		(40.3)A		(37.1)A		(28.5)A

Table 5.2 (Continued)

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Lowest	$30.2^{\circ}$	5.6	84.3 <sup>c</sup>	70.5	79.4 <sup>c</sup>	23.9	55.7 <i>n.s</i> .	20.8	$54.3^{\circ}$	13.6
quarter		(22.5)n.s.		(204.4)n.s.		(62.8)n.s.		(80.3)n.s.		(39.9)n.s.
2nd quarter	36.9	5.4	93.5	88.0	86.5	21.0	62.0	23.3	61.7	12.7
1		(11.8)		(206.1)		(58.3)		(72.3)		(36.1)
3rd quarter	41.3	6.2	95.8	76.7	83.5	21.1	60.4	16.7	57.3	13.3
1		(17.0)		(211.6)		(93.7)		(56.6)		(61.4)
Highest	45.0	5.9	97.6	73.5	87.4	18.6	59.3	19.1	61.3	11.1
quarter		(11.7)		(162.8)		(65.1)		(69.5)		(32.0)
Total sample										
Percent	40.8	5.8	92.3	77.3	84.2	21.2	59.0	20.0	59.0	12.7
		(16.4)		(197.5)		(71.5)		(70.2)		(44.0)
Range		0 - 416		0-2880		0 - 1440		0-1440		0-800
Note. From the Ni	ational Sur	rvey of Midlife	in the US	(MIDUS), 199:	5.	05 10001				

<sup>a</sup> T-test revealed a significant difference between gender groups (column) at p < .05 level.

<sup>b</sup> One-way ANOVA revealed an overall significant difference in mean scores of continuous variables among group categories (column) at p < .05 level; no post hoc Sheffe test evidence of specific group differences.

<sup>c</sup> Chi-square test revealed significant differences in proportions among group categories (column) at p < .05 level.

A, B, C: Overall ANOVA significant across groups (column) and post-hoc Scheffe test revealed groups with the same letter to be a homogeneous subset (i.e., no different in means); groups with distinct letters have significantly different means.

n.s.: One-way ANOVA (means) or Chi-Square test (proportions) revealed no significant differences among group categories (column).

with some college or more reported more volunteering than persons without schooling beyond high school (12 years). These results are consistent with other research indicating that more highly educated groups do more formal volunteering (Wilson, 2000; Wilson & Musick, 1997).

There was evidence of proportion differences across income groups – with a linear pattern where higher-income groups were more likely to report formal volunteering. However, the actual mean hours of formal volunteering did not significantly vary across income groups. Finding higher proportions of higher-educated, higher-income, middle-aged, and non-Hispanic white persons volunteering is consistent with what we might expect from a Maslovian perspective, which emphasizes the importance of having basic needs met before being able to give additionally to others.

*Emotional support to primary kin.* Within the overall sample the prevalence of reporting at least some emotional support to primary kin during the last month was extremely high; 92.3 % of sample respondents reported providing some such support; the average number of hours of support provided in the last month across the entire sample was also quite sizeable: 77.3 hours.

There was a significant gender difference in number of hours provided (although not in the proportion providing *any* support). Women averaged about 95.7 hours of emotional support to primary kin in the last month; men reported an average of 54.2 hours of emotional support during the same period of time. These results are consistent with other work that provides evidence that women provide higher levels of emotional support than men (e.g., Almeida & McDonald, 2005; Rossi & Rossi, 1990; see also Taylor et al., 2000).

Proportions of persons providing emotional support to kin varied by age – with younger adults reporting higher rates. Additionally, younger adults aged 25–34 reported the highest levels of mean hours of providing emotional support to primary kin (M = 105.1), significantly more than the young-old adults (ages 65–74) in this sample who reported the lowest mean hours of support (M = 34.2). It may be that younger adults (in contrast to young-old adults) have more living and/or coresident primary kin members – spouses, parents, parents-in-law, and children – to whom they may provide considerable support. Older adults may also be less healthy and less able to focus on providing support to others owing to their own needs.

A significant difference across race/ethnic groups in proportions of persons giving emotional support to primary kin was noted; the rate for African Americans was the lowest. Yet there were no significant race/ ethnic differences in mean hours of providing emotional support to primary kin (mean hours of African Americans were actually highest (97.1 hours) but with an extremely large standard deviation (293.1 hours), suggesting some exceptionally intense cases of support provision within this group).

There was evidence that proportions of persons providing emotional support to primary kin also differed across education – with the higher rates in evidence at each step up the educational ladder. Yet persons with the highest level of education reported the lowest mean number of hours of emotional support to primary kin (M = 44.7), which was significantly different from the level of providing support reported by any other educational group. This latter result is puzzling, given the fact that more highly educated people tend to report having more kin as well as nonkin persons with whom they discuss important matters (McPherson, Smith-Lovin, & Brashears, 2006). Persons with higher income were found to provide emotional support to primary kin at higher proportional levels than persons with lower income. There were no differences across income groups, however, in terms of mean number of hours of providing support.

Emotional support to secondary kin and friends. Overall, 84.2% of the sample reported providing some degree of emotional support to secondary kin or friends during the last month. Mean hours of such support provided was 21.2 - a much lower number of hours than the mean for primary kin (77.3). Women were more likely to report providing emotional support to secondary kin or friends in the last month than men (88.6% vs. 78.6%). Women also reported more than twice the number of hours reported by men (M = 28.7 vs. 11.4). This is convergent with other evidence that women are more engaged in emotional support exchange with friends, neighbors, and co-workers (Liebler & Sandefur, 2002).

There was a clear linear trend by age in proportions of adults reporting providing emotional support to secondary kin or friends – with younger adults reporting the highest levels. An evaluation of age differences across mean hours of support also suggested that congruent with their higher level of reported obligation to friends noted previously, younger adults (ages 25-34) reported providing significantly more hours of emotional support to secondary kin and friends than did young-old adults (ages 65-74; M = 28.7 vs. 11.8).

While no proportion differences were in evidence across race/ethnicity, there were significant differences across race/ethnic groups in mean hours reported of providing support to secondary kin and friends. Post hoc Sheffe tests did not reveal significant differences in two-group comparisons, but African Americans, on average, reported the highest mean number of hours of emotional support to secondary kin and friends – 35.9 (although the standard deviation was also extremely high, at 123.4, suggesting great variation in reports). Although higher proportions of persons with more than a high-school education reported providing "any" emotional support to secondary kin and nonkin, there was evidence that the highest educational group reported significantly fewer hours of emotional support than the lowest educational group or the group with some college education. This suggests that the time-intensity of providing emotional support to secondary kin and nonkin may be greater when it occurs for persons with lower education. There were no significant differences across household income groups.

Instrumental support to primary kin. Overall, about three out of five adults (59%) in our sample reported providing some degree of instrumental support to primary kin, with an average of about 20 hours provided per month. There was no gender difference in the proportion of persons reporting provision of instrumental support to primary kin, but women did report significantly more hours per month than men (23.6 hours vs. 15.4 hours). A methodological issue may be contributing to this result; the instructions for considering types of instrumental support (e.g., childcare, help around the house, transportation) may have cued the types of activities that women are more likely to undertake. Other research has also suggested that women tend to report giving more instrumental support overall than men, but not necessarily more across every type of support; for example, sons in Rossi and Rossi's (1990) study reported "fixing things" for mothers and fathers more often than daughters did.

Proportions providing instrumental support to primary kin differed by age – with the highest proportions in evidence during the midlife decades (ages 45–64). Again, this may reflect the greater likelihood of midlife adults being in family roles of partner, parent, and adult child, which call upon them to respond in significant ways to needs for instrumental support to primary kin. There were no age differences, however, in reports of mean hours of support provided.

No difference in proportions across race/ethnic groups was found. ANOVA provided evidence of a global difference in mean hours across race/ethnicity, but post hoc tests did not reveal specific group differences. Latinos reported the highest level of hours of providing instrumental support to primary kin – 34.6; non-Hispanic whites were lowest, reporting a mean of 16.9 hours.

Persons with 16 or more years of education evidenced the lowest rate of providing instrumental support to primary kin. Similar to the pattern observed for emotional support, the highest educational group reported a lower level of provision of instrumental support to primary kin (9.5 hours) compared to the lowest educational group (30.6 hours) or the some college education group (24.7 hours). Persons with higher education tend to live further away from kin in adulthood than persons with lower education (Fischer, 1982); this structural factor may contribute to less instrumental support exchange with kin (Rossi & Rossi, 1990). Neither proportions nor means differed across income groups.

Instrumental support to secondary kin and friends. Interestingly, the overall rate of report of instrumental support to secondary kin and friends in the last month was similar for secondary kin and friends to that found for primary kin – 59%. Yet the mean number of hours reported was less – 12.7 hours for secondary kin and friends vs. 20 hours for primary kin – as might be expected, owing to differences in normative obligation typically reported for secondary kin and friends in contrast to primary kin (Rossi & Rossi, 1990).

Although a higher proportion of men than women reported providing any instrumental support to secondary kin and friends during the last month (61.6% vs. 56.3%), women were found to provide more hours of instrumental support to secondary kin and friends than men (M = 15.0to 9.7). The youngest age groups provided instrumental support to secondary kin and friends at higher rates than the oldest age groups. The oldest age group (65–74) also reported providing fewer hours of instrumental support to secondary kin and friends per month (6.4 hours) than the youngest age groups (17.7 for ages 25–34 and 15.5 for ages 35–44).

There were no proportion differences by race/ethnic group status. ANOVA suggested overall mean hour differences by race/ethnicity, but post hoc tests did not reveal a specific group difference. African Americans reported the highest mean hours of instrumental support to secondary kin and friends (21.6); Latinos reported the lowest mean hours (9.3).

At each progressively higher level of education, a higher proportion of persons reported the provision of instrumental support to secondary kin and friends during the last month. Yet in terms of mean number of hours provided, persons with the highest education (16 or more years) provided fewer hours of instrumental support to secondary kin and friends than persons with some college. It may be that the higher prevalence of providing support is because persons with higher education have larger numbers of nonkin (as well as kin) in their social networks (McPherson et al., 2006; Moore, 1990), and a higher proportion of nonkin to kin (Moore, 1990). Yet owing to homophily in social networks (McPherson, Smith-Lovin, & Cook, 2001), it may be that the secondary kin and friends in the networks of persons with higher education also have more resources and do not require and therefore elicit the same intensity of instrumental support.

There were overall differences across household income status in proportions providing instrumental support to secondary kin and nonkin. The lowest rate (54.3%) was found for the lowest income group. There were no significant differences across income groups in mean hours of support provided.

NSFH data and analytic sample. We turn next to population analyses of informal caregiving to kin and nonkin owing to a mental or physical illness, disability, or condition. Data for analyses of caregiving came from the National Survey of Families and Households (NSFH), which includes information from personal interviews conducted in 1987-88 (NSFH1, T1) and 1992–93 (NSFH2, T2; five years later) with a nationally representative primary respondent sample of 13,007 noninstitutionalized US adults, 19 years old and older. The response rate at NSFH1 was 74%, and at NSFH2, 82% of first-wave respondents, yielding national population coverage at a rate of about 60% for data from both waves. Again, we used a sample weight variable available in these data that allowed us to generate estimates that correct for selection probabilities and nonresponse, thereby allowing the NSFH2 sample used here to match the composition of the US population on age, sex, and race in 1992 (for more design details see Sweet & Bumpass, 1996; Sweet, Bumpass, & Call, 1988). The analytic sample for this study consisted of NSFH primary respondents who reported caregiving information at both NSFH1 and NSFH2 (N = 9,620; 5,893 women and 3,727 men).

*NSFH measures of caregiving.* In-household caregiving at NSFH1 was assessed by asking the question: "Does anyone living here require care or assistance because of a disability or chronic illness?" If respondents answered "yes," they were asked for the age and relationship to them of up to four disabled or chronically ill persons in their households. Because of the way this question was asked at NSFH1, it should be noted that some inference of caregiving must be made with these data; persons who live with a disabled person are inferred to provide at least some degree of help with care for that coresident person.

Out-of-household caregiving at NSFH1 was evaluated by a more direct question: "Sometimes people help take care of relatives who are seriously ill or disabled, and who do not live with them. Have you provided such care at any time during the last 12 months?" For those who answered "yes," the age and relationship of up to four persons was reported by respondents.

To assess in-household caregiving at NSFH2, respondents were asked, "During the last 12 months have you, yourself given anyone who was living with you at the time any help with personal care because of their long-term physical or mental condition, illness, or disability?" Respondents answering, "yes," were asked, "Who did you give the most personal care of this kind?"

To assess out-of-household caregiving at NSFH2, respondents were asked, "Sometimes because of a physical or mental condition, illness, or

disability, people require the assistance of friends or relatives. During the last 12 months have you, yourself, given anyone not living with you at the time any help or assistance because of their health problem or disability?" Respondents answering "yes" were further queried, "Who did you provide with the most help?"

Based on answers to all these questions, a dichotomous variable for *primary kin care T1–T2* was created where a respondent was coded 1 if (1) they had answered at NSFH1 that they lived with a person with a disability and/or provided out-of-household care and/or (2) they answered at NSFH2 that they provided in-household or out-of-household care to a disabled biological/step/adopted/or foster child or child-in-law, spouse, or biological or adoptive parents. In other words, respondents reporting any caregiving provided at either NSFH1 or NSFH2 for these categories of primary family relationships during the last 12 months were coded 1 as providing primary kin care T1–T2. All others were coded 0 - no primary kin care T1–T2.

Secondary kin care T1–T2 was constructed in a similar way, only the categories of persons included for this variable were stepparents, parentsin-law, grandparents, sibling, step-sibling, half-sibling, sibling-in-law, grandchild, and other relatives. Thus, if a respondent to NSFH1 indicated they lived with or provided out-of-household care for a relative in these categories, and/or if a respondent to NSFH2 indicated they provided in-household or out-of household care to a relative in these categories they were coded 1 for secondary kin care T1–T2; otherwise, they were coded 0 – no secondary kin care T1–T2.

Nonkin care T1-T2 was constructed as a dichotomous variable where respondents were coded 1 if they had indicated they lived with and/or provided out-of-household care at NSFH1 and/or provided in-household or out-of-household caregiving at NSFH2 to a disabled roommate, friend, or other nonrelative. All other respondents were coded 0 - no nonkin care T1–T2.

Finally, a composite *total kin/nonkin care T1–T2* variable was created. This dichotomous variable was coded 1 for any respondent who had indicated they had provided either primary kin care, secondary kin care, or nonkin care at either NSFH1 or NSFH2. Table 5.3 shows the results of analyses showing overall weighted percentages of persons providing caregiving to family members and friends at either NSFH1 or NSFH2.

*Caregiving for primary kin.* The bottom row of Table 5.3 shows the rates of providing caregiving overall at one or both of the survey time points separated by about five years. The results in the primary kin care columns indicate that about one in five (18.9%) US adults age 19 and over reported providing some level of caregiving for a disabled primary kin member within the last 12 months of being interviewed at NSFH1 or

by Gender, Age,	Kace/E	thnicity, E	ducatio	n, and H	ousehold I	ncome									
	Ō	nweighted	Z	Prin (v	nary kin ca ⁄eighted %)	e -	Seco (v	ndary kin c veighted %)	are	23	Jonkin care veighted %)		Total care	kin or noi (weighted	nkin %)
	Total	Women	Men	Total	Women	Men	Total	Women	Men	Total	Women	Men	Total	Women	Men
Age 19-24	1242	735	507	10.5 <sup>a</sup>	13.3 <sup>a</sup>	7.8ª	18.0ª	19.5 <sup>a</sup>	16.4	5. 4ª	6.7 <sup>a</sup>		$30.8^{a}$	35.5ª	26.2 <sup>a</sup>
25-34	2882	1696	1186	18.0	21.7	14.2	15.5	17.3	13.6	7.0	8.0	5.9	36.3	42.2	30.2
35-44	2155	1301	854	23.1	26.6	19.6	14.7	16.2	13.3	7.8	8.4	7.1	40.5	45.5	35.8
45 - 54	1211	757	454	25.7	29.7	20.7	14.9	15.4	14.1	7.4	9.2	5.1	42.8	48.0	36.2
55-64	1005	625	380	19.5	23.7	14.3	13.0	12.8	13.2	9.8	12.7	6.2	37.8	43.5	30.9
65 - 74	778	523	255	18.1	21.0	14.3	11.1	11.0	11.3	9.7	13.0	5.3	33.7	38.8	27.2
75+	343	252	16	11.7	10.9	12.5	9.0	9.9	6.3	5.9	6.1	5.4	25.3	25.9	24.1
<i>Race/ethnicity</i> Non-Hispanic White	7192	4328	2864	19.3 <sup>b</sup>	23.0	15.3	$15.0^{a}$	$16.4^{a}$	13.6	7.6	9.3	5.8	37.6 <sup>a</sup>	$43.2^{a}$	31.5 <sup>a</sup>
African American	1655	1083	572	18.5	21.4	14.7	16.1	16.5	15.8	7.4	8.1	6.4	37.9	41.9	32.9
Latino	434	264	170	13.7	17.9	9.7	10.2	10.3	10.1	4.8	6.0	3.6	24.7	29.5	20.6
Other race/ ethnicity	327	210	117	18.0	17.5	18.7	10.8	6.8	16.3	8.4	11.2	4.8	33.6	31.6	35.8

Table 5.3 Unweighted N and Weighted Percentage of Persons Providing Caregiving to Family and Friends Measured at Two Times Over Five Years

	$24.5^{a}$	33.0	30.6	33.4			30.2		31.4	32.7	28.9		31.3	
	$33.4^{\rm a}$	41.9	45.2	46.3			$40.4^{\rm b}$		44.9	41.2	46.1		41.9°	:
	29.5 <sup>a</sup>	38.0	38.2	39.2			36.9		38.4	37.1	36.8		36.9	
	4.7 <sup>b</sup>	5.3	4.8	7.5			6.8		7.0	5.3	4.7		5.7	-
	8.6 <sup>a</sup>	8.1	8.8	11.8			$10.9^{b}$		10.0	7.3	8.8		9.1°	100
	6.9ª	6.8	6.9	9.5			9.5 <sup>a</sup>		8.6	6.3	6.6		7.5	-
	8.3 <sup>a</sup>	16.5	14.5	12.8			$10.8^{\mathrm{b}}$		12.0	15.1	13.6		13.7	-
	9.9ª	15.8	19.7	16.5			$12.4^{a}$		17.3	15.9	20.6		15.7°	-
	9.2ª	16.1	17.2	14.5			$11.8^{a}$		14.7	15.5	16.9		14.8	-
	14.9	14.7	14.7	16.0			15.7		15.5	16.5	13.3		15.1	
	19.0	23.1	23.1	22.9			21.9		24.1	23.3	22.3		22.3°	-
	17.2	19.4	19.1	19.1			19.7		19.9	20.0	17.4		18.9	
	661	1233	853	968			708		902	922	600		3727	ر د
	1173	2260	1372	1069			1891		1374	1272	680		5893	•
	1834	3493	2225	2037			2599		2276	2194	1280		9620	
Education	Less than 12 years	12 years	13–15 years	16 years	and more	Household income	Lowest	quarter	2nd quarter	3rd quarter	Highest	quarter	Total	

Note. Percentages across care recipient types for total kin and nonkin care can total less than total of subcomponents because 409 respondents reported providing care to more than one person in and/or out of their household at T1 or T2. US National Survey of Families and Households, primary respondents (T1:1987-1988, T2:1992-1993).

 $^{\rm a}$  Chi-square test revealed significant group differences (within column) in proportions at p < .01 (two-tailed).

<sup>b</sup> Chi-square test revealed significant group differences (within column) in proportions at p < .05 (two-tailed).

 $^{\circ}$  Chi-square test revealed significant gender differences (across bottom row) in proportions at p < .01 (two-tailed).

NSFH2. The rates were significantly higher for women than for men (22.3% vs. 15.1%).

Primary kin care rates differed across age groups, with highest rates overall during the midlife decades from ages 35–54, when about one in four US women and one in five US men reported providing primary kin care. Total rates also differed across race/ethnicity, with fewer Latinos reporting primary kin care. It is unclear why Latinos reported lower primary kin caregiving rates in this study, given that they reported more normative obligation to primary kin and more hours of instrumental help to primary kin in MIDUS. One possibility is that owing to more recent immigration to the United States many Latinos may be living separate from older and/or more disabled family members who have remained in their "home" countries and are therefore not living in close enough proximity to be provided with hands-on caregiving help. Rates did not differ by education or household income.

*Caregiving for secondary kin.* Rates of secondary kin care were somewhat lower than for primary kin care but were still sizable. Overall, about 14.8% of US adults reported providing care to a secondary kin member either at T1 or T2 of the NSFH; rates were higher for women than men (15.7 vs. 13.7%). Total group difference tests suggested more secondary kin care at younger ages, among non-Hispanic whites and African Americans, among persons with at least a high-school education, and among persons not in the lowest income quarter.

Caregiving for nonkin. Care for persons outside of family is likely to be more voluntary, and therefore is of particular interest in terms of considering acts of compassionate love. Overall, 7.5% of adults – almost one in ten women (9.1%) and slightly more than one in twenty men (5.7%) – reported providing care for a disabled friend, neighbor, or other nonfamily member at one or both times of assessment. Total rates were highest among women, adults ages 55–74, and respondents with the highest education, yet also among respondents with the lowest income.

These results demonstrate considerable rates of compassionate acts by friends and neighbors to provide help to others in times of need owing to disablement (see also Himes & Reidy, 2000; Liebler & Sandefur, 2002). In considering these numbers it is also important to remember this analysis estimates caregiving only at two time points about five years apart; lifetime incidence rates of care for nonkin others would be expected to be much higher.

Total caregiving for kin or nonkin. Overall, the last columns of Table 5.3 for combined kin or nonkin care demonstrate that more than one-third of respondents (36.9%) reported providing some caregiving for a disabled family member or friend either at NSFH1 or NSFH2. More than two in five women (41.9%) reported such caregiving. Almost one in three

men reported kin or nonkin caregiving (31.3%) at one or both time points. Again, it is important to note that lifetime incidence of caregiving would be expected to be much higher.

The relatively high rates of caregiving for kin as well as nonkin reported here are also relatively convergent with results from a US national sample study conducted in 2003 by the American Association for Retired Persons and the National Alliance for Caregiving, which estimated there were 44.4 million US caregivers aged 18 and older (21% of the population at these ages) providing unpaid care to one or more adults who needed help due to some level of functional limitation (Caregiving in the US, 2004). Women reported caregiving more often than men, yet four of ten caregivers were men. While 83% of the instances of caregiving reported were for family members, a sizable percentage of care recipients named were nonkin (17%). Overall, these prevalence rates from two national studies suggest the importance of family as well as friend and neighbor caregiving as increasingly important manifestations of compassionate acts in adulthood.

#### Conclusions and Suggestions for Future Research

This chapter aimed to provide linkages between theory guiding the empirical study of compassionate love and theory and research in the fields of adult development and life-course studies. It also sought to contribute to a population perspective on how cultural and sociodemographic contextual characteristics contribute to differences in selected compassionate norms and compassionate acts in the contemporary US adult population.

We have suggested that there is compatibility between the biopsychosocial model of compassionate love guiding this volume and contemporary biopsychosocial theoretical frameworks in human development, including bioecological systems theory and the life-course perspective. Human development theories that emphasize psychological readiness (e.g., Eriksonian theory) and material readiness (e.g., Maslovian theory) can provide additional insights in understanding the antecedents of internalized compassionate norms and compassionate action. Structural social exchange theory can also inform the science of compassionate love, through its consideration of how societal and subcultural social norms can influence patterns of expectable giving and receiving in a society.

Biopsychosocial theoretical frameworks emphasize developmental contextualism – that is, individual development occurs within specific sociocultural milieux. The model guiding the science of compassionate love likewise posits the importance of physical, social, and cultural contextual factors in shaping compassionate motives and behaviors. We found a number of sociocultural (as indexed by gender, age, race/ethnicity, educational status, and income status) differences in compassionate normative obligation and action. Future research in the science of compassionate love might benefit from continuing to consider such sociodemographic differences and to further "unpack" the processes whereby such differences occur. For example, there was relatively consistent evidence across the compassionate norms and acts considered here that women report higher levels than men. This is a finding that deserves more research exploration. Is this finding a result of gender differences in biological proclivity toward compassionate norms and acts and/or differences in normative socialization regarding obligations regarding giving to kin and nonkin? Are gender differences due to differences in expectations in social roles (e.g., in enacting the role of adult child as a daughter vs. a son), and/or differences in other societal opportunity structures that enhance compassionate norms and allow for compassionate acts (e.g., more emphasis on giving to others in the jobs that women are more likely to occupy than men)?

Age differences in compassionate norms suggested greater altruistic normative obligation at midlife and older ages vs. younger ages, yet normative obligation as well as emotional and instrumental support to secondary kin and friends was highest at youngest ages. Overall contribution to others was rated highest among midlife adults (ages 35–64), when we might expect societal expectations and opportunities for social contributions to others to be greatest. Future work might further explore how much age differences in norms and acts reflect developmental differences as might be suggested by Eriksonian theory, structural differences in role expectations as might be suggested by sociological norm theory, cohort differences, or some combination of developmental, structural, and cohort differences.

African Americans are noteworthy in their high levels of reported altruistic normative obligation, even in the face of considerable discrimination and disadvantage in US society (Kessler, Mickelson, & Williams, 1999). African Americans also were found to report the highest levels of normative obligation to friends and overall personal contribution to the wellbeing of others. Other research that has suggested that African American culture emphasizes inclusiveness, cooperation, interdependence, and collective responsibility (Baldwin & Hopkins, 1990).

Latinos, another relatively disadvantaged group in US society, were found to report the highest normative obligation to primary kin and the highest mean number of hours per month of instrumental support to primary kin. Does this reflect a greater ideological "familism" in Latino culture (Vega, 1990), which is influencing compassionate norms and compassionate acts toward primary kin? To better understand the antecedents of compassionate normative obligation it would be worthwhile for future research to investigate the question: How much is internalized compassionate normative obligation a result of ideological factors, such as a culture-based value orientation (e.g., communitarianism or familism), in contrast to structural factors, such as access to greater resources (e.g., income, education)?

Education and household income are structural factors that might be expected to constrain compassionate normative obligation and action at the lower end of the socioeconomic status spectrum and to enhance opportunities for compassionate normative obligation and action at the higher end of the socioeconomic status spectrum, yet the patterns reported here did not consistently reflect this expectation. For example, higher education was associated with higher rates of volunteering, but also with lower rates and fewer mean hours per month of instrumental support to primary kin. Higher income was associated with higher normative obligation to primary kin, but lower levels of obligation to secondary kin and friends. More research is needed to understand why adults with higher education (in contrast to lower education) reported lower normative obligation to primary kin, less emotional support to kin and nonkin, and less instrumental support to primary kin. Additionally, it would be worthwhile to explore why persons with higher income (in contrast to lower income) reported lower normative obligation to friends and rates of nonkin caregiving.

Large population surveys can continue to be useful for the scientific study of compassionate love. For example, use of longitudinal survey data that allow for analyses of change in compassionate normative obligation and compassionate actions over time in relation to other time-invariant as well as time-varying biological, psychological, and social factors would be useful in further clarifying causal processes related to compassionate love. Multivariate analyses were beyond the scope of this descriptive chapter, but future, more targeted population research, which develops models that better account for the confounding of sociodemographic factors (e.g., race/ethnicity and income) will yield more precise conclusions.

In sum, this theoretical overview and population perspective suggests that US adults are reporting generally high levels of compassionate normative obligation and action; therefore, such motivational norms and actions are relatively "typical" for adults. These results fit with developmental theories such as those of Erikson and Maslow, as well as sociological theories that emphasize the widespread socialization of norms in all societies to increase an internalized sense of obligation, and therefore motivation, to provide support to others. Our results suggest that levels of compassionate norms and compassionate acts often differ by sociocultural location; therefore, it is important to continue to take into account such sociocultural differences in future research, as well as develop further research to help better account for these differences. Developmental and life-course scholars are well situated to contribute to the science of compassionate love through further analysis of existing data with relevant constructs, and through the inclusion of new measures like the Compassionate Love Scale (Sprecher & Fehr, 2005) in future surveys. Likewise, additional scholarship concerning the biopsychosocial antecedents, correlates, and consequences of compassionate love will make an important contribution to the fields of adult development and life-course studies by providing a more complete understanding of the biopsychosocial conditions that foster the development of more compassionate individuals and more compassionate societies.

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