

OLDER CHILDLESS ADULTS' INTER-VIVOS TRANSFERS OF
EMOTIONAL, INSTRUMENTAL, AND FINANCIAL SUPPORT AND
PREDICTORS OF GIVING TO KIN AND NON-KIN

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EMOTIONAL, INSTRUMENTAL, AND FINANCIAL SUPPORT AND
PREDICTORS OF GIVING TO KIN AND NON-KIN

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ABSTRACT

Inter-vivos transfers, or support given to others during a person's lifetime, are vital to the economy, public resource preservation, and social policies. The increasing prevalence of childlessness among older adults and their often ample resources warrant an investigation into their inter-vivos transfers and an understanding of predictors of giving. This dissertation explored mid- to later-life childless adults' ($N = 339$) inter-vivos transfers of emotional, instrumental, and financial support to kin and non-kin and examined two individual-level and six social-level predictors of making those transfers using data from the second wave of the National Survey of Midlife Development in the United States (MIDUS2). In addition, the relationship between inter-vivos transfers, social-level predictors of giving, and the childless adults' sex and marital status were identified. Results indicated more similarities than differences in giving between childless women and childless men as well as between ever married and never married childless adults, none of the social-level predictors were related to inter-vivos transfers, and sex and marital status rarely moderated the relationship between inter-vivos transfers and the social-level predictors of giving.

CHAPTER 1

INTRODUCTION

Private transfers such as money, emotional support, and instrumental assistance to kin and non-kin are important to the economy, social policies, and preservation of public capital (Bumpass, 1990; Kohli & Kunemund, 2003; Szydluk, 2000). For instance, researchers have found that parental transfers helped adult children accrue wealth, pay down debt, pursue higher education and professional careers, and provide for their own offspring (Altonji, Hayashi, & Kotlikoff, 2000; Bengtson & Harootyan, 1994; Cox, 1990; Szydluk; Wilhelm, 1996). Moreover, parents who transferred resources to their children when they were young were more likely than were other parents to get diverse types of help from their children in later life (Henretta, Hill, Li, Soldo, & Wolf, 1997; Silverstein, Conroy, Wang, Giarrusso, & Bengtson, 2002). In short, inter-vivos transfers (i.e., voluntary conveyance of support and resources during a person's lifetime) can provide a safety net for both younger and older adults, decrease reliance on public services, and free-up public funds for those who need them most.

How are inter-vivos transfers affected when people do not have children but do have resources to convey? Do the childless hold on to/use up their assets or do they pass them on to others? This is a critical topic for researchers and policy makers in light of the growing numbers of older childless adults and the aging of the population. The proportion of American women between the ages of 40 and 44 years who did not have children rose from 11% in 1985 to 19% in 2004 (Dye, 2005). The population over the age of 65 years is expected to increase from 12% in 2000 to 20% in 2030 (He, Sengupta, Velkoff, & DeBarros, 2005). Amidst declining fertility rates and increasing needs for

support associated with an aging population, the childless have the potential to provide generous inter-vivos transfers to kin and non-kin, because they are in a position to give money in addition to emotional and instrumental support. Older childless adults have more available leisure time, earn more during their working years and, for the most part, save more money than do parents (Abma & Martinez, 2006; Dalphonse, 1997; Dye; Dykstra, 1995; Hurd, 2003). Moreover, considering that inter-vivos transfers might be used by older adults to entice future “repayment” from kin and non-kin (i.e., in expectation that norms of reciprocity might apply), their current giving may be repaid in later years as their dependence on others increases.

Despite the significant numbers of older childless adults, their resources, and the potential impact on individual and social well-being, research on childless adults’ diverse inter-vivos transfers is scarce. In addition, the research has been limited to examinations of financial transfers and bequests, comparisons of the distribution of wealth and transfers of help and basic care between parents and non-parents, and tests of bequest models based on parents’ and childless adults’ rates of dissaving (i.e., spending down of financial resources after retirement) (e.g., Hurd & Smith, 2002; Komter & Vollebergh, 2002; Whitaker, 2007). However, no researchers, to my knowledge, have examined older childless adults’ inter-vivos transfers of emotional, instrumental, and financial support to kin and non-kin in a single study.

Furthermore, no researchers have explored predictors of childless adults’ resource conveyance. Understanding factors that are associated with childless adults’ transfers of emotional, instrumental, and financial assistance to kin and non-kin is fundamental for predicting private transfers. The childless, unlike parents, are not legally obligated to

share their wealth and time with anyone. Instead, inter-vivos transfers are voluntary conveyances of resources during the childless adult's lifetime that have the potential to benefit the recipient, the childless adult, and society by preserving public services and funds.

Thus, the purposes of this study were to explore mid- to later-life childless adults' inter-vivos transfers of emotional support, instrumental unpaid assistance, and financial resources to kin and non-kin and to examine individual-level and social-level predictors of making those transfers. Specifically, I investigated the relationships between older childless adults' inter-vivos transfers of emotional, instrumental, and financial support to kin and non-kin and the childless adults' sex and marital status (i.e., individual-level predictors). In addition, I explored whether solidarity toward family, friends, neighbors, and community members as well as norms of reciprocity and generativity predict diverse types of inter-vivos transfers (i.e., social-level predictors). Finally, I considered if the childless adults' sex and marital status moderate the relationship between inter-vivos transfers and social-level predictors of giving. Data were obtained from the second wave of the National Survey of Midlife Development in the United States (MIDUS2) and restricted to childless adults over the age of 44 years. This is an age that is considered to be near the limit of women's childbearing years (Dye, 2005); Martin and colleagues (2006) found that less than 1% of women over the age of 44 years gave birth. Although men are biologically capable of reproduction longer than are women, it is likely that most childless men over the age of 44 years will remain childless.

Definition of Terms

Childlessness. The term *childless* in this dissertation refers to adults who do not have biological or adopted children or stepchildren for various reasons (e.g., voluntary childlessness, infertility-related childlessness). Although definitions of childlessness vary in the research literature and often distinguish between involuntary or voluntary childlessness, determining an individual's pathway into childlessness is challenging and ambiguous. For example, childlessness in young adulthood is often temporary whereas childlessness in mid-to later life is generally permanent (Dye, 2005; Stobert & Kemeny, 2003). Many adults who postpone parenthood until later years miss the window of opportunity for reproduction and become permanently childless (voluntarily or involuntarily). Moreover, married older adults who grew up during a time when parenthood was "mandatory" may be reluctant to admit to voluntary childlessness (Koropeckyj-Cox & Call, 2007).

Inter-vivos transfers. The term *inter-vivos transfers* is often used by economists to refer to conveyances of financial support and, less often, to instrumental assistance while the giver is alive; conversely, bequests are made after the death of the giver. Social scientists, in contrast, generally use the expression *intergenerational transfers* to refer to diverse resource conveyances between younger and older adults (both kin and non-kin). This study expands on the commonly used concept of inter-vivos transfers to include not only financial transfers but also emotional and instrumental assistance to others, because resource transfers during a person's lifetime can and do include all types of assistance to family, friends, other non-kin, social groups, organizations, and institutions. Intergenerational giving is, in essence, an inter-vivos transfer.

CHAPTER 2

LITERATURE REVIEW

Types of Inter-Vivos Transfers

Inter-vivos transfers can include various kinds of support. For instance, emotional support such as listening to others, instrumental assistance in the form of help with household chores, and financial aid are all types of inter-vivos transfers. Researchers investigating childless adults' resource conveyances, however, have mainly studied financial transfers and bequests. This study goes beyond these limitations to explore childless adults' inter-vivos transfers of emotional support, instrumental unpaid assistance, and financial aid to both kin and non-kin.

Financial transfers and bequests. Hurd and Smith (2002), comparing financial bequest intentions between parents and childless adults using data from four national data sets, found that both older childless adults and older parents planned to leave bequests. There were differences, however, in the hierarchy of the benefactors of these bequests based on the parental and marital status of the conveyor. The majority of married parents (76%) and married childless adults (80%) first left an inheritance to their spouses. For married parents, children were the next largest benefactors (23%), but for married childless adults, charities (18%), siblings (1%), and other relatives (1%), respectively, received an inheritance. In the absence of a spouse or partner, the majority of parents named their children (92%), followed by other relatives (5%) and friends (2%) as benefactors. Childless single adults, in contrast, left an inheritance to "other relatives" (45%), siblings (39%), friends, (10%), and charities (6%).

Whitaker (2007) compared the bequest practices of a small sample of single childless and widowed childless adults in Ireland in 1951 and 2000. An examination of probated wills showed that the childless bequeathed their commercial (e.g., businesses, farms, land), domestic (e.g., residence, right of residence), and personal mementos to siblings, followed by nieces, nephews, and cousins. In addition, but to a much lesser extent, bequests were made to the church (mainly Catholic), charity, and friends. Financial bequests generally were similar in 1951 and 2000, although domestic properties were more likely to go to females in 1951 but were bequeathed equally to males and females in 2000.

Non-financial transfers. Komter and Vollebergh (2002) compared inter-vivos transfers of help and care between parents and childless adults using data from 513 Dutch adults between the ages of 20 and 70 years. They found that adults without children provided significantly more support and care (i.e., preparing meals, giving presents, letting someone stay overnight, offering help) to family members than did adults with children. The childless also provided twice as much help to friends compared to their parental counterparts, but no differences were found in giving help to their own aging parents between adults without children and adults with children.

Predictors of Giving to Kin and Non-Kin

Predictors of giving inter-vivos transfers by older childless adults remain largely unexplored. However, understanding factors that predict conveyances by the childless in the absence of legal obligations to give to others is important for considerations such as evaluating current and developing future theories on inter-vivos transfers, helping forecast inter-vivos transfers, and predicting factors that may influence inter-vivos

transfers. I explored two individual-level predictors of giving—the childless adults’ sex and marital status—and six social-level predictors of giving—solidarity toward family, friends, neighbors, and community members, reciprocity, and generativity—that may be associated with childless adults’ transfers of emotional, instrumental, and financial support to kin and non-kin. In addition, I examined if sex and marital status moderate the relationship between inter-vivos transfers of emotional, instrumental, and financial support and the six social-level predictors of giving.

Individual-Level Predictors of Giving

Childless adults’ sex. Differences between childless men and childless women in giving to kin and non-kin have been identified (Komter & Vollebergh, 2002). Childless women gave more informal care and support to parents, other family members, and non-kin than did childless men (Komter & Vollebergh). Studies on intergenerational transfers also have found that women, especially daughters, provide more care to family members than do men (Brewer, 2001; Donelan, Falik, & DesRoches, 2001; Robinson, 1997). Sex differences in giving may be tied to gender socialization (i.e., socially sanctioned values, beliefs, and actions about what women and men “should” do), social embeddedness, and opportunities for transfers. Women generally are raised to take care of others, perform emotional roles, and meet others’ needs. Men, on the other hand, often are raised to perform instrumental roles and expected to become (financial) providers and protectors (Moen & Roehling, 2005).

Moreover, Dykstra and Hagestad (2007), using data from seven countries (Australia, Finland, Germany, Japan, the Netherlands, the United Kingdom, and the United States), have found that older childless women were more socially embedded and

had more contact with kin and non-kin compared to older childless men. This is critical because inter-vivos transfers in the general population tend to be associated with emotional closeness, frequency of contact, and interactions between the giver and the receiver (Ganong & Coleman, 2006; McGarry, 1999; Rossi & Rossi, 1990; Shapiro, 2003). Thus, sex may moderate the relationship between inter-vivos transfers and social-level predictors of giving.

Childless adults' marital status. Although, to my knowledge, no published empirical findings are available on the link between giving inter-vivos transfers and childless adults' marital status, it may be argued that having a partner can either increase or limit inter-vivos transfers. For instance, researchers have noted that the presence of a marriage partner generally increased the total household income and economic resources (Dykstra, 2004), and greater available resources have been found to be related to giving more financial inter-vivos transfers (Altonji et al., 2000; Lord, 2002; McGarry, 1999; McGarry & Schoeni, 1997). Because married childless adults may have higher combined incomes than may never married childless adults, they are in a better position to transfer more financial aid.

However, emotional closeness may be associated with greater propensity to make some types of transfers (Bengtson, Giarrusso, Mabry, & Silverstein, 2002; Rossi & Rossi, 1990; Silverstein, 2006); it is not clear whether marital status is related to closeness to others, although some studies have reported that never married childless women were more likely to have close ties with family members, friends, and neighbors than were other childless women (Dykstra, 2004), whereas formerly married men without children may experience a striking lack of social embeddedness and family contact (Dykstra &

Hagestad, 2007). Thus, in addition to sex, marital status may moderate the relationship between inter-vivos transfers and social-level predictors of giving.

It is important to point out that older women, particularly older unmarried women, often reported that their childless status was a direct result of providing care for parents, siblings, and other family members earlier in life, which may help explain their greater family ties. For instance, women who took on caregiving responsibilities for older parents or married siblings (e.g., raising nieces and nephews, providing childcare) often missed the transition into marriage and subsequent childbearing (Allen, 1989; Koropecj-Cox & Call, 2007). One woman in Allen's study who had to take care of her mother illustrates this point, "I look back now, and I wished I had [married], but at the time I was taking care of my mother...I do miss the fact that I never had children" (p. 121). Moreover, many older childless adults who grew up during a time when non-marital childbirth was not a viable option reported that delayed marriage and having never been married were the main reasons for their childless status (Connidis & McMullin, 1996; Hagestad & Call, 2007; Holden, 2005; Koropecj-Cox & Call; Wenger, 2001).

Social-Level Predictors of Giving

Solidarity toward kin: The family solidarity model. The family solidarity model primarily has been used by family scholars to examine motives for diverse types of inter-vivos transfers among parents and adult children, although the model also lends itself to studying childless adults' familial relationships and inter-vivos transfers. Solidarity refers to the bonds that tie families together, which are both complex and multidimensional (Bengtson et al., 2002; Bengtson & Roberts, 1991). In addition, conflict is presumed to be an integral part of family relations and affects family members' willingness to help

each other (Bengtson et al.; Clarke, Preston, Raskin, & Bengtson, 1999; Parrott & Bengtson, 1999).

The family solidarity model includes six dimensions of solidarity (Bengtson et al., 2002): (1) affection (perception of intimacy and emotional closeness among family members), (2) association (prevalence of contact and interactions among family members), (3) norms (felt obligation toward family members), (4) structure (factors that promote or hinder cohesion such as family structure and geographical distance), (5) function (exchange of inter-vivos support among family members), and (6) consensus (degree of agreement that exists among family members on core values, beliefs, and attitudes). I focused on affectional and associational solidarity for two main reasons.

First, affection has been considered one of the main motivating factors for inter-vivos transfers (Rossi & Rossi, 1990) and thought to be more important than other dimensions of solidarity as a reason for giving (Aldous, 1987; Cicirelli, 1983). Affectional solidarity signifies perceptions of warmth, affection, and emotional closeness among family members (Bengtson & Roberts, 1991), which are important for cohesion (Allen, 1991; Rossi & Rossi, 1990; Walker & Thompson, 1983). In general, inter-vivos transfers were greater between adults who perceived a close and intimate relationship with each other than between adults who reported strained and distant relations (McGarry, 1999; Rossi & Rossi). Silverstein and colleagues (1995) have further found that middle-aged daughters were most motivated to help older parents when they perceived an emotional closeness toward the parents.

Second, I selected associational solidarity because many childless adults maintain strong contact and associations with family members (Connidis, 1994; White, 2001).

Associational solidarity refers to the frequency and patterns of interactions among family members (Bengtson & Roberts, 1991). Family bonds are important and opportunities for staying in contact with family are ample due to changes in demographics (e.g., increased longevity and shared lives) and advances in technology (e.g., e-mail, internet phone) (Bengtson, Lowenstein, Putney, & Gans, 2003; Litwin, 2005). Adults who had high levels of close contact with each other (e.g., in-person contact, e-mail, phone calls, letters) were more likely to receive and give assistance such as advice, emotional support, and instrumental assistance than were adults who had a lack of interactions (Ganong & Coleman, 2006; McGarry, 1999; Rossi & Rossi, 1990; Shapiro, 2003). Associational solidarity may be especially relevant to adults without children, because researchers have found that many older childless adults reported frequent contact and close relationships with siblings, particularly if they lived in close geographical proximity and that they turned to their siblings for support (Connidis, 1994; White, 2001). In turn, mutual assistance among older siblings was common (White).

Solidarity toward non-kin. In addition to family solidarity, I examined the association between childless adults' feelings of solidarity toward friends, neighbors, and community members and inter-vivos transfers of emotional, instrumental, and financial support. Many older childless adults have strong and durable relationships with friends and other non-kin despite the misconception that the childless lack adequate networks in later life (Connidis, 1994; Dykstra, 1995; Wu & Pollard, 1998). Researchers have indicated that childless adults transferred various types of resources to non-kin, religious groups, and other organizations (Hurd & Smith, 2002; Komter & Vollebergh, 2002). Thus, some aspects of solidarity that characterize relationships among family members

may serve as predictors of giving inter-vivos transfers to non-kin. In particular, this study assessed childless adults' feelings of associational solidarity toward neighbors and people in the community in which they lived. However, because close friends are often labeled "like-family" and play an important role in the lives of older childless adults (Connidis), similar to that of family members, both associational and affectional solidarity toward friends were explored as predictors of giving inter-vivos transfers.

Norms of reciprocity. Norms of reciprocity are based on the premise that people make inter-vivos transfers to family members and non-kin with the expectation that the recipient will repay the debt either immediately or over the life course (Ganong & Coleman, 2006; Hollstein & Bria, 1998; Ikkink, Van Tilburg, & Knipscheer, 1999; Rossi & Rossi, 1990; Silverstein, 2006). In this study, I focused on the relationship between inter-vivos transfers to kin and non-kin and attitudes toward expectations of exchange. Specifically, I examined if childless adults gave more emotional, instrumental, and financial assistance if they thought that people generally anticipate repayment when they do a good deed. The MIDUS data set did not ask individuals what they would do in response to a good deed being done for them, but there is evidence that normative beliefs are related to individuals' behaviors (Ganong & Coleman, 2005), so this question in the MIDUS data set was seen as a proxy for self-reported behaviors regarding reciprocity.

Empirical findings on childless adults and reciprocity in interactions with others are limited. Researchers, for example, have observed higher levels of reciprocal support among siblings aged 70 years and older when they lacked help from children or spousal assistance compared to siblings in mid-life with similar family situations (White, 2001). Other researchers examining childless adults' inter-vivos transfers have not considered if

childless adults provided help to others as a result of having received help concurrently or in the past, if they transferred resources with the expectation for future repayment, or if they made transfers without expecting any assistance in return (e.g., Hurd & Smith, 2002; Komter & Vollebergh, 2002; Whitaker, 2007).

Considering that many people provide informal assistance to relatives, friends, and “others” (Harootyan & Vorek, 1994), reciprocity expectations may serve as a form of future “life insurance” by encouraging kin and non-kin to exchange transfers. In a qualitative study of three older childless men, Koropeckyj-Cox (2003) found that some men advertised their intentions to bequeath money to extended kin as a motivator for family members to provide help in the future. As one man mentioned, “I always felt that if I needed anybody there’s a few of my nephews that I’m *sure* [would help] – especially if they know there’s money involved . . . It’s important, you know, take care of family. If you’ve gone mental, they know that they’re going to get some money when he dies, it’s easy to love him” (p. 89). It is unknown, however, to what extent the man actually received assistance from kin in later life.

Generativity. Although generativity as a predictor of giving assistance to kin and non-kin is largely unexplored in the intergenerational literature, it deserves further consideration. Erikson’s (1985) psychosocial theory proposes that as adults get older and move into midlife, generative behaviors become more important than they were in previous life stages. In midlife, adults are more capable of going beyond their own needs and the needs of their immediate family and become more interested in their community and society. For many adults, becoming a parent and raising children is one way to invest in the future and ensure the continuity of society. Parents are interested in passing on

their skills, knowledge, and experience to younger generations (Snarey, Son, Kuehne, Hauser, & Vaillant, 1987).

In addition, however, Erikson (1968) and other researchers noted that generativity can not only be fostered through caring for children but also through other contributions that benefit individuals and society as a whole such as social activism, education, creativity, productivity, involvement in the community, and altruism (Kotre, 1996; McAdams, 2001; Rossi, 2001). Thus, childless adults have opportunities for developing generativity. Indeed, many childless adults are strongly involved in the lives of nieces and nephews, the community, volunteer work, religious organizations, teaching children and adults in various settings, and maintaining enduring relations with siblings, friends, and neighbors (Dykstra & Hagestad, 2007; Komter & Vollebergh, 2002; Milardo, 2005; Rubinstein, 1996; White, 2001),

Researchers have built on Erikson's theory and suggested different types of generativity (Hawkins & Dollahite, 1997; Kotre & Hall, 1990). For instance, Snarey and colleagues (1987), based on research with men, noted three types of generativity. Becoming a parent and ensuring the continuity of society is known as *biological generativity*. Raising, nurturing, and fostering the well-being of children is referred to as *parental generativity*. Caring for other adults in various capacities (e.g., mentoring, teaching, providing leadership) is known as *societal generativity*. The authors found that men who were involved in their biological or adoptive children's lives scored higher on societal generativity compared to childless men, suggesting a link between parental and societal generativity among men (Snarey, 1993). In contrast, parental generativity was not associated with increased societal generativity among women (McAdams & de St.

Aubin, 1992). This study investigated the link between societal generativity as a predictor for giving support to others. It may be that childless adults engage in inter-vivos transfers of emotional, instrumental, and financial support to kin and non-kin to leave behind a legacy and to help ensure the well-being of others as well as the next generation.

Other Factors that May be Associated with Giving

Four factors that may be associated with giving various types of inter-vivos transfers to kin and non-kin were included as control variables in all analyses based on previous findings on single dimensions of transfers. First, childless adults with higher education gave more instrumental help and care to friends but not to parents and extended family than did childless adults with less education (Komter & Vollebergh, 2002). Second, adults in general with higher incomes transferred more money, but not necessarily other types of support, to kin and non-kin (Altonji et al., 2000; Hoyert, 1991; Hurd, 2003; McGarry, 1999; Rossi & Rossi, 1990). Third, although the one study that has compared giving between parents and non-parents did not find age differences in help and care to parents, extended family, and friends, the researchers did not assess emotional, instrumental, and financial transfers (Komter & Vollebergh).

Finally, race/ethnicity also may be associated with childless adults' inter-vivos transfers, although no published findings are available to support or refute this. In general, racial and ethnic minorities tend to adhere to collectivistic values and hold strong expectations for members within their social networks (both kin and non-kin) to help each other (Kim & Ahn, 2001; Santiago-Rivera, Arredondo, & Gallardo-Cooper, 2002; White, Townsend, & Stephens, 2000). In contrast, White European Americans tend to

promote more individualistic ideals that focus on independence, self-sufficiency, and meeting personal rather than kin and societal needs (Hofstede, 2001; Triandis, 2001).

Conversely, childless adults from racial/ethnic minority backgrounds may be similar to childless White adults in their inter-vivos transfers to kin and non-kin because of their non-normative life paths. Most racial/ethnic minority cultures adhere to strong pro-natalist values (Heaton, Jacobson, & Holland, 1999; Rovi, 1994). Racial/ethnic minority women are more likely than White women to be socialized to place a high value on becoming mothers, because childbearing is often a rite of passage into adulthood and an integral part of social, cultural, and religious expectations (Stevens, 1996). Thus, individualistic values may be more prevalent than collectivistic values among childless adults from racial/ethnic minority backgrounds who may have gone against cultural expectations of childbearing and/or childrearing; if this is the case, then giving may be similar among racial/ethnic groups. Unfortunately, this study will not be able to assess the relationship between race/ethnicity and inter-vivos transfers among childless adults, because only 36 (11%) adults in this study were racial/ethnic minorities. Thus, in addition to age, education, and income, race/ethnicity was added as a control variable to the analyses.

Research Questions

In sum, the research on diverse types of inter-vivos transfers given to kin and non-kin by older childless adults and predictors of giving those transfers is sparse. However, understanding older childless adults' inter-vivos transfers and factors that predict resource conveyances carry important economic, public resources, and policy implications. Thus, the purposes of this study were to explore mid- and later life childless

adults' inter-vivos transfers of emotional, instrumental, and financial support and predictors of giving to kin and non-kin. In particular, two individual-level predictors of giving—the childless adults' sex and marital status—and six social-level predictors of giving—solidarity toward family, friends, neighbors, and community members, norms of reciprocity, and generativity—were tested. In addition, based on theoretical and empirical support, I examined if sex and marital status moderate the relationship between inter-vivos transfers and social-level predictors of giving to kin and non-kin. Given the general lack of research on childless adults and resource conveyances, and older childless adults in particular, the following three research questions (RQs) were examined:

RQ1: Are sex and marital status significantly related to older childless adults' inter-vivos transfers of (a) emotional support, (b) instrumental support, and (c) financial support to kin and non-kin?

RQ2: Which, if any, of the following six social-level predictors—solidarity toward family, friends, neighbors, and community members, reciprocity, and generativity—are significantly related to older childless adults' inter-vivos transfers of (a) emotional, (b) instrumental, and (c) financial support to kin and non-kin?

RQ3: Do sex and marital status significantly moderate the relationship between older childless adults' inter-vivos transfers of (a) emotional, (b) instrumental, and (c) financial support, and the six social-level predictors of giving to kin and non-kin?

CHAPTER 3

METHOD

Data

The secondary data examined in this study were derived from the second wave of the National Survey of Midlife Development in the United States (MIDUS2), which was collected between 2004 and 2006. The original data collection in 1995-1996 (MIDUS1) was supported by the John D. and Catherine T. MacArthur Midlife Research Network to examine social, psychological, and behavioral factors thought to be associated with adult development (Brim et al., 1996). The original nationally representative sample was obtained using random digit dialing of working telephone numbers in the 48 contiguous states and included 4,244 English-speaking, non-institutionalized adults between the ages of 25 and 74 years. Respondents completed an approximately 30-minute telephone interview and were then mailed a follow-up questionnaire. Respondents who completed all phases of the data collection received \$20. The phone response rate was 70%; the self-administered questionnaire response rate was 87%. Older adults and men were over-sampled.

The second wave data were obtained a decade later through a follow-up of the original respondents who were between the ages of 35 and 86 years in 2004-2006, resulting in 2,746 participants. The follow-up study was supported by the National Institute on Aging, and respondents who completed all phases of the second data collection received \$60. Similar to the first wave, respondents first completed a telephone interview and then a two-hour self-administered questionnaire. The response rate adjusted for mortality (based on results from the 2004 National Death Index) was 71%

for the telephone interview and 80% for the self-administered questionnaire (Ryff et al., 2007a).

Post-stratification weights were created by MIDUS2 researchers for respondents who completed the telephone interview in MIDUS1 using population-based methods. The purposes of weights are to adjust for unequal selection probabilities and non-response so that results more closely match population data, and so that population estimates can be made. The post-stratification method uses known population strata (e.g., age group, sex distribution) and adjusts the sample data to correspond with the population's parameters (Ryff, 2007b). MIDUS2 weights were calculated based on comparisons between the MIDUS data and the Current Population Survey (October, 2005). Weights for the product terms of sex by age by education were used, because men and older adults were oversampled and differences in education were found by MIDUS researchers between the population and sample (Ryff). Childless adults' demographic characteristics are based on the unweighted data (Table 1); all other results are based on the weighted data.

Sample

In accordance with the purposes of this dissertation, the only MIDUS2 participants who were included in the analyses were those adults over the age of 44 years who were not biological or adoptive parents, stepparents, currently pregnant, and had never given birth to or fathered a child. This age criterion was selected because it is generally deemed to be the upper limit for women's fertility (Dye, 2005), although men's reproductive capabilities can extend well beyond this age. Of the 409 childless adults who met these criteria, 70 did not complete both the telephone interview and self-

administered questionnaire and were deleted from the analyses, resulting in a final sample of 339 childless adults (167 men, 172 women; see Table 1 for sample characteristics). There were no significant differences between respondents who were included in the analyses and respondents who were deleted on age, sex, race, marital status, and work status. There was, however, a significant difference in education, $t(117) = 3.28, p < .01$; individuals remaining in the analyses were more educated than were those deleted from the analyses ($M = 7.81, SD = 2.66$ and $M = 6.84, SD = 2.15$, respectively).

The mean age of respondents in the final sample was 58 years ($SD = 10.11$). Thirty-two percent were married, 17% were separated or divorced, 4% were widowed, and 47% were never married. Of those who were not married, 12% were living with a partner. The majority of respondents were non-Hispanic White (89%). Regarding their level of education, 5% of the childless had obtained less than a high school degree, 40% had a high school degree or GED, 8% had an associate's degree, 23% had a bachelor's degree, and 24% had a graduate degree or higher. Moreover, 52% were currently working, 12% were self-employed, 4% were unemployed, 28% were retired, 2% were disabled, and 2% reported an "other" work status. The vast majority of respondents owned their own home (81%). The mean annual income from wages, pension, and social security was \$48,040 ($SD = 36,720$).

Dependent Variables

Twelve dependent variables (DVs) for giving inter-vivos transfers of emotional support (three DVs), instrumental unpaid assistance (three DVs), and financial aid (six DVs) to kin and non-kin were examined. In an attempt to reduce the number of DVs,

exploratory factor analyses with various orthogonal and oblique rotations were conducted. First, a separate factor analysis was run for giving emotional, instrumental, and financial support to parents, because further analyses pertaining to transfers to parents were restricted to childless adults who had at least one living parent. Results did not endorse combining the three types of support to parents into a single factor (reliability coefficient was .12). Second, a factor analysis was run with the remaining variables (i.e., not having to do with transfers to parents), indicating four factors. However, the internal consistency for the variables that made up two factors was very low—the reliability coefficient was .50 for the combination of emotional and instrumental support to other family members and others; and the reliability coefficient was .27 for the combination of financial support to others, religious groups, and other organizations. The two remaining variables—financial support to others and political organizations—loaded on separate factors. Third, a factor analysis was run for emotional, instrumental, and financial support to other family/friends, indicating three different factors. Fourth, a factor analysis was run for emotional, instrumental, and financial support to others, indicating three different factors. Fifth, factor analysis was run for financial support to religious groups, political organizations, and other organizations, indicating three different factors. Thus, the decision was made to retain the 12 DVs.

Table 2 displays the coding for each DV, independent variable (IV), and control variable (CV). In addition, Figure 1 graphically shows the IVs that may be associated with emotional transfer outcomes; Figure 2 illustrates the IVs that may be related with the instrumental transfer outcomes; and Figure 3 demonstrates the IVs that may be linked

with the financial transfer outcomes. Appendix A contains the MIDUS2 questions regarding the 12 DVs.

Emotional support. Respondents provided information on the average number of hours per month that they gave emotional support (e.g., comforting, listening to problems, giving advice) to (1) parents, (2) other family members or close friends, and (3) others (e.g., neighbors or people at church). Responses could range from 0 hours to 744 hours per month. Emotional support given to each of the three recipients was treated as a unique DV.

Instrumental support. Respondents provided information on the average number of hours per month that they gave instrumental support or unpaid assistance (e.g., help around the house, transportation) to (1) parents, (2) other family members or close friends, and (3) others (e.g., neighbors or people at church). Responses could range from 0 hours to 744 hours per month. Instrumental support given to each of the three recipients was treated as a unique DV.

Financial support. Respondents provided information on the average number of dollars per month that they gave to (1) parents, (2) other family members or close friends, (3) other individuals including people on the street, (4) religious groups, (5) political organizations, and (6) other organizations. If non-monetary items were given such as food, clothing, or other goods, respondents were asked to include their dollar value in the estimate. Responses could range from 0 dollars to unlimited dollars per month. Financial support given to each of the six recipients was treated as a unique DV.

Independent Variables

The childless adults' sex and marital status were added as individual-level predictors to the analyses to identify the relationship between inter-vivos transfers of emotional, instrumental, and financial support to kin and non-kin and sex and marital status (RQ1) as well as to determine if sex and marital status moderate the relationship between inter-vivos transfers and predictors of giving (RQ3). In addition, six social-level predictors of giving—solidarity toward family, friends, neighbors, and community members, reciprocity and generativity—were explored (RQ2). Table 2 displays the coding for each DV, IV, and CV. Figures 1—3 exhibit the IVs that may be associated with the emotional, instrumental, and financial transfer outcomes, respectively. Appendix B contains the MIDUS2 questions regarding the six social-level predictors of giving.

Childless adults' sex and marital status. Childless adults' sex was coded 0 = *male* and 1 = *female*. A dummy variable was created for marital status with 0 = ever married (i.e., currently married, separated/divorced, widowed; 53%) and 1 = never married (47%). [Please note that additional analyses were conducted and reported to examine if there were differences in the results when comparing other marital status categories.]

Solidarity toward family. Solidarity toward family was measured with four items that assessed perceived support and affection from family (e.g., “How much do members of your family really care about you?”) and one item that assessed the extent of association with family (“How often are you in contact with any members of your family, that is, any of your brothers, sisters, or parents, including visits, phone calls, letters, or electronic mail messages?”). Factor analysis indicated one factor among the five items. Thus, the affectional and associational solidarity items were combined into a single

solidarity toward family scale by calculating the mean across the five items. Affection responses ranged from 1 = *a lot* to 4 = *not at all*; association responses ranged from 1 = *several times a day* to 8 = *never or hardly ever*. All items were reverse coded so that higher scores indicate greater solidarity toward family. The reliability coefficient was .87.

Solidarity toward friends. Solidarity toward friends was measured with four items that assessed perceived support and affection from friends (e.g., “How much do your friends really care about you?”) and one item that assessed the extent of association with friends (“How often are you in contact with your friends, including visits, phone calls, letters, or electronic mail messages?”). Factor analysis indicated one factor among the five items. Thus, the affectional and associational solidarity items were combined into a single solidarity toward friends scale by calculating the mean across the five items.

Affection responses ranged from 1 = *a lot* to 4 = *not at all*; association responses ranged from 1 = *several times a day* to 8 = *never or hardly ever*. All items were reverse coded so that higher scores indicate greater solidarity toward friends. The reliability coefficient was .86.

Solidarity toward neighbors. Solidarity toward neighbors was assessed by calculating the mean of two items, (1) “How often do you have any contact, even something as simple as saying “hello,” with any of your neighbors?” and (2) “How often do you have a real conversation or get-together with any of your neighbors?” Responses ranged from 1 = *almost every day* to 6 = *never or hardly ever*. Responses were reverse coded so that higher scores indicate greater solidarity toward neighbors. The reliability coefficient was .75.

Solidarity toward community members. Solidarity toward community members was assessed by calculating the mean of two items, (1) “I feel close to people in my community”, and (2) “My community is a source of comfort.” Responses ranged from 1 = *strongly agree* to 7 = *strongly disagree*. Responses were reverse coded so that higher scores indicate greater solidarity toward community members. The reliability coefficient was .76.

Norms of reciprocity. Norms of reciprocity were assessed with a single item, “People who do a favor expect nothing in return.” Responses ranged from 1 = *strongly agree* to 7 = *strongly disagree*; therefore, higher scores indicate greater expectations of reciprocity.

Generativity. The shortened version of the Loyola Generativity Scale (McAdams & de St. Aubin, 1992) used in MIDUS2 included six items that assessed an individual’s perception of his or her societal generativity (e.g., “You feel that other people need you.”). Responses ranged from 1 = *a lot* to 4 = *not at all*. The scale was constructed by calculating the mean across the six items. Responses were reverse coded so that higher scores indicate greater generativity. The reliability coefficient was .86.

Control Variables

Age, level of education, total annual income, and race/ethnicity were used as control variables in all analyses, because previous research has suggested a link between these variables and childless adults’ inter-vivos transfers (Hurd, 2003; Komter & Vollebergh, 2002). Age was a continuous variable ranging from 45 – 84 years. Education was a continuous variable ranging from 1 = *completed grades 1 – 6* to 12 = *completed PhD, EdD, or other professional degree*. A “total income” continuous variable was

created by summing the means across three annual income sources—wages, pensions, and Social Security. The three income sources reflect imputed means that were made available by MIDUS2 researchers, because up to 23% of the income data were missing. Specifically, for fields with missing values, the mean for that category was imputed. [Please note that additional analyses were conducted and reported to ascertain if there were differences in the results when using the imputed total income variable versus the total income variable with missing values.] Race/ethnicity was dichotomized into 0 = *non-Hispanic White* and 1 = *racial/ethnic minority*.

Demographic Questionnaire

Respondents provided demographic information including sex, age, race, marital status, parental status, level of education, work status, income, and number of other people living in the household (see Table 1 for sample description). In addition, respondents answered questions if their mother and father were still alive; 153 (45%) childless adults reported that at least one parent was alive at the time of the interview.

Institutional Review Board (IRB)

Please note that this study did not require a review by the University of Missouri IRB. According to Erin Bryant (e-mail communication, December 14, 2007) at the University of Missouri IRB, researchers using data that are publicly available and anonymous do not have to obtain IRB approval.

CHAPTER 4

RESULTS

Using SAS 9.1, descriptive analyses were conducted for all variables to assess frequency counts, means, standard deviations, ranges, normality, outliers, and missing data. Various data transformations were considered for variables that did not meet parametric assumptions to reduce skewness, outliers, and improve normality and linearity as much as possible (Tabachnick & Fidell, 2001). Sine transformation was used for all DVs, exponential transformation was used for both solidarity toward family and friends, and square root transformation was used for the total income variable. Despite transformations, kurtosis was greater than 3 for financial assistance given to parents, other family/friends, and political organizations; skewness, however, was within the suggested range. Thus, these variables were kept in the analyses.

Descriptive Statistics

The weighted descriptive statistics for the DVs and IVs using PROC SURVEYMEANS prior to and after data transformation are provided in Table 3. This procedure is recommended for use with survey data (it accounts for the sampling design) to obtain population estimates and make valid inferences about the population (An & Watts, SAS Institute Inc., n.d.). As shown in Table 3, childless adults provided an average of 13 hours per month of emotional support to parents, followed by 9 hours to family/friends, and 4 hours to others. In addition, they gave an average of 12 hours per month of instrumental support to parents, 5 hours to family/friends, and 2.5 hours to others. Finally, the childless transferred an average of \$27 per month to parents, \$32 to family/friends, \$5 to others, \$105 to religious groups, \$11 to political organizations, and

\$64 to other organizations. Although there appeared to be differences in the number of hours spent on emotional and instrumental transfers and the amount of money given to kin and non-kin, general linear models (PROC GLM) with the least squares means statement and pdiff option for post-hoc analysis using the transformed data indicated no significant differences in giving emotional support to parents, other family/friends, and others ($p > .05$), in giving instrumental support to parents, other family/friends, and others ($p > .05$), and in giving financial support to parents, other family/friends, others, religious groups, political organizations, and other organizations ($p > .05$).

Intercorrelations among all Variables

Intercorrelations among all variables were computed and are presented in Appendix C. Results did not indicate multicollinearity problems; all bivariate correlations were smaller than .40, which is below the recommended criterion of .70 (Tabachnick & Fidell, 2001). None of the dependent variables were significantly related to the independent variables in the bivariate analyses.

Among the dependent variables, significant ($p < .01$) but small positive correlations were found between emotional support to parents and emotional support to family/friends and financial support to other organizations. Emotional support to family/friends also was positively related to emotional support to others. Emotional support to others was positively related to instrumental support to family/friends and instrumental support to others and negatively related to financial support to others. Instrumental support to family/friends was positively related to instrumental support to others. Financial support to religious groups was positively related to financial support to other organizations.

Among the dependent and control variables, education was positively related to instrumental support to family/friends and instrumental support to others. Income was negatively related to financial support to political organizations, and race was negatively related to financial support to religious organizations.

Among the independent variables, significant ($p < .01$) but small positive correlations were found between solidarity toward family and solidarity toward friends, solidarity toward neighbors, solidarity toward community members, and generativity. In addition, sex and marital status were related to solidarity toward family—men reported lower solidarity toward family compared to women, and ever married childless adults reported greater solidarity toward family compared to never married childless adults. Solidarity toward friends was positively related to solidarity toward neighbors, solidarity toward community members, generativity, and sex; childless men reported lower solidarity toward friends than did childless women. Solidarity toward neighbors was positively related to solidarity toward community members and generativity. Solidarity toward community members was positively related to generativity and negatively related to reciprocity.

Among the independent and control variables, a significant ($p < .01$) but small positive correlation was found between race and solidarity toward family—White childless adults reported lower solidarity toward family than did non-White childless adults. Age was positively related to solidarity toward neighbors and community members. Income also was negatively related to sex—childless men reported higher incomes compared to childless women. Finally, age, education, and income were related to generativity.

Multivariate Statistics Performed to Answer the Research Questions

Hierarchical multiple regressions using PROC SURVEYREG were conducted to answer all research questions. Tables 4-6 display the results for emotional support to parents, other family/close friends, and others, respectively. Tables 7-9 show the results for instrumental unpaid support to parents, other family/close friends, and others, respectively. Tables 10-15 present the results for financial support to parents, other family/close friends, others, religious organizations, political groups, and other organizations, respectively. Given the large number of independent tests that were conducted, which increases the risk of making a type I error (falsely rejecting the null hypothesis) and decreases the risk of making a type II error (falsely accepting the null hypothesis), a .01 level of significance was selected. An alternative method for balancing type I and type II errors—the Bonferroni correction—was considered but determined to be overly conservative in light of the exploratory nature of this study.

For every table, the first model shows only the control variables of age, education, income, and race. Model 2 adds sex and marital status, and Model 3 adds the sex by marital status interaction term (RQ1). Model 4 adds the six social-level predictors of giving (RQ2), and Model 5 contains an additional set of variables that are the interaction terms for sex by the six social-level predictors of giving and marital status by the six social-level predictors of giving (RQ3).

RQ1: Are Sex and Marital Status Significantly Related to Older Childless Adults' Inter-Vivos Transfers of (a) Emotional Support, (b) Instrumental Support, and (c) Financial Support to Kin and Non-Kin?

In Model 1, the control variables of age, education, income, and race were regressed on each of the 12 DVs. The 12 DVs were: (1) emotional support given to parents, (2) emotional support given to other family members/close friends, and (3) emotional support given to others; (4) instrumental support given to parents, (5) instrumental support given to other family members/close friends, and (6) instrumental support given to others; and (7) financial support given to parents, (8) financial support given to other family members/close friends, (9) financial support given to others, (10) financial support given to religious groups, (11) financial support given to political organizations, and (12) financial support given to other organizations. Please note that the analyses for “support given to parents” only pertained to respondents who had at least one living parent. In Model 2, sex and marital status were added to the controls, and in Model 3, the sex by marital status interaction was added to answer the first research question.

Emotional support given to kin and non-kin. Model 2 in Tables 4-6 shows that sex and marital status were not significantly related to childless adults’ inter-vivos transfers of emotional support to parents, other family/friends, or others. As shown in Model 3 in Tables 4-6, there was no significant sex by marital status interaction effect for emotional support given to kin and non-kin.

Instrumental support given to kin and non-kin. As displayed in Model 2 in Tables 7-9, sex and marital status were not significantly related to childless adults’ inter-vivos transfers of instrumental support to parents, other family/friends, or others. Model 3 in Tables 7-9 shows that there was no significant sex by marital status interaction effect for instrumental support given to kin and non-kin.

Financial support given to kin and non-kin. Model 2 in Tables 10-15 illustrates that sex and marital status were not significantly related to childless adults' inter-vivos transfers of financial support to kin and non-kin. As shown in Model 3 in Tables 10-15, there was no significant sex by marital status interaction effect for parents, other family/friends, others, religious groups, and political organizations. Model 3 in Table 15, in contrast, indicates a significant sex by marital status interaction effect for financial assistance to other organizations. Post-hoc analysis using general linear models (PROC GLM) with the least squares means statement and pdiff option for the sex by marital status interaction was conducted. The DV was financial assistance to other organizations and the IV was the sex by marital status interaction. Examination of the resulting table of *p*-values for all possible pairwise comparisons indicated that never married childless men gave significantly more financial assistance to other organizations than did ever married childless men or never married childless women ($p < .05$). Ever married women did not differ from the other groups.

RQ2: Which, if Any, of the Following Six Social-Level Predictors of Giving—Solidarity toward Family, Friends, Neighbors, and Community Members, Reciprocity, and Generativity—are Significantly Related to Older Childless Adults' Inter-Vivos Transfers of (a) Emotional, (b) Instrumental, and (c) Financial Support to Kin and Non-Kin?"

For this research question, sex and marital status were added to the analyses as controls. In Model 4, the six social-level predictors of giving were added to the control variables and were regressed on each of the 12 DVs.

Emotional support given to kin and non-kin. None of the six social-level predictors of giving were significantly related to emotional support provided to parents, other family/friends, or others (see Model 4 in Tables 4-6).

Instrumental support given to kin and non-kin. None of the six social-level predictors of giving were significantly related to giving instrumental unpaid support to parents, other family/friends, or others (see Model 4 in Tables 7-9).

Financial support given to kin and non-kin. None of the six social-level predictors of giving were significantly related to transferring financial support to parents, other family/friends, others, religious groups, political organizations, or other organizations (see Model 4 in Tables 10-15).

RQ3: Do Sex and Marital Status Significantly Moderate the Relationship between Older Childless Adults' Inter-Vivos Transfers of (a) Emotional, (b) Instrumental, and (c) Financial Support and the Six Social-Level Predictors of Giving to Kin and Non-Kin?

In Model 5, 12 interaction terms were added to the control variables and the six social-level predictors of giving—sex by solidarity toward family, sex by solidarity toward friends, sex by solidarity toward neighbors, sex by solidarity toward community members, sex by reciprocity, and sex by generativity; marital status by solidarity toward family, marital status by solidarity toward friends, marital status by solidarity toward neighbors, marital status by solidarity toward community members, marital status by reciprocity, and marital status by generativity.

Emotional support given to kin and non-kin. Model 5 in Tables 4-6 shows that neither sex nor marital status significantly moderated the relationship between childless

adults' inter-vivos transfers and the six social-level predictors of giving emotional support to parents, other family/friends, and others.

Instrumental support given to kin and non-kin. As displayed in Model 5 in Tables 7-9, sex and marital status did not significantly moderate the relationship between childless adults' inter-vivos transfers and the six social-level predictors of giving instrumental support to parents, other family/friends, and others.

Financial support given to kin and non-kin. Model 5 in Tables 10-11 and 13-15 indicates that neither sex nor marital status significantly moderated the relationship between childless adults' inter-vivos transfers and the six social-level predictors of giving financial support to parents, other family/friends, religious groups, political organizations, and other organizations. However, Model 5 in Table 12 shows that marital status significantly moderated the relationship between childless adults' financial transfers to others and generativity. Post-hoc analysis using general linear models (PROC GLM) with the least squares means statement and pdiff option for the marital status by generativity interaction was conducted. Generativity was categorized into high and low generativity based on the median split. The DV was financial assistance to others and the IV was the marital status by generativity interaction. Examination of the resulting table of *p*-values for all possible pairwise comparisons indicated that ever married childless adults who reported greater generativity gave more financial transfers to others than did never married childless adults who reported greater generativity ($p < .05$). No differences were found among ever married childless adults who reported lower generativity and ever married childless adults who reported greater generativity or never married childless adults who reported lower generativity.

Additional Analyses

Additional analyses were conducted for all hierarchical multiple regressions to ascertain differences in the results when using the imputed total income variable versus the total income variable with missing values. Without the imputation, income was significantly negatively related to financial transfers to political organizations in Models 2, 3, and 4 but not significantly related using the imputed income variable. All hierarchical multiple regressions were also conducted without weights—there were no differences in the findings compared to the weighted data. Other marital status categories that were considered included comparisons between (a) currently married (32%) versus never married/separated/divorced/widowed (68%) childless adults and (b) currently married (32%) versus separated/divorced/widowed (21%) and never married childless adults (47%)—there were no differences in the findings compared to the analyses with ever married versus never married childless adults.

Summary of Significant Findings

RQ1: Childless women and childless men provided similar amounts of inter-vivos transfers of emotional, instrumental, and financial support to kin and non-kin. One exception was that never married childless men gave significantly more financial assistance to other organizations than did ever married childless men or never married childless women.

RQ2: None of the six social-level predictors were significantly related to inter-vivos transfers of emotional, instrumental, and financial support to kin and non-kin.

RQ3: Overall, sex and marital status did not moderate the relationship between childless adults' inter-vivos transfers of emotional, instrumental, and financial assistance

and the six social-level predictors of giving to kin and non-kin. One exception was that ever married childless adults who reported greater generativity gave more financial transfers to others than did never married childless adults who reported greater generativity.

CHAPTER 5

DISCUSSION

Inter-vivos transfers, or conveyances of resources during a person's lifetime, to kin and non-kin can be beneficial to both the receiver and giver and are, thus, vital to the economy, social policies, and public resource preservation (Bumpass, 1990; Kohli & Künemund, 2003; Szydlik, 2000). The relatively high rate of childlessness among older adults and their generally ample resources merit an inquiry into their inter-vivos transfers of emotional, instrumental, and financial support to kin and non-kin and an understanding of predictors of giving. Nonetheless, research on childless adults' inter-vivos transfers in the absence of legal obligations to give resources to others is scarce and predictors of inter-vivos transfers among childless adults remain unexplored.

To help bridge this gap, I investigated inter-vivos transfers of emotional care, instrumental unpaid assistance, and financial aid to both kin and non-kin and explored two individual-level predictors (i.e., childless adults' sex and marital status) and six social-level predictors of resource conveyances by mid- to later-life childless adults using data from the MIDUS2. Social-level predictors of giving included solidarity toward family, friends, neighbors, and community members, reciprocity, and generativity. In addition, links between inter-vivos transfers, social-level predictors of giving, and the childless adults' sex and marital status were explored. Overall findings indicated more similarities than differences in giving between childless women and childless men as well as between ever married and never married childless adults; none of the six social-level predictors of giving were significantly related to inter-vivos transfers, and neither sex nor

marital status moderated the relationship between childless adults' inter-vivos transfers and predictors of giving.

Childless Adults' Sex, Marital Status, and Inter-Vivos Transfers

This study assessed the relationship between inter-vivos transfers of emotional, instrumental, and financial support to kin and non-kin and childless adults' sex and marital status. In addition, this study examined if sex and marital status moderate the relationship between inter-vivos transfers and social-level predictors of giving.

Childless adults' sex and inter-vivos transfers. Overall, childless women and childless men were more similar than different in their emotional, instrumental, and financial inter-vivos transfers to kin and non-kin. In addition, social-level predictors of giving to kin and non-kin did not differ between childless women and childless men. Previous research on sex differences in childless adults' inter-vivos transfers of instrumental care has shown that childless women gave more assistance to both kin and non-kin than did childless men (Komter & Vollebergh, 2002). These divergent findings may be explained by the differences in measures of instrumental support and distinctions that were made among recipients of assistance.

First, in the MIDUS2, examples of instrumental support given to respondents included help around the house, transportation, and childcare provided to family and non-kin. In contrast, Komter and Vollebergh (2002) focused on tasks such as providing dinners, giving gifts, offering help and care, and letting people stay in one's house. It may be that slightly different instrumental tasks illicit different (or more similar) responses between childless women and childless men. Second, in the MIDUS2, assistance given to family members and close friends was grouped together, whereas Komter and Vollebergh

asked separate questions about transfers to family versus friends. There may be more sex differences in childless adults' inter-vivos transfers when recipients are more clearly delineated.

In addition, the greater similarities than differences in inter-vivos transfers between childless women and men are interesting insofar as previous research has shown that childless women were more socially embedded and had more contact with family and non-kin than compared to older childless men (Dykstra & Hagestad, 2007). In turn, cohesion and association among family members has been shown to be associated with more transfers in the intergenerational literature (Ganong & Coleman, 2006; Rossi & Rossi, 1990; Walker & Thompson, 1983). However, feelings of solidarity toward family and solidarity toward friends were not related to inter-vivos transfers for childless women (and childless men) in this study. More research in this area is clearly needed to shed light on sex differences in childless adults' diverse types of inter-vivos transfers and factors that may explain similarities and differences in support given to kin and non-kin.

Childless adults' marital status and inter-vivos transfers. Overall findings showed that ever married and never married childless adults were similar in their emotional, instrumental, and financial inter-vivos transfers to kin and non-kin. One exception was that never married men gave more financial aid to other organizations than did ever married men and never married women. Considering that marriage can both boost an individual's ability to transfer resources and limit inter-vivos transfers to people outside of the nuclear family (Bengtson et al., 2002; Dykstra, 2004; Silverstein, 2006), this duality may partially help explain the similarities between ever married and never married childless adults. It may be that some benefits that are associated with marriage

for parents (e.g., greater economic resources; DeGenova & Rice, 2005; Emery, 1999) are different or not as vital for adults without children.

Childless adults' demographic characteristics may further provide some support for this hypothesis. In general, childless adults are well educated and financially stable (Abma & Martinez, 2006; Dalphonse, 1997; Dye, 2005; Dykstra, 1995; Hurd, 2003). Thus, the presence or absence of a marital partner may not affect inter-vivos transfers, which would explain greater similarities than differences among childless adults regardless of their marital status. Never married childless adults may have enough resources on their own that they can pass on to others; similarly, ever married childless adults may be able to give diverse types of support to others without creating a hardship within their own two-adult family.

Childless Adults and Predictors of Giving to Kin and Non-Kin

No known published empirical studies have investigated predictors of childless adults' conveyances of various types of resources. This study explored six social-level predictors of giving emotional, instrumental, and financial assistance to kin and non-kin by older childless adults including solidarity toward family, friends, neighbors, and community members, reciprocity, and generativity. Results did not show a link between these predictors and inter-vivos transfers.

Solidarity. Solidarity among adults as a reason for helping has been extensively studied in the intergenerational literature, particularly in parent-adult child relationships (Bengtson et al., 2002; Clarke et al., 1999; Komter & Vollebergh, 2002; Lowenstein, 2007; Parrott & Bengtson, 1999), but was not related to inter-vivos transfers by childless adults. Factors that may account for these discrepancies are the small sample size for help

given to parents and the dimensions of solidarity toward family and non-kin that were included in this study. First, in terms of transferring emotional, instrumental, and financial assistance to parents, the sample size for childless adults who had at least one living parent was relatively small ($n = 153$). Thus, there may not have been adequate power to detect significant findings bearing in mind the large number of variables that were examined. Second, the two dimensions of solidarity—affection and association—that are of greatest importance in parent-adult child transfers (Aldous, 1987; Bengtson et al., 2002; Cicirelli, 1983; Rossi & Rossi, 1990) appear to be less meaningful predictors of giving for childless adults. Future studies should evaluate if other dimensions of solidarity better predict childless adults' inter-vivos transfers of emotional, instrumental, and financial assistance to kin and non-kin.

Reciprocity. Findings also did not indicate a relationship between expectations for reciprocity and inter-vivos transfers. It may still be that childless adults gave inter-vivos transfers to others with the expectation for concurrent and/or future repayment. However, the single hypothetical item used in this study to assess norms of reciprocity may have been too general and perhaps did not tap into childless adults' expectations for or received repayment of their help. A brief scale that addresses norms of reciprocity with multiple questions and items that are more relevant to direct giving and receiving may yield a link between reciprocity and childless adults' inter-vivos transfers.

Generativity. Care and concern for the next generation is a major developmental task during midlife and can be achieved regardless of parental status (Erikson, 1985; Snarey, 1993; Snarey et al., 1987). Societal generativity in connection with inter-vivos transfers was examined, because childless adults may transfer resources to others as a

way to give back to society, help ensure the well-being of the next generation, and show concern for others. Results did not show a relationship between generativity and inter-vivos transfers of emotional, instrumental, and financial assistance to kin and non-kin. Thus, although generativity may be an important stage for adults in midlife, it does not appear to be a driving force behind childless adults' resource conveyances.

Sex and Marital Status as Moderators between Childless Adults' Inter-Vivos Transfers and Social-Level Predictors of Giving

In this study, overall neither sex nor marital status moderated the relationship between childless adults' inter-vivos transfers of emotional, instrumental, and financial assistance and the six social-level predictors of giving to kin and non-kin. One exception was that ever married childless adults who reported greater generativity gave more financial aid to others compared to never married childless adults who reported greater generativity. However, overall predictors of inter-vivos transfers to family and non-kin appear to be similar between childless women and childless men as well as between ever married and never married childless adults. This finding is interesting in light of previous research that has suggested that childless women, especially never married childless women, have particularly close relationships with both kin and non-kin compared to childless men (Dykstra, 2004) and that closeness among family members is associated with greater inter-vivos transfers (Bengtson et al., 2002; Rossi & Rossi, 1990). Perhaps childless men, including the never married, are not experiencing the distinct disadvantage regarding social networks that is often proposed, and thus, there are no differences in predictors of giving compared to childless women. In addition, considering that no known research has investigated predictors of childless adults' resource conveyances, it is

possible that sex and/or marital status may moderate the relationship between childless adults' transfers of emotional, instrumental, and financial assistance and predictors of giving that were not explored in this study. More research is clearly needed in this area.

Limitations, Directions for Future Research, and Conclusion

As with any research, the limitations in this study need to be considered when generalizing the findings and should be used to provide directions for future studies on older childless adults' diverse types of inter-vivos transfers and predictors of giving to kin and non-kin. First, although national data sets provide researchers access to large and random samples and respondents from diverse demographic backgrounds, there are disadvantages to using secondary data sets. For instance, the MIDUS2 data set was not collected for the purpose of exploring childless adults' inter-vivos transfers and predictors of giving. Thus, the investigation of the types of transfers and predictors of giving inter-vivos transfers to kin and non-kin in this study was limited by the questions posed in the survey.

To illustrate, the MIDUS2 contained a single question about the amount of emotional, instrumental, and financial support that was given to various recipients. Furthermore, each question provided examples of the types of assistance that may have been given. However, it may be that respondents transferred other types of support to kin and non-kin that were not captured in any of the questions about inter-vivos transfers. Moreover, a single question was used to assess transfers to both family members and close friends, which may have influenced reports of inter-vivos transfers. Although many childless adults have enduring relationships with friends and may consider them "like

family” (Dykstra, 1995; Wu & Pollard, 1998), it would be prudent to create separate questions for each recipient.

Second, limitations were also associated with the cross-sectional data used in this study. Longitudinal designs would allow for the examination of changes in inter-vivos transfers over time and the development of reciprocal transfers across time. The latter aspect would also provide more detailed information on patterns of mutual assistance and how norms of reciprocity shape and influence subsequent inter-vivos transfers. In addition, this information could help inform policy makers about the types of informal resources that are available to and utilized by older childless adults. For example, if childless adults give support to others and receive assistance in return, inter-vivos transfers may serve as “life insurance” and decrease their reliance on formal care and assistance in later life. Although longitudinal data (2 waves) are available through MIDUS, this study was limited to the second wave data because of the focus on mid- to later-life childless adults. Specifically, adults ranged in ages from 35-86 years in MIDUS2 and 25-74 years in MIDUS1. Because I was interested in adults over the age of 44 years who did not have biological or adopted children, stepchildren, who were not currently pregnant and had never given birth or fathered a child, MIDUS2 provided a greater pool of potential participants. Even so, only 339 adults of the 2,746 MIDUS2 participants met these criteria.

Third, the small sample size of childless adults from racial and ethnic minority backgrounds in this study ($n = 36$) did not allow the identification of race/ethnicity differences in inter-vivos transfers and predictors of giving to kin and non-kin. The generally strong emphasis that is placed on collectivism as well as reproduction among

racial and ethnic minorities (Heaton et al., 1999; Hofstede, 2001; Triandis, 2001) may play a role in resource conveyances. In addition, cross-cultural studies are needed that examine similarities and differences in giving assistance among older childless adults from diverse cultural backgrounds.

Finally, the lack of association between any of the six social-level predictors of giving explored in this study and inter-vivos transfers, despite the fact that the childless transfer resources to others (see Table 3), suggests that reasons for giving are complex. It is likely that other predictors that were not explored in this study are related to childless adults' inter-vivos transfers. For instance, childless adults' self-interest (e.g., expectations of one's own future, pleasure derived from giving to others) as well as perceived moral obligations, felt obligations, and social expectations of what type of help is appropriate for and expected to be given to kin and non-kin may be important catalysts for childless adults to make inter-vivos transfers. Future research needs to strive to identify other factors that may predict inter-vivos transfers as well as motives for childless adults to convey resources despite having no legal obligation to do so. One way to achieve this task is by conducting qualitative studies or posing open-ended questions in surveys about the types of inter-vivos transfers that childless adults give to others, the amount they transfer, to whom they provide assistance, and their reasons for giving. Findings can then be used to develop and integrate more appropriate measures of childless adults' inter-vivos transfers and predictors of giving.

In conclusion, the increased prevalence of childlessness among older adults provides a plethora of opportunities to investigate childless adults' inter-vivos transfers to kin and non-kin. Despite some limitations, this study extends the empirical literature on

older childless adults' inter-vivos transfers to kin and non-kin. Specifically, this study is the first to explore older childless adults' inter-vivos transfers of emotional, instrumental, and financial support in a single study and the first study to contemplate predictors of giving assistance to kin and non-kin among childless adults. Findings provided evidence that childless adults are involved in giving inter-vivos transfers of emotional care, instrumental unpaid assistance, and financial aid to both kin and non-kin. In addition, results indicated more similarities than differences in resource conveyances among both childless women and childless men as well as the ever married and never married childless. Future research should build on these findings and limitations to help deepen our understanding of older childless adults' involvement in inter-vivos transfers and predictors of giving to kin and non-kin.

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Table 1.

Older Childless Adults' Demographic Characteristics (N = 339)

Variable	<i>n</i>	%
Sex		
Men	167	49
Women	172	51
Race		
White	303	89
African American	17	5
Native American	3	1
Asian American	1	1
Latino	4	1
Other	11	3
Marital Status		
Married	107	32
Separated	3	1
Divorced	54	16
Widowed	13	4
Never Married	159	47
Currently Cohabiting		
Yes	28	8
No	203	60

Not Applicable	108	32
Highest Level of Education Completed		
1=Grades 1-6	1	1
2=Grades 7-8	4	1
3=Grades 9-12	10	3
4=G.E.D	3	1
5=High School	78	23
6=Some College	44	13
(1-2 years, no degree)		
7=Some College	11	3
(3+ years, no degree)		
8=Associate Degree	28	8
9=Bachelor Degree	66	20
10=Some Graduate	11	3
11=Master's Degree	58	17
12=PhD, EdD, Prof.	25	7
At Least 1 Parent is Still Alive		
Yes	153	45
No	186	55
Mother is Still Alive		
Yes	134	40
No	205	60
Fathers is Still Alive		

Yes	75	22	
No	264	78	
Current Employment Status			
Work	176	52	
Self-Employed	39	12	
Not Employed	29	8	
Retired	95	28	
Number of Other Household Members			
0	165	49	
1	151	44	
2+	23	7	
<hr/>			
	<i>M</i>	<i>SD</i>	Range
<hr/>			
Age	57.73	10.11	45-84
Total Annual Household Income (\$)	48,039.88	36,720.26	0 – 212,500
Wages (\$)	35,582.69	36,754.36	0 – 200,000
Pension (\$)	8,609.92	16,933.60	0 – 145,000
Social Security (\$)	3,921.64	7,500.76	0 – 87,500

Note. Demographic characteristics are based on the unweighted data

Table 2.

Dependent, Independent, and Control Variables included in the Analyses

Variable	Coding
Dependent Variables	
Emotional support given per month to	
1. parents	0-744 hours per month
2. other family/close friends	0-744 hours per month
3. others	0-744 hours per month
Instrumental support given per month to	
4. parents	0-744 hours per month
5. other family/close friends	0-744 hours per month
6. others	0-744 hours per month
Financial support given per month to	
7. parents	0-unlimited dollars per month
8. other family/close friends	0- unlimited dollars per month
9. others	0- unlimited dollars per month
10. religious groups	0- unlimited dollars per month
11. political organizations	0- unlimited dollars per month
12. other organizations	0- unlimited dollars per month
Independent Variables	
1. Childless adults' sex	0 = Male; 1 = Female
2. Childless adults' marital status	0 = Married/separated/divorced/

- widowed; 1 = never married
3. Solidarity toward family
Mean across 5 items; higher scores = greater solidarity
 4. Solidarity toward friends
Mean across 5 items; higher scores = greater solidarity
 5. Solidarity toward neighbors
Mean across 2 items; higher scores = greater solidarity
 6. Solidarity toward community members
Mean across 2 items; higher scores = greater solidarity
 6. Reciprocity
Single item; higher scores = greater reciprocity
 7. Generativity
Mean across 6 items; higher scores = greater generativity

Control Variables

1. Age
Continuous variable; 45-84 years
2. Race/ethnicity
0 = White; 1 = racial/ethnic minority
3. Highest level of education
Continuous variable; 1 = *grades 1-16*
to 12 = *PhD, EdD, profess. degree*
4. Total income
Continuous imputed variable
representing the sum across 3
sources of annual mean incomes:
wages, pension, and social security

Table 3.

Weighted Descriptive Statistics for Dependent and Independent Continuous Variables Pre- and Post-Transformation

Variables	Pre-Transformation				Post-Transformation			
	<i>M</i>	<i>SE</i>	<i>Skew</i>	<i>Kurtosis</i>	<i>M</i>	<i>SE</i>	<i>Skew</i>	<i>Kurtosis</i>
Emotional Support Given to ^a								
Parents	12.72	2.83	4.75	26.76	-.03	.06	.18	-1.22
Other family/friends	8.63	1.24	8.31	96.29	-.06	.04	.25	-1.19
Others	4.04	.37	2.39	6.53	-.02	.03	.06	-.91
Instrumental Support Given to ^a								
Parents	12.39	2.95	5.07	32.01	.00	.04	.19	-.04
Other family/friends	5.35	1.57	11.43	148.67	.05	.03	.00	-.33
Others	2.49	.38	5.55	43.41	.09	.03	.01	-.14
Financial Support Given to ^a								
Parents	27.11	7.46	4.44	23.21	-.05	.03	-.60	5.14

Other family/friends	31.79	8.33	9.20	103.73	-.06	.02	-.03	4.24
Others	5.28	.79	3.86	17.82	-.07	.02	-.27	2.99
Religious groups	105.11	27.66	9.60	101.90	-.10	.02	-.09	.86
Political organizations	10.59	2.77	8.50	82.20	-.05	.02	-.16	5.10
Other organizations	64.46	10.57	5.97	44.66	-.08	.03	.32	-.08
Solidarity toward family ^b	3.67	.05	-1.26	1.52	51.63	1.80	.40	-.09
Solidarity toward friends ^b	3.75	.05	-1.32	1.99	53.89	1.73	.30	-.67
Solidarity toward neighbors	4.06	.08	-.35	-.68				
Solidarity toward community	4.58	.08	-.26	-.40				
Reciprocity	3.66	.09	.17	-.48				
Generativity	2.74	.04	-.20	-.26				
Age	57.17	.61	.90	.16				
Education	7.27	.16	-.12	-.54				
Total Income ^c	46,728	2,017.22	1.72	3.91	200.24	4.50	.31	.83

Note. ^a Sine transformation; ^b exponential transformation; ^c square root transformation.

Table 4.

Hierarchical Regression Coefficients for Inter-Vivos Transfers of Emotional Support to Parents^a

Variables	Model 1			Model 2			Model 3			Model 4			Model 5		
	B	SE B	β												
Control Variables															
Age	-.01	.01	-.04	-.01	.01	-.04	-.01	.01	-.06	-.01	.01	-.04	-.00	.01	-.02
Education	.01	.03	.05	.02	.03	.06	.02	.03	.07	.01	.03	.05	.03	.03	.09
Income ^b	.00	.00	.01	.00	.00	.06	.00	.00	.07	.00	.00	.05	.00	.00	.04
Race ^c	-.10	.22	-.04	-.10	.23	-.05	-.06	.22	-.03	-.08	.23	-.04	-.01	.25	-.01
Individual-Level Predictors of Giving															
Sex ^d				.22	.11	.16	.42**	.16	.31	.20	.12	.15	-.20	.85	-.14
Marital Status ^e				.00	.12	.00	.24	.15	.18	-.01	.12	-.01	.82	.85	.61
Sex ^d X Marital Status ^e							-.42	.23	-.27						
Social-Level Predictors of Giving															
Family Solidarity ^f										-.00	.00	-.08	.00	.00	.05

Friend Solidarity ^f	.00	.00	.05	-.00	.00	-.11
Neighbor Solidarity	.03	.05	.05	.01	.09	.03
Community Solidarity	.02	.05	.04	-.10	.10	-.20
Reciprocity	-.01	.04	-.01	.01	.08	.01
Generativity	-.02	.13	-.02	.19	.22	.18
Interactions						
Sex ^c X Family Solidarity ^f				.00	.00	.01
Sex ^c X Friend Solidarity ^f				.00	.00	.09
Sex ^c X Neighbor Solidarity				.03	.11	.09
Sex ^c X Community Solidarity				.08	.11	.28
Sex ^c X Reciprocity				.07	.09	.21
Sex ^c X Generativity				-.16	.22	-.35
Marital Status ^d X Family Solidarity ^f				-.01	.00	-.43
Marital Status ^d X Friend Solidarity ^f				.00	.00	.20
Marital Status ^d X Neighbor Solidarity				-.02	.11	-.05
Marital Status ^d X Community Solidarity				.13	.11	.49
Marital Status ^d X Reciprocity				-.18	.09	-.53

Marital Status ^d X Generativity						-0.17 .25 -.37
R^2	.01	.03	.05	.03	.12	
F	.20	.82	1.24	.55	.98	
n	146	143	143	141	141	

Note. ^a Sine transformation; ^b square root transformation; ^c Race: 0 = White, 1 = non-White; ^d Sex: 0 = male, 1 = female;

^e Marital Status: 0 = ever married, 1 = never married; ^f exponential transformation.

** $p < .01$.

Table 5.

Hierarchical Regression Coefficients for Inter-Vivos Transfers of Emotional Support to Other Family/Close Friends^a

Variables	Model 1			Model 2			Model 3			Model 4			Model 5		
	B	SE B	β												
Control Variables															
Age	.00	.00	.00	-.00	.00	-.00	-.00	.00	-.01	-.00	.00	-.01	-.00	.00	-.02
Education	.00	.01	.02	.00	.01	.01	.00	.01	.01	.00	.01	.00	.00	.01	.02
Income ^b	-.00	.00	-.00	-.00	.00	-.02	-.00	.00	-.02	-.00	.00	-.01	-.00	.00	-.02
Race ^c	.07	.13	.03	.07	.13	.03	.06	.13	.03	.04	.13	.02	-.01	.13	-.01
Individual-Level Predictors of Giving															
Sex ^d				-.19	.08	-.14	-.22	.11	-.17	-.25**	.08	-.19	.02	.44	.01
Marital Status ^e				.10	.08	.08	.07	.10	.05	.12	.08	.09	.90	.44	.68
Sex ^d X Marital Status ^e							.07	.15	.04						
Social-Level Predictors of Giving															
Family Solidarity ^f										.00	.00	.08	.00	.00	.10

Friend Solidarity ^f	.00	.00	.00	-.00	.00	-.13
Neighbor Solidarity	-.06	.03	-.13	-.01	.05	-.02
Community Solidarity	.01	.03	.01	-.03	.05	-.06
Reciprocity	-.03	.02	-.08	-.02	.04	-.06
Generativity	-.04	.06	-.04	.14	.11	.15
Interactions						
Sex ^d X Family Solidarity ^f				-.00	.00	-.14
Sex ^d X Friend Solidarity ^f				.00	.00	.01
Sex ^d X Neighbor Solidarity				-.01	.06	-.03
Sex ^d X Community Solidarity				.04	.06	.15
Sex ^d X Reciprocity				.02	.05	.06
Sex ^d X Generativity				-.12	.13	-.27
Marital Status ^e X Family Solidarity ^f				.00	.00	.11
Marital Status ^e X Friend Solidarity ^f				.01	.00	.29
Marital Status ^e X Neighbor Solidarity				-.14	.06	-.46
Marital Status ^e X Community Solidarity				.02	.07	.07
Marital Status ^e X Reciprocity				-.03	.05	-.10

Marital Status ^e X Generativity						-22.13	-48
R^2	.00	.03	.03	.06	.10		
F	.09	1.42	1.22	2.04	1.66		
n	322	319	319	310	310		

Note. ^a Sine transformation; ^b square root transformation; ^c Race: 0 = White, 1 = non-White; ^d Sex: 0 = male, 1 = female;

^e Marital Status: 0 = ever married, 1 = never married; ^f exponential transformation.

** $p < .01$.

Table 6.

Hierarchical Regression Coefficients for Inter-Vivos Transfers of Emotional Support to Others^a

Variables	Model 1			Model 2			Model 3			Model 4			Model 5		
	B	SE B	β												
Control Variables															
Age	.00	.00	.05	.00	.00	.07	.00	.00	.08	.00	.00	.07	.00	.00	.07
Education	.02	.01	.10	.02	.01	.11	.03	.01	.11	.04**	.01	.16	.04**	.01	.18
Income ^b	.00	.00	.09	.00	.00	.09	.00	.00	.10	.00	.00	.11	.00	.00	.11
Race ^c	.15	.11	.07	.16	.11	.08	.17	.11	.09	.21	.11	.11	.20	.12	.10
Individual-Level Predictors of Giving															
Sex ^d				.01	.07	.01	.15	.09	.13	.03	.07	.02	-.72	.35	-.60
Marital Status ^e				-.03	.07	-.03	.12	.09	.10	-.05	.07	-.04	-.19	.36	-.16
Sex ^d X Marital Status ^e							-.31	.13	-.22						
Social-Level Predictors of Giving															
Family Solidarity ^f										.00	.00	.03	-.00	.00	-.01

Marital Status ^e X Generativity					.05	.12	.11
R^2	.03	.03	.05	.09	.12		
F	2.48	1.81	2.42	3.20**	2.18**		
n	315	312	312	303	303		

Note. ^a Sine transformation; ^b square root transformation; ^c Race: 0 = White, 1 = non-White; ^d Sex: 0 = male, 1 = female;

^e Marital Status: 0 = ever married, 1 = never married; ^f exponential transformation.

** $p < .01$.

Table 7.

Hierarchical Regression Coefficients for Inter-Vivos Transfers of Instrumental Support to Parents^a

Variables	Model 1			Model 2			Model 3			Model 4			Model 5		
	B	SE B	β												
Control Variables															
Age	-.01	.01	-.10	-.01	.01	-.11	-.01	.01	-.13	-.02	.01	-.19	-.02	.01	-.21
Education	.03	.02	.14	.04	.02	.18	.04	.02	.20	.05	.02	.24	.04	.02	.20
Income ^b	-.00	.00	-.10	-.00	.00	-.10	-.00	.00	-.09	-.00	.00	-.09	-.00	.00	-.06
Race ^c	-.10	.14	-.06	-.06	.14	-.04	-.03	.15	-.02	.01	.16	.00	.04	.18	.03
Individual-Level Predictors of Giving															
Sex ^d				.14	.09	.13	.31**	.11	.30	.12	.09	.11	-.76	.56	-.73
Marital Status ^e				-.17	.09	-.16	.04	.13	.04	-.17	.09	-.16	-.29	.58	-.28
Sex ^d X Marital Status ^e							-.37	.17	-.31						
Social-Level Predictors of Giving															
Family Solidarity ^c										.00	.00	.10	.00	.00	.23

Marital Status ^e X Generativity						-0.14 .15 -.40
R^2	.03	.08	.11	.15	.23	
F	1.50	1.82	2.50	2.15	2.11 ^{**}	
n	147	144	144	142	142	

Note. ^a Sine transformation; ^b square root transformation; ^c Race: 0 = White, 1 = non-White; ^d Sex: 0 = male, 1 = female;

^e Marital Status: 0 = ever married, 1 = never married; ^f exponential transformation.

^{**} $p < .01$.

Table 8.

Hierarchical Regression Coefficients for Inter-Vivos Transfers of Instrumental Support to Other Family/Close Friends^a

Variables	Model 1			Model 2			Model 3			Model 4			Model 5		
	B	SE B	β												
Control Variables															
Age	.00	.00	.02	.00	.00	.03	.00	.00	.04	-.00	.00	-.00	-.00	.00	-.02
Education	.03**	.01	.16	.03**	.01	.16	.03**	.01	.17	.03	.01	.16	.03	.01	.16
Income ^b	-.00	.00	-.01	-.00	.00	-.00	-.00	.00	-.00	.00	.00	.00	.00	.00	.00
Race ^c	.03	.10	.02	.03	.11	.02	.05	.11	.03	.05	.11	.03	.07	.11	.04
Individual-Level Predictors of Giving															
Sex ^d				.01	.06	.01	.10	.09	.09	-.04	.07	-.04	-.32	.37	-.30
Marital Status ^e				.00	.06	.00	.10	.09	.09	.01	.07	.01	-.17	.37	-.16
Sex ^d X Marital Status							-.19	.12	-.15						
Social-Level Predictors of Giving															
Family Solidarity ^f										.00	.00	.12	.00	.00	.24

Marital Status ^e X Generativity						-0.15	0.10	-0.41
R^2	.02	.03	.03	.06	.10			
F	1.94	1.36	1.55	1.58	1.44			
n	322	319	319	311	311			

Note. ^a Sine transformation; ^b square root transformation; ^c Race: 0 = White, 1 = non-White; ^d Sex: 0 = male, 1 = female;

^e Marital Status: 0 = ever married, 1 = never married; ^f exponential transformation.

** $p < .01$.

Table 9.

Hierarchical Regression Coefficients for Inter-Vivos Transfers of Instrumental Support to Others^a

Variables	Model 1			Model 2			Model 3			Model 4			Model 5		
	B	SE B	β												
Control Variables															
Age	-.01	.00	-.12	-.01	.00	-.13	-.01	.00	-.12	-.01	.00	-.15	-.01	.00	-.16
Education	.03**	.01	.15	.03	.01	.14	.03**	.01	.15	.03	.01	.13	.03	.01	.13
Income ^b	-.00	.00	-.02	-.00	.00	-.02	-.00	.00	-.02	-.00	.00	-.04	-.00	.00	-.03
Race ^c	-.09	.10	-.06	-.10	.10	-.06	-.09	.10	-.05	-.10	.11	-.06	-.08	.12	-.05
Individual-Level Predictors of Giving															
Sex ^d				-.01	.06	-.01	.04	.08	.04	-.04	.06	-.04	-.05	.34	-.04
Marital Status ^e				.09	.06	.08	.14	.09	.14	.08	.06	.08	-.19	.36	-.18
Sex ^d X Marital Status							-.11	.12	-.09						
Social-Level Predictors of Giving															
Family Solidarity ^f										.00	.00	.01	-.00	.00	-.00

Friend Solidarity ^f	.00	.00	.01	.00	.00	.07
Neighbor Solidarity	-.03	.02	-.07	-.02	.04	-.04
Community Solidarity	.04	.03	.10	.03	.05	.07
Reciprocity	-.02	.02	-.05	-.01	.03	-.05
Generativity	-.01	.05	-.02	-.07	.10	-.09
Interactions						
Sex ^d X Family Solidarity ^f				-.00	.00	-.08
Sex ^d X Friend Solidarity ^f				.00	.00	.10
Sex ^d X Neighbor Solidarity				-.03	.04	-.13
Sex ^d X Community Solidarity				.01	.05	.04
Sex ^d X Reciprocity				-.04	.04	-.16
Sex ^d X Generativity				.09	.11	.25
Marital Status ^e X Family Solidarity ^f				.00	.00	.13
Marital Status ^e X Friend Solidarity ^f				-.00	.00	-.30
Marital Status ^e X Neighbor Solidarity				.03	.05	.14
Marital Status ^e X Community Solidarity				.01	.05	.05
Marital Status ^e X Reciprocity				.04	.04	.15

Marital Status ^e X Generativity					.02	.11	.06
R^2	.04	.05	.05	.07	.09		
F	3.40 ^{**}	2.51	2.36	1.79	1.39		
n	323	320	320	312	312		

Note. ^a Sine transformation; ^b square root transformation; ^c Race: 0 = White, 1 = non-White; ^d Sex: 0 = male, 1 = female;

^e Marital Status: 0 = ever married, 1 = never married; ^f exponential transformation.

^{**} $p < .01$.

Table 10.

Hierarchical Regression Coefficients for Inter-Vivos Transfers of Financial Support to Parents^a

Variables	Model 1			Model 2			Model 3			Model 4			Model 5		
	B	SE B	β												
Control Variables															
Age	.00	.01	.03	.00	.01	.03	.00	.01	.03	.00	.01	.06	.00	.01	.06
Education	.02	.02	.12	.02	.02	.11	.02	.02	.11	.02	.02	.12	.02	.02	.16
Income ^b	-.00	.00	-.09	-.00	.00	-.09	-.00	.00	-.09	-.00	.00	-.08	-.00	.00	-.06
Race ^c	.04	.09	.04	.04	.09	.03	.03	.09	.03	.09	.09	.08	.17	.12	.15
Individual-Level Predictors of Giving															
Sex ^d				-.01	.06	-.02	-.05	.10	-.06	.02	.07	.03	.19	.36	.27
Marital Status ^e				.03	.05	.05	-.01	.08	-.01	.04	.06	.05	.65	.39	.92
Sex ^d X Marital Status							.07	.12	.09						
Social-Level Predictors of Giving															
Family Solidarity ^f										.00	.00	.02	.00	.00	.37

Marital Status ^e X Generativity						-0.16	.10	-.65
R^2	.02	.02	.02	.07		.16		
F	.54	.38	.37	.96		.78		
n	143	140	140	138		138		

Note. ^a Sine transformation; ^b square root transformation; ^c Race: 0 = White, 1 = non-White; ^d Sex: 0 = male, 1 = female;

^e Marital Status: 0 = ever married, 1 = never married; ^f exponential transformation.

** $p < .01$.

Table 11.

Hierarchical Regression Coefficients for Inter-Vivos Transfers of Financial Support to Other Family/Close Friends^a

Variables	Model 1			Model 2			Model 3			Model 4			Model 5		
	B	SE B	β												
Control Variables															
Age	-0.00	.00	-.00	.00	.00	.00	.00	.00	.00	-.00	.00	-.00	-.00	.00	-.00
Education	-.01	.01	-.05	-.01	.01	-.04	-.01	.01	-.05	-.00	.01	-.00	-.00	.01	-.00
Income ^b	.00	.00	.05	.00	.00	.04	.00	.00	.04	.00	.00	.04	.00	.00	.04
Race ^c	-.04	.05	-.04	-.04	.05	-.04	-.04	.05	-.04	-.02	.05	-.02	.00	.06	.00
Individual-Level Predictors of Giving															
Sex ^d				-.02	.04	-.04	-.04	.05	-.07	-.00	.04	-.00	.15	.20	.25
Marital Status ^e				-.06	.04	-.09	-.08	.05	-.13	-.08	.04	-.12	.19	.21	.31
Sex ^d X Marital Status ^e							.05	.08	.07						
Social-Level Predictors of Giving															
Family Solidarity ^f										-.00	.00	-.13	-.00	.00	-.06

Friend Solidarity ^f	.00	.00	.07	.00	.00	.03
Neighbor Solidarity	.01	.01	.03	.01	.02	.04
Community Solidarity	-.01	.01	-.05	.01	.02	.05
Reciprocity	.02	.01	.08	.02	.02	.09
Generativity	-.06	.03	-.13	-.02	.04	-.05
Interactions						
Sex ^d X Family Solidarity ^f				-.00	.00	-.11
Sex ^d X Friend Solidarity ^f				.00	.00	.07
Sex ^d X Neighbor Solidarity				.01	.02	.06
Sex ^d X Community Solidarity				-.04	.03	-.32
Sex ^d X Reciprocity				-.02	.02	-.13
Sex ^d X Generativity				.03	.06	.16
Marital Status ^e X Family Solidarity ^f				-.00	.00	-.06
Marital Status ^e X Friend Solidarity ^f				.00	.00	.06
Marital Status ^e X Neighbor Solidarity				-.01	.03	-.05
Marital Status ^e X Community Solidarity				-.00	.03	-.01
Marital Status ^e X Reciprocity				.02	.03	.13

Marital Status ^e X Generativity						-11 .06 -.52
<i>R</i> ²	.00	.01	.02	.06	.09	
<i>F</i>	.39	.84	.78	1.99	1.23	
<i>n</i>	315	312	312	304	304	

Note. ^a Sine transformation; ^b square root transformation; ^c Race: 0 = White, 1 = non-White; ^d Sex: 0 = male, 1 = female;

^e Marital Status: 0 = ever married, 1 = never married; ^f exponential transformation.

** $p < .01$.

Table 12.

Hierarchical Regression Coefficients for Inter-Vivos Transfers of Financial Support to Others^a

Variables	Model 1			Model 2			Model 3			Model 4			Model 5		
	B	SE B	β												
Control Variables															
Age	.00	.00	.01	.00	.00	.02	.00	.00	.02	.00	.00	.00	-.00	.00	-.00
Education	-.00	.01	-.03	-.00	.01	-.02	-.00	.01	-.02	-.01	.01	-.06	-.01	.01	-.06
Income ^b	-.00	.00	-.13	-.00	.00	-.11	-.00	.00	-.11	-.00	.00	-.11	-.00	.00	-.12
Race ^c	-.11	.09	-.10	-.11	.09	-.10	-.12	.09	-.10	-.14	.08	-.11	-.13	.08	-.11
Individual-Level Predictors of Giving															
Sex ^d				.00	.04	.00	-.03	.06	-.05	-.02	.05	-.03	.50	.27	.67
Marital Status ^e				-.06	.04	-.08	-.10	.06	-.13	-.04	.04	-.05	-.05	.27	-.07
Sex ^d X Marital Status ^e							.08	.08	.09						
Social-Level Predictors of Giving															
Family Solidarity ^f										.00	.00	.10	-.00	.00	-.05

Marital Status ^e X Generativity						-0.20**	0.07	-0.77
<i>R</i> ²	.03	.03	.04	.06	.14			
<i>F</i>	1.87	1.58	1.44	1.39	1.55			
<i>n</i>	313	310	310	302	302			

Note. ^a Sine transformation; ^b square root transformation; ^c Race: 0 = White, 1 = non-White; ^d Sex: 0 = male, 1 = female;

^e Marital Status: 0 = ever married, 1 = never married; ^f exponential transformation.

** $p < .01$.

Table 13.

Hierarchical Regression Coefficients for Inter-Vivos Transfers of Financial Support to Religious Groups^a

Variables	Model 1			Model 2			Model 3			Model 4			Model 5		
	B	SE B	β												
Control Variables															
Age	-0.00	.00	-.02	-0.00	.00	-.01	-0.00	.00	-.01	-0.00	.00	-.05	-0.00	.00	-.05
Education	-.01	.01	-.04	-.01	.01	-.04	-.01	.01	-.04	-.01	.01	-.04	-.01	.01	-.03
Income ^b	.00	.00	.02	.00	.00	.02	.00	.00	.02	.00	.00	.04	.00	.00	.04
Race ^c	-.20**	.07	-.14	-.19**	.07	-.14	-.19**	.07	-.14	-.21**	.08	-.16	-.22**	.08	-.17
Individual-Level Predictors of Giving															
Sex ^d				.07	.05	.08	.08	.07	.09	.04	.05	.04	-.15	.25	-.18
Marital Status ^e				.00	.05	.00	.01	.07	.02	.02	.05	.02	.02	.23	.08
Sex ^d X Marital Status							-.03	.10	-.03						
Social-Level Predictors of Giving															
Family Solidarity ^f										.00	.00	.10	.00	.00	.11

Friend Solidarity ^f	-0.00	.00	-.03	-.00	.00	-.14
Neighbor Solidarity	-.00	.02	-.01	-.02	.03	-.06
Community Solidarity	-.02	.02	-.06	-.06	.03	-.20
Reciprocity	-.03	.01	-.11	-.01	.02	-.03
Generativity	-.03	.04	-.05	.04	.06	.07
Interactions						
Sex ^d X Family Solidarity ^f				-.00	.00	-.03
Sex ^d X Friend Solidarity ^f				-.00	.00	-.00
Sex ^d X Neighbor Solidarity				.03	.04	.16
Sex ^d X Community Solidarity				.05	.04	.28
Sex ^d X Reciprocity				-.01	.03	-.07
Sex ^d X Generativity				-.03	.07	-.10
Marital Status ^e X Family Solidarity ^f				-.00	.00	-.03
Marital Status ^e X Friend Solidarity ^f				.00	.00	.21
Marital Status ^e X Neighbor Solidarity				-.00	.04	-.00
Marital Status ^e X Community Solidarity				.05	.04	.28
Marital Status ^e X Reciprocity				-.02	.03	-.10

Marital Status ^e X Generativity						-12 .07 -.41
<i>R</i> ²	.02	.03	.03	.05	.08	
<i>F</i>	1.97	1.54	1.32	1.50	1.17	
<i>n</i>	315	312	312	303	303	

Note. ^a Sine transformation; ^b square root transformation; ^c Race: 0 = White, 1 = non-White; ^d Sex: 0 = male, 1 = female;

^e Marital Status: 0 = ever married, 1 = never married; ^f exponential transformation.

** $p < .01$.

Table 14.

Hierarchical Regression Coefficients for Inter-Vivos Transfers of Financial Support to Political Organizations^a

Variables	Model 1			Model 2			Model 3			Model 4			Model 5		
	B	SE B	β												
Control Variables															
Age	.00	.00	.11	.00	.00	.10	.00	.00	.10	.00	.00	.13	.00	.00	.13
Education	.00	.01	.04	.00	.01	.03	.00	.01	.03	.00	.01	.03	.00	.01	.03
Income ^b	-.00**	.00	-.19	-.00	.00	-.19	-.00	.00	-.19	-.00	.00	-.19	-.00	.00	-.19
Race ^c	-.01	.05	-.01	-.01	.05	-.01	-.01	.05	-.02	-.03	.05	-.03	-.04	.05	-.04
Individual-Level Predictors of Giving															
Sex ^d				.00	.03	.01	-.02	.04	-.04	.00	.04	.01	.02	.19	.04
Marital Status ^e				-.01	.03	-.01	-.03	.05	-.06	-.01	.03	-.02	.09	.20	.16
Sex ^d X Marital Status							.06	.06	.09						
Social-Level Predictors of Giving															
Family Solidarity ^f										-.00	.00	-.06	-.00	.00	-.08

Friend Solidarity ^f	.00	.00	.15	.00	.00	.08
Neighbor Solidarity	-.01	.01	-.07	-.01	.02	-.05
Community Solidarity	-.01	.01	-.07	-.01	.03	-.05
Reciprocity	-.00	.01	-.03	-.01	.01	-.07
Generativity	-.01	.03	-.02	.02	.05	.06
Interactions						
Sex ^d X Family Solidarity ^f				.00	.00	.06
Sex ^d X Friend Solidarity ^f				-.00	.00	-.03
Sex ^d X Neighbor Solidarity				-.00	.02	-.00
Sex ^d X Community Solidarity				-.01	.03	-.07
Sex ^d X Reciprocity				.02	.02	.17
Sex ^d X Generativity				-.03	.04	-.16
Marital Status ^e X Family Solidarity ^f				-.00	.00	-.03
Marital Status ^e X Friend Solidarity ^f				.00	.00	.21
Marital Status ^e X Neighbor Solidarity				-.01	.02	-.10
Marital Status ^e X Community Solidarity				-.00	.02	-.02
Marital Status ^e X Reciprocity				-.00	.02	-.03

Marital Status ^e X Generativity						-0.03 .05 -.17
R^2	.05	.05	.05	.07	.09	
F	3.28	2.06	1.79	1.65	1.12	
n	310	307	307	299	299	

Note. ^a Sine transformation; ^b square root transformation; ^c Race: 0 = White, 1 = non-White; ^d Sex: 0 = male, 1 = female;

^e Marital Status: 0 = ever married, 1 = never married; ^f exponential transformation.

** $p < .01$.

Table 15.

Hierarchical Regression Coefficients for Inter-Vivos Transfers of Financial Support to Other Organizations^a

Variables	Model 1			Model 2			Model 3			Model 4			Model 5		
	B	SE B	β												
Control Variables															
Age	-0.00	.00	-.05	-0.00	.00	-.05	-0.00	.00	-.04	-0.00	.00	-.03	-0.00	.00	-.02
Education	-.01	.01	-.05	-.01	.01	-.05	-.01	.01	-.04	-.01	.01	-.04	-.01	.01	-.06
Income ^b	-0.00	.00	-.10	-0.00	.00	-.11	-0.00	.00	-.11	-0.00	.00	-.11	-0.00	.00	-.12
Race ^c	-.11	.08	-.01	-.11	.08	-.07	-.09	.07	-.05	-.10	.07	-.07	-.12	.08	-.07
Individual-Level Predictors of Giving															
Sex ^d				-.07	.06	-.07	.07	.07	.07	.06	.07	.06	.12	.35	.12
Marital Status ^e				.03	.05	.03	.17	.08	.17	.15	.08	.15	.09	.35	.10
Sex ^d X Marital Status ^e							-.29**	.11	-.25	-.25	.11	-.22	-.34**	.12	-.30
Social-Level Predictors of Giving															
Family Solidarity ^f										.00	.00	.02	-.00	.00	-.05

Friend Solidarity ^f	.00	.00	.03	-.00	.00	-.03
Neighbor Solidarity	-.01	.02	-.02	-.06	.03	-.15
Community Solidarity	-.02	.02	-.07	.02	.02	.04
Reciprocity	.02	.02	.06	.01	.02	.06
Generativity	-.00	.05	-.00	.00	.08	.04
Interactions						
Sex ^d X Family Solidarity ^f				-.00	.00	-.05
Sex ^d X Friend Solidarity ^f				-.00	.00	-.15
Sex ^d X Neighbor Solidarity				.04	.04	.18
Sex ^d X Community Solidarity				-.01	.04	-.04
Sex ^d X Reciprocity				.02	.03	.07
Sex ^d X Generativity				-.03	.09	-.08
Marital Status ^e X Family Solidarity ^f				.00	.00	.19
Marital Status ^e X Friend Solidarity ^f				.00	.00	.33
Marital Status ^e X Neighbor Solidarity				.03	.04	.15
Marital Status ^e X Community Solidarity				-.08	.05	-.42
Marital Status ^e X Reciprocity				-.00	.04	-.01

Marital Status ^e X Generativity						-01 .09 -.05
<i>R</i> ²	.02	.02	.04	.05	.10	
<i>F</i>	2.03	1.55	2.18	1.52	1.51	
<i>n</i>	319	316	316	309	309	

Note. ^a Sine transformation; ^b square root transformation; ^c Race: 0 = White, 1 = non-White; ^d Sex: 0 = male, 1 = female;

^e Marital Status: 0 = ever married, 1 = never married; ^f exponential transformation.

** $p < .01$.

IVs Related to Emotional Support Given to (3 DVs):

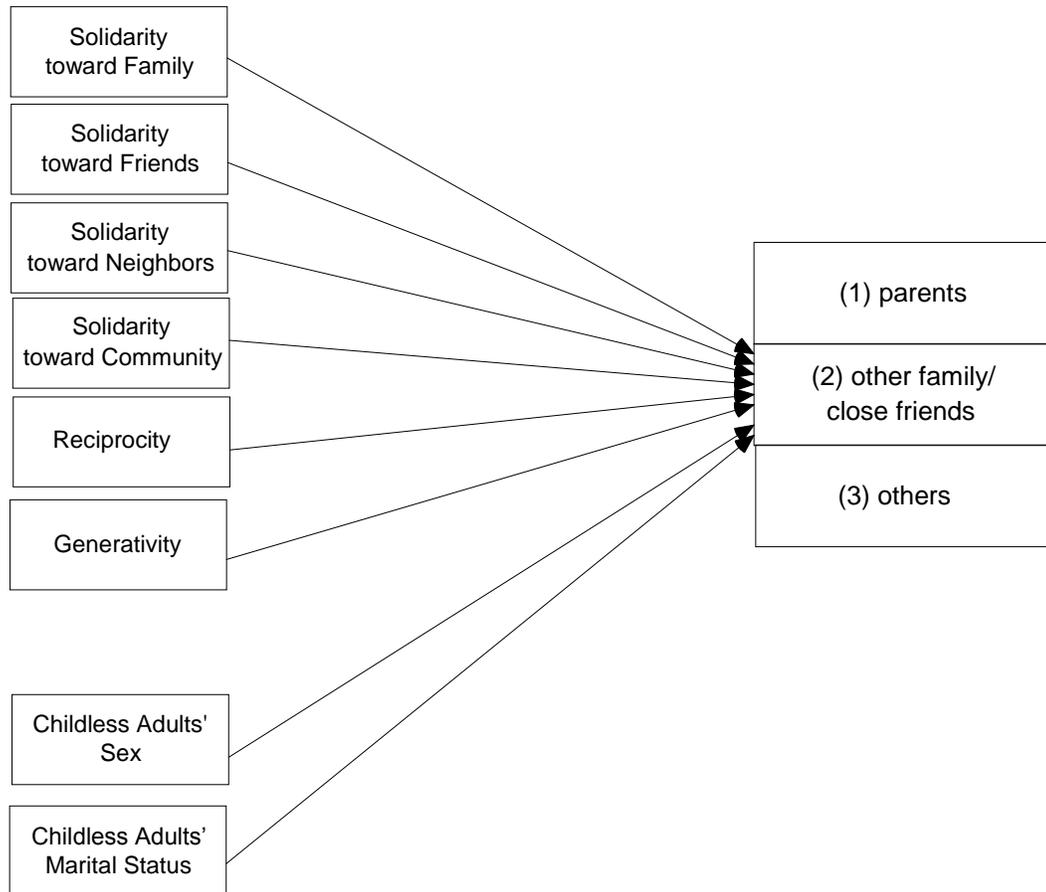


Figure 1. Independent variables that may be associated with emotional transfers to three recipients. Age, education, total annual income, and race/ethnicity were added as control variables in all analyses.

IVs Related to Instrumental Support Given to (3 DVs):

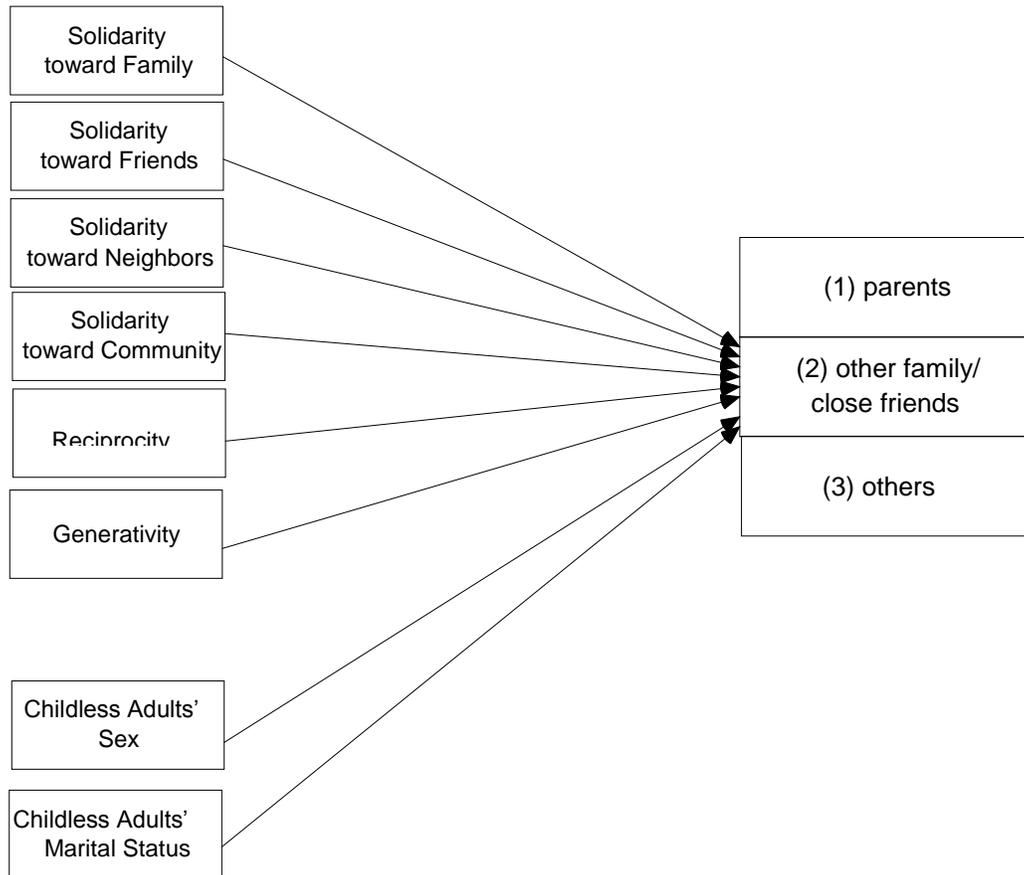


Figure 2. Independent variables that may be associated with instrumental transfers to three recipients. Age, education, total annual income, and race/ethnicity were added as control variables in all analyses.

IVs Related to Financial Support Given to (6 DVs):

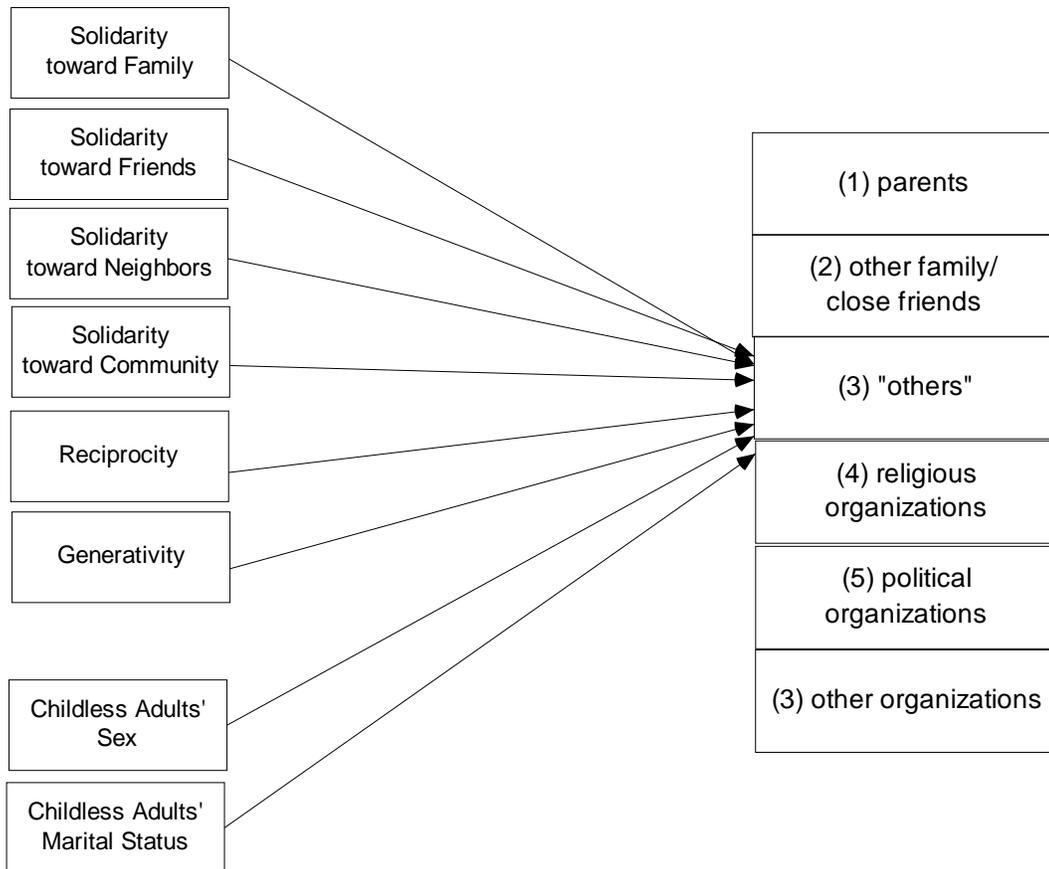


Figure 3. Independent variables that may be associated with financial transfers to six recipients. Age, education, total annual income, and race/ethnicity were added as control variables to all analyses.

Appendix A

Dependent Variables: Inter-Vivos Transfers of Emotional, Instrumental, and Financial Support to Kin and Non-Kin

Emotional Support Given

(1) 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, enter "0".)

- a. YOUR PARENTS OR THE PEOPLE WHO RAISED YOU
- b. ANY OTHER FAMILY MEMBERS OR CLOSE FRIENDS
- c. ANYONE ELSE (SUCH AS NEIGHBORS OR PEOPLE AT CHURCH)

Instrumental Support Given

(2) 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, or if the question does not apply, enter "0".)

- a. YOUR PARENTS OR THE PEOPLE WHO RAISED YOU
- b. ANY OTHER FAMILY MEMBERS OR CLOSE FRIENDS
- c. ANYONE ELSE (SUCH AS NEIGHBORS OR PEOPLE AT CHURCH)

Financial Support Given

(3) On average, about how many dollars per month do you or your family living with you contribute to each of the following people or organizations? If you contribute food, clothing, or other goods, include their dollar value. (If none, enter "0".)

- a. YOUR PARENTS OR THE PEOPLE WHO RAISED YOU

- b. ANY OTHER FAMILY MEMBERS OR CLOSE FRIENDS
- c. ANY OTHER INDIVIDUALS (NOT ORGANIZED GROUPS)
INCLUDING PEOPLE ON THE STREET ASKING FOR MONEY
- d. RELIGIOUS GROUPS
- e. POLITICAL ORGANIZATIONS OR CAUSES
- f. ANY OTHER ORGANIZATIONS, CAUSES, OR CHARITIES
(INCLUDING DONATIONS MADE THROUGH MONTHLY
PAYROLL DEDUCTIONS)

Appendix B

Predictors of Giving Inter-Vivos Transfers

I. Solidarity toward Family

1. “Not including your spouse or partner, how much do members of your family really care about you?”
2. “How much do they understand the way you feel about things?”
3. “How much can you rely on them for help if you have a serious problem?”
4. “How much can you open up to them if you need to talk about your worries?”

Coding: 1 = A lot; 2 = Some; 3 = A little; 4 = Not at all.

5. “How often are you in contact with any members of your family, that is, any of your brothers, sisters, or parents, including visits, phone calls, letters, or electronic mail messages?”

Coding: 1 = *several times a day* to 8 = *never or hardly ever*

II. Solidarity toward Friends

1. “How much do your friends really care about you?”
2. “How much do they understand the way you feel about things?”
3. “How much can you rely on them for help if you have a serious problem?”
4. “How much can you open up to them if you need to talk about your worries?”

Coding: 1 = A lot; 2 = Some; 3 = A little; 4 = Not at all.

5. “How often are you in contact with your friends, including visits, phone calls, letters, or electronic mail messages?”

Coding: 1 = *several times a day* to 8 = *never or hardly ever*

III. Solidarity toward Neighbors

1. “How often do you have any contact, even something as simple as saying ‘hello’ with any of your neighbors?”
2. “How often do you have a real conversation or get-together with any of your neighbors?”

Coding: 1 = *almost every day* to 6 = *never or hardly ever*

IV. Solidarity toward Community Members

1. “I feel close to people in my community.”
2. “My community is a source of comfort.”

Coding: 1 = *strongly agree* to 7 = *strongly disagree*

V. Norms of Reciprocity

1. “People who do a favor expect nothing in return.”

Coding: 1 = *strongly agree* to 7 = *strongly disagree*

VI. Generativity

1. “Others would say that you have made unique contributions to society.”
2. “You have important skills you can pass along to others.”
3. “Many people come to you for advice.”
4. “You feel that other people need you.”
5. “You have had a good influence on the lives of many people.”
6. “You like to teach things to people.”

Coding: 1 = A lot; 2 = Some; 3 = A little; 4 = Not at all.

Appendix C: Intercorrelations among All Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1. Emot Parents	1.00	.31	.17	.05	-.12	.08	.05	-.06	-.02	.13	-.20	.22	-.01	.07	.06	.06	-.01	.04	.13	.01	-.04	.05	.02	-.03
2. Emot Fam/Friends		1.00	.16	.09	.11	.12	.21	-.02	.03	-.04	-.04	.06	.01	-.05	-.12	-.01	-.05	-.06	-.14	.08	.00	.01	.00	.03
3. Emot Others			1.00	.11	.26	.23	.07	.03	-.15	.05	.00	.03	.01	-.09	-.13	-.02	.01	-.13	-.02	.00	.01	.12	.12	.08
4. Instrum Parents				1.00	.18	.05	.15	-.10	-.11	.01	-.14	-.05	.04	-.07	-.08	-.06	-.07	-.17	.11	-.15	-.10	.10	-.04	-.05
5. Instrum Fam/Friends					1.00	.32	.09	.04	-.07	.04	-.04	.04	.10	-.03	-.05	.07	-.10	-.05	-.01	.03	-.01	.15	.04	.01
6. Instrum Others						1.00	.10	-.07	-.06	-.04	-.05	-.02	.02	.02	-.07	.08	-.04	.04	-.02	.09	-.14	.17	.05	-.06
7. Financ Parents							1.00	.01	-.05	-.09	.03	.06	.00	-.07	-.09	.07	.12	.01	-.01	.07	.03	.09	-.03	.04
8. Financ Fam/Friends								1.00	-.02	.07	.05	.07	-.13	-.04	.00	-.11	.12	-.13	-.04	-.10	.00	-.04	.03	-.04
9. Financ Others									1.00	.04	.12	.06	.08	-.03	.07	-.01	-.04	.04	.04	-.09	.05	-.07	-.14	-.10
10. Financ Religious										1.00	-.09	.15	.07	-.02	-.02	.00	-.09	-.07	.06	-.01	-.01	-.03	.00	-.14
11. Financ Political											1.00	.07	-.03	.04	-.03	-.06	-.01	-.05	.06	.00	.15	-.04	-.21	-.03
12. Financ Other Grps												1.00	-.02	-.03	-.05	-.10	.11	-.07	-.05	.00	-.02	-.07	-.11	-.07
13. Family Solidarity													1.00	.33	.15	.30	-.11	.14	.20	-.18	.00	.01	-.03	.12
14. Friends Solidarity														1.00	.31	.31	-.03	.39	.18	-.06	-.02	.13	.06	.07
15. Neighbor Solidarity															1.00	.29	-.05	.19	-.03	-.02	.24	-.07	.00	-.04
16. Community Solidarity																1.00	-.21	.31	.10	.01	.15	.03	.05	-.03
17. Reciprocity																	1.00	-.08	-.09	-.01	-.09	-.01	.00	-.08
18. Generativity																		1.00	.00	-.04	-.17	.23	.14	.10
19. Sex																			1.00	.00	.06	-.05	-.22	-.01
20. Marital Status																				1.00	.11	.14	.05	.02
21. Age																					1.00	-.24	-.21	-.03
22. Education																						1.00	.31	-.09
23. Income																							1.00	.07
24. Race																								1.00

bold = $p < .01$;

VITA

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Her diverse graduate research assistantships provided her with the opportunity to work with and learn from recognized researchers in the field, develop her research skills, publish in multiple peer-reviewed journals, and present her work at local and national conferences.