



## Generativity and Volunteering

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*The robust association between religion and volunteering and education and volunteering can be interpreted in developmental terms as a function of socialization. Churches and schools instill attitudes that predispose the individual to volunteer. Data from two waves of the National Survey of Midlife in the United States (1995 and 2005) are used to test a hypothesis that generativity—a desire to leave a legacy by providing for the welfare of others—mediates the influence of both religion and education on volunteering. Structural equation models using multiple-imputed data to correct for attrition show that the influence of parental religiosity on volunteering in 2005 is partially explained by generativity in 1995 and that the influence of education on volunteering in 2005 is partially explained by generativity in 1995.*

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**KEY WORDS:** community; education; generativity; religion; religiosity; volunteering.

### INTRODUCTION

In their “profile” of the volunteer, Musick and Wilson (2008) devote a whole section to the part played by “subjective dispositions” in explaining who volunteers. This term, borrowed from Moen (1997:133), covers a wide range of concepts, including personality traits, motives, self-conceptions, attitudes, and values, their common denominator being that they describe ways in which people might be *predisposed* to undertake volunteer work because of the way they think about themselves and the world around them. The nature of these predispositions varies widely and their actual role is shaped by structural forces, such as age, gender, race, and socioeconomic status, as well as by social context, but one thing is sure—no explanation of volunteerism is complete without them. It should come as no surprise to learn that volunteers, when asked why they contribute their time to helping solve community problems, most frequently invoke ethical considerations, such as an obligation to help those in need (Hodgkinson and Weitzman, 1992:243).

Theoretical advances in the study of volunteerism are made by specifying reasons why certain people are more likely to volunteer (see, e.g., Rotolo

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et al., 2010; Walker, 2008). For example, repeated studies have shown that people who attend church frequently are more likely to volunteer, as are people who stayed in school longer. It remains unclear why this is so. We test a theory that volunteering is more common among frequent churchgoers and the more highly educated because they have acquired a disposition to volunteer. This is not the only theory as to why religion and education lead to volunteering. For example, it might be posited that frequent church going and years of education expand people's social networks, which in turn encourages volunteering. However, the socialization theory has the benefit of drawing on a considerable amount of research showing that subjective dispositions are, for the most part, acquired in the family of origin and later through participation in social institutions such as the church or the school. In short, subjective dispositions are the effect of institutional involvement and the proximate cause of volunteerism.

Volunteerism has been linked to a wide range of subjective dispositions. In this study, we focus on the concept of generativity. Generativity is a state of mind in which people think of themselves as having certain qualities that predispose them to engage in activities, such as volunteer work, that will have lasting benefits for other people. Although suggestions have been made that generativity *should* be a progenitor of volunteer work, empirical evidence to support this theory is scarce. Musick and Wilson (2008:548) express their surprise "that the generativity concept does not figure more prominently in the psychological research on volunteerism ...." In what follows we first describe the research on religion and volunteering and education and volunteering to show why a concept like generativity might function as a mediator between them. We then describe the generativity concept and how it is linked to religion and education on the one hand and volunteerism on the other.

## RELIGION

More Americans belong to a religious congregation than any other voluntary organization. This in itself helps explain why religious people volunteer more: they are committed to maintaining the organization to which they belong. In addition to this, religious congregations in the United States assume a variety of social responsibilities, from soup kitchens to midnight basketball. The scope for volunteer work is wide indeed. Add to this the fact that many congregations act as pseudo-families and have the power to exercise family-like pressure on their members' free time, and the power of religion to influence volunteerism is largely accounted for. But the influence of religion on volunteering is by no means confined to work in connection with the congregation itself: religious people are more likely to volunteer overall, even for secular causes. Indeed, the association between religion and volunteering is so strong in the United States that helping the needy is seen as a religious virtue, as if secularists did not share this value (Ammerman, 1997:366).

Two types of theory have been proposed as to why religious people are more likely to volunteer (Park and Smith, 2000:273; Wilson and Janoski, 1995). One is structural: religious people are more socially integrated than nonreligious people. It is a fact that frequent churchgoers belong to more voluntary associations and have contact with their friends, neighbors, and acquaintances more often. As a result, they are more likely to be contacted by organizations and people looking for volunteer help. A recent study found that 58% of weekly churchgoers had been asked to volunteer, compared to 31% of those never attending church (Musick and Wilson, 2008:283).

The second type of theory is cultural: exposure to religious teachings fosters an ethic of caring (Wuthnow, 2004:121). Most religions “encourage altruistic values and behavior” (Fischer and Schaffer, 1993:60) and highly religious people tend to be more concerned about the welfare of others (Dillon et al., 2003:429). Surveys show that frequent churchgoers in the United States are not only more likely to believe that they have a moral duty to help others, but also that it is in their power to do so (Musick and Wilson, 2008:282).

We focus on the cultural theory because it highlights the role of subjective dispositions. Do religious institutions inculcate prosocial dispositions and, if they do, does this explain why religious people are more likely to volunteer? It might seem to be a sociological truism that religious people volunteer more because they feel more responsibility toward others, but even if it were true that religious people have more prosocial values, ideals do not always result in action. Some scholars are skeptical that religious teachings on stewardship and the Good Samaritan found in the Christian tradition will have much effect on volunteerism. Wuthnow (2004:127) believes that prosocial values and religious involvement each influence volunteerism but independently: prosocial values do not explain why religious involvement is salient. Musick and Wilson (2008:284) conclude that “[t]he reason why church attendance encourages volunteering has less to do with changing the way people think than it has with increasing the level of social interaction with others and the chances of being asked to volunteer.” Despite the intuitive appeal of the cultural argument, it remains open to question as to whether subjective dispositions make much difference to volunteerism or could play any role in accounting for the effect of religion on volunteering.

## EDUCATION

Education has been described as “the most consistent, and often strongest, predictor of volunteering” (Musick and Wilson, 2008:119). Years of schooling have a positive effect on the likelihood of having volunteered in the past 12 months, on the number of different activities for which people volunteer, and the number of hours they donate. The significance of education “lies in the fact that it promotes the acquisition of ... three forms of resources: civic skills, social connections, and civic values” (Oesterle et al., 2004:1142). As far

as civic skills are concerned, further education fosters aptitudes such as being able to write letters, plan meetings, meet with local officials, and give presentations, which in turn make it easier to find work as a volunteer. Schooling also breeds self-confidence: for example, poorly educated people are more likely to say they do not volunteer because they do not know how, whereas highly educated people are more likely to give shortage of time as a reason for not volunteering (Lasby, 2004:10). Educational qualifications, such as degrees and titles, are also forms of credentialing, signaling one's capabilities of doing volunteer work. Significantly, the more education people have, the more likely they are to be asked to volunteer—and the more likely they are to accept the invitation (Musick and Wilson, 2008:293). As far as social connections are concerned, education increases one's level of social integration: the more education people have, the more extensive and heterogeneous are their social networks, which in turn increases the chances they will be asked to volunteer (Wilson and Musick, 1998).

When it comes to socialization, schools set out to inculcate ideals, values, norms, and self-understandings that might well encourage various forms of prosocial behavior. Many schools in the United States specifically teach "civic attitudes" or "prosocial values," increasingly through service learning. Although some scholars are skeptical that the "mandatory volunteerism" service learning often entails positive consequences for future volunteer work (Snyder and Gil Clary, 2004:231), well-designed programs do have long-term benefits and schooling in general can encourage cosmopolitan attitudes, foster empathy with the less fortunate, build self-confidence, raise consciousness of social problems and how to tackle them, and teach people to think about social conditions more critically and analytically (Musick and Wilson, 2008:126). Aside from any benefits that might accrue from service learning, educated people are more empathic, efficacious, and more likely to feel they have a duty to help others (Musick and Wilson, 2008:126). Thus, while it is possible to see education affecting volunteering through civic skills (human capital) or social connections (social capital), it is also possible to imagine a pathway from education to volunteerism passing "through" certain prosocial subjective dispositions.

## GENERATIVITY

The concept of generativity was first introduced into the social sciences over half a century ago by Eric Erikson (1950) in his theory of the human life-cycle. Erikson maintained that in midlife, men and women become more concerned with the well-being of future generations, having spent their earlier years establishing an identity for themselves. They feel more demands on them to generate a positive legacy that would outlive them. Generativity was thus, from its first formulation, two-sided, consisting of "agentic and communal desires that motivate a person to seek out opportunities for both symbolic

immortality and caring nurturance for others” on the one hand and “age-graded cultural demands that provide standards and expectations concerning how people may and should begin to take responsibility for the next generation” on the other (McAdams, 2001:405). For generative people, midlife is time to “give something back” to society. They become “more interested in those institutions and cultural practices designed to promote positive functioning and social life in the future—schools, churches, charities, community organizations, professional societies, and so on” (McAdams, 2001:405).

Generative people see themselves as being concerned about, and able to offer something to, the next generation (McAdams et al., 1998; McAdams and Logan, 2004). However, while the core of generativity is an interest in the welfare of the next generation—as exhibited in parenting, mentoring, teaching, and coaching—psychologists have adapted Erikson’s original concept in two ways. First, they have loosened its attachment to specific life stages. Although people are most likely to see themselves as generative in midlife, both old and young can express generative attitudes (McAdams, 2001:413). Second, they have broadened the expression of generativity so that it no longer is orientated literally to the next generation (e.g., children), but embraces concerns about the security and welfare of valued institutions and practices: that is, institutions and practices that the person sees as a legacy for future generations (Fleeson, 2001:77).

As operationalized in this study, generativity is a form of self-evaluation, a “view of the self” (An and Cooney, 2006). It is the result of “self-perusal,” a self-assessment that one has “generative qualities,” that one is energized by “a desire for ... the benefit of others” (Keyes and Ryff, 1998:230). In the class of subjective dispositions described by Musick and Wilson (2008), generativity most resembles an attitude toward the self, similar to self-esteem or self-efficacy but, in contrast to generativity, self-esteem and self-efficacy are quite open-ended. Although they might enable volunteer work (and have been found to do so) they do not necessarily direct the actor toward volunteer work. Altruism and generativity are somewhat similar in describing a concern about the welfare of others but there are two differences. First, altruism is not as narrowly focused as generativity on the creation of a product or legacy “in one’s own image.” In this respect, altruism is more open-ended. Second, generativity is defined within a human development context. Generativity is something most humans acquire during the course of their development. It is quite possible for children to be altruists but “only adults are generative” (McAdams and St. Aubin, 1992:1014). Another kind of subjective disposition linked to volunteerism that is quite similar to generativity is motivation. Some psychologists believe that the reasons people volunteer (their propelling motivation) can be summarized in a Volunteer Functions Inventory consisting of six basic functions or needs that people might seek to satisfy by doing volunteer work (e.g., “I feel compassion toward people in need”). People who lack one or more of these motivations are unlikely to volunteer or at least volunteer for very long. Generativity is certainly associated with motives such as these but

they are not the same. In a small-scale study, Snyder and Clary (2004:223) found that scores on the Volunteer Functions Inventory and the Loyola Generativity Scale (LGS) were moderately correlated. They suggest that generativity might be an antecedent to motives. Finally, unlike personality traits, which have also been linked to volunteerism, generativity is not fixed because it is partly based on age-relevant cultural demands. In contrast, personality can be applied to any developmental stage and does not directly address developmental tasks and concerns (Cox et al., 2010:1189). Most importantly, it is improbable that personality traits could function as a mediator between religion and volunteering or education and volunteering because they are not learned in either church or school and may well be partly genetic.

### WHY GENERATIVITY HELPS EXPLAIN VOLUNTEERISM

From the outset, social scientists have assumed that generative concerns lead to generative behaviors (McAdams, 2001:441). Many forms of volunteer work clearly target the next generation (e.g., coaching) or are intended to help important social institutions survive into the next generation (e.g., schools, parks). Generativity has an elective affinity with volunteerism: “just as the recipients of volunteer services are typically not known previously to volunteers ... the recipients of generative actions, being members of future generations who may yet to be born, are also unknown to their benefactors” (Snyder and Clary, 2004:222).

The research on generativity and volunteerism, although limited in its amount, has largely supported this argument. Rossi (2001:298), using data from a nationally representative sample of the U.S. population ( $N = 2,886$ ), found that generativity was positively associated with hours volunteered per month. This study was, however, cross-sectional. We cannot rule out the possibility that volunteering is the cause of generativity. Cox et al. (2010:1197) found that generativity was correlated with “positive societal engagement” but the study did not single out volunteer work and the sample was restricted to “highly religious middle aged Christian adults.” McAdams and St. Aubin (1992:1011) found that scores on the Loyola Generativity Scale were correlated ( $0.31, p < .01$ ) with “performance of community service” but the sample size was very small ( $N = 79$ ). Cole and Stewart (1996:22) found that generativity correlates with strong feelings of attachment to community but did not measure volunteer work as such.

#### *Generativity as a Mediator*

To function as a mediator, generativity must be linked not only to volunteering, as indicated above, but also to religiosity and education. Given the meaning and interpretation of generativity, there is every reason to believe it

will be associated with religiosity, especially where religion teaches values that encourage stewardship. And, indeed, “[t]here is a large body of empirical data supporting the links between religious involvement and generativity” (Dillon and Wink, 2004:158). If generative attitudes encourage volunteerism, then theoretically they could function as a link between religion and volunteering. Although the case for education promoting generativity is less obvious, it makes sense to expect more years of schooling to enhance one’s sense of connection to the wider world, empathy for the plight of strangers, concern for the common good, or generativity. Although this topic has not received much attention, “[m]ore education appears to promote everyone’s generative self-conceptions” both in the U.S. population at large (Keyes and Ryff, 1998:248) and in a special subsample of ethnic minorities ( $N = 906$ ) (Hughes, 2001:215).

## ANALYTICAL DESIGN

Ideally, testing for mediation effects requires three waves of data so that the mechanism (generativity) can be situated in the middle, after religion or education and before volunteering. We use this design in our study, drawing on two waves of data from the National Survey of Midlife in the United States (MIDUS) gathered in 1995 and 2005. In the first wave of this study, questions were asked about the respondent’s family of origin. The first wave also gathered information on the respondent’s educational achievement. These two sets of questions provide retrospective data, the 1995 wave provides data on the mechanism, and the 2005 wave provides data on outcomes.

The theoretical model guiding this investigation is shown in Fig. 1. In drawing up this model, we make assumptions based on many studies of the lifecourse, principally that children tend to inherit the religious behaviors and attitudes of their parents and that there is continuity in volunteering over the lifespan (Gallagher, 1994:569). Figure 1 displays the pathways by which we test our two main hypotheses: that generativity mediates the effects of both religion and education on volunteering. We take information on the religiosity of the family of origin and use it to predict 1995 generativity, which in turn is allowed to predict 2005 volunteering. Likewise, we take information on respondents’ education to predict 1995 generativity, which in turn is allowed to predict 2005 volunteering. We also explore other ways in which generativity might link religion or education and volunteering. First, we propose that generativity can have an added effect on 2005 volunteering “through” 1995 volunteering because volunteering and generativity in 1995 are linked to each other. Thus, more highly educated people are more likely to be generative, for this reason more likely to be 1995 volunteers and, for this reason, more likely to be volunteering in 2005. Second, we propose that generativity affects volunteering in 2005 “through” generativity in 2005. That is, just as is the case in 1995, generativity and volunteering are correlated and we must allow for the possibility that 1995 generativity has an indirect effect on 2005 volunteering

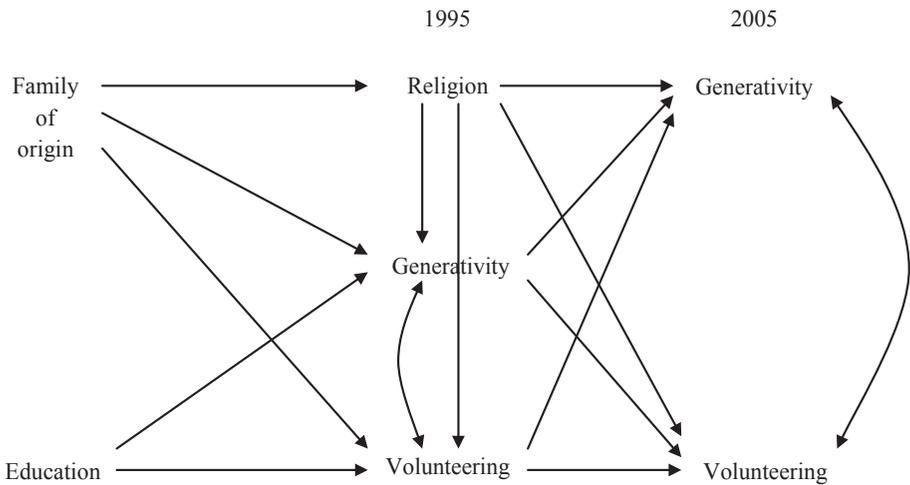


Fig. 1. Theoretical model.

through generativity in 2005. Next, we allow for the possibility that 1995 generativity has nothing to do with family of origin at all but is simply correlated with the respondent’s religion that he or she has inherited from his or her parents. The question being answered here is this: Does religion in the family of origin have a direct effect on 1995 generativity or is the effect indirect through the respondent’s religion? In the latter case, parents do not pass on generativity by being religious, but simply pass on their religion, which, in turn, increases the offspring’s chances of being generative. A similar argument is made when we draw arrows from 1995 religion to 2005 generativity and subsequently to 2005 volunteering.

Most of the remaining proposed pathways are intended to isolate the contribution generativity makes to linking religion, education, and volunteering by controlling for other possible influences. Thus, we fully expect religion in the family of origin to predict 1995 religion, which in turn predicts 1995 volunteering and, subsequently, 2005 volunteering. Generativity has nothing to do with this pathway. Likewise, we fully expect education to have a direct effect on volunteering in 1995, which subsequently affects volunteering in 2005. Generativity does not interfere with this connection.

*Reciprocal Effects*

It is generally understood that attitudes are subject to change, often as a consequence of the very behavior those attitudes brought about in the first place (Schuman and Johnson, 1976:198). As a form of “self-perusal” generativity, like all other self-assessments, is therefore subject to change because it is an attitude toward the self. Some scholars have specifically suggested that

engaging in generative behaviors fosters generative attitudes (Hart et al., 2001:413; Marks and Greenfield, 2009:311). This argument is highly plausible if actions help shape self-assessments. Role identity theory would explain these reciprocal effects: as people continue to volunteer, commitment to the organization or cause increases and, as commitment increases, self-concept changes (Penner and Finkelstein, 1998:526). To test for this reciprocal effect, we estimate a path running from volunteering in 1995 to generativity in 2005.

Throughout the analysis, we control for a set of variables that could have rendered results spurious because they refer to factors connected to both exogenous and endogenous variables. These are age, gender, race, marital status, and income. We also try to control for the powerful influence of parental role modeling on children's future volunteer work. Unfortunately, MIDUS did not ask retrospective questions about whether the respondent's parents volunteered or were generative. However, respondents were asked how generous and helpful their parents were to people outside the family and how sociable and friendly they were to people outside the family. Although one of the principal designers of MIDUS refers to these two items as a measure of "parental generativity" (Rossi, 2001:245), it is not the same generativity measure as that used for the respondents themselves and therefore we simply refer to this as parental sociability. This control is important because respondents could be generative not because of their education or their religiosity but because they had more sociable parents. We therefore include this variable in our models, linking it to 1995 generativity. The question with respect to religion therefore is: Does parents' religion have any effect on respondents' generativity independent of any direct effect parental sociability might have had on them? With respect to education, we are asking: Does education have any effect on the respondent's generativity independent of any effect parents' sociability might have had directly?

### *Model*

To analyze the longitudinal data we employ a structural equation model (SEM) composed of three steps flowing from exogenous measures of family of origin and educational background to 1995 intermediate endogenous measures to 2005 generativity and volunteering. We test all plausible direct and indirect effects of exogenous and intermediate endogenous measures on the two final endogenous variables. Indirect effects estimates are not furnished by the statistical package when multiple-imputed data are employed in a SEM analysis; therefore, we calculate average standardized coefficients of indirect effects from the five multiple-imputed data sets and report the proportions explained by each of the paths originating from the family of origin variables and education, the exogenous measures, and religion, one of the intermediary endogenous measures (see Table II later in this article). We choose to report explained proportions by paths rather than by results of statistical significance tests because the standard errors of indirect effects estimates are deflated in

the imputed data sets. In this study, volunteering is a dichotomous variable, while generativity and religion are continuous measures. Using Mplus 6, we therefore employ a MLM estimator (i.e., maximum likelihood parameter estimates with standard errors and a mean-adjusted chi-square test statistic) that accounts for nonnormality of the endogenous variables even when at least one of them is a binary or ordered categorical measure (Muthén and Muthén, 2010; Satorra and Bentler, 2001).

### *Data*

For data we use the national random-digit-dialing sample from the National Survey of Midlife in the United States (MIDUS) two-wave panel survey. Eligible respondents were noninstitutionalized, English-speaking adults in the coterminous United States between ages of 25 and 74. The baseline national RDD sample was selected in 1995 from working telephone banks. Males between 65 and 74 were oversampled. The respondents participated in a computer-assisted telephone interview and also completed two self-administered questionnaire booklets mailed to their households. The 1995 sample consists of 3,487 respondents. The response rate estimates are 70% for the telephone interview, 86.8% for the completion of the self-administered questionnaires, and 60.8% for the combined response (i.e.,  $.700 \times .868$ ).

A follow-up survey of the original MIDUS sample was conducted between 2004 and 2006. The longitudinal retention rate of the national RDD sample is 71%, adjusting for mortality of the respondents. Multivariate logit regression of attrition revealed that those who failed to respond to the second wave were more likely to be nonwhite males with low education and income level (attrition in MIDUS is thoroughly analyzed in Radler and Ryff [2010]). In light of the attrition rate between waves, we employ multiple-imputed data throughout our analyses (Arbuckle, 1996; Graham, 2009; Peugh and Enders, 2004; Rubin, 1976; Schafer, 2003). This procedure creates parameter estimates by averaging the set of analyses on the five multiple-imputed data sets, their standard errors being calculated on the basis of the average of the standard errors over the set of analyses and the between-analysis parameter estimation variation (Muthén and Muthén, 2010). Specifically, the imputation procedure recovers missing values using the MICE (multiple imputation by chained equations) technique under the assumption of MAR (missing at random) (Buuren et al., 1999; Royston, 2005). In each chained equation, we used a set of predictors known to be related to the measure being imputed. The imputed data sets were also weighted to correct for unequal stratified probabilities of household and within-household respondent selection at the baseline. The sample weight poststratified the sample to match the proportions of adults in the 1995 Current Population Survey with regard to age, gender, race, education, marital status, MSA (i.e., metropolitan and nonmetropolitan), and region (Northeast, Midwest, South, and West). The final sample count of the multiple-imputed

data sets is 3,257, excluding 228 respondents who died between the two waves and two who are not covered by the weight variable.

## MEASURES

### *Endogenous Variables*

*1995 and 2005 Volunteering* A binary measure where 0 = not volunteered and 1 = volunteered for doing volunteer work for organizations related to health, education, and youth work, political organizations, and any other organization, cause, or charity. (i.e., “On average, about how many hours do you spend per month doing volunteer work of any of the following types?”)

*1995 and 2005 Generativity* The best-known instrument for measuring generativity is the 20-item Loyola Generativity Scale, described by McAdams (2001:411) as “well-validated.” The scale is intended to measure generativity in the following categories: (1) passing on knowledge, skills, and the like to the next generation (four items); (2) making a significant contribution for the betterment of one’s community, neighborhood, and so on (four items); (3) doing things that will last for a long time, have an enduring legacy (six items); (4) being creative or productive (two items); and (5) caring and taking responsibility for other people (four items). MIDUS uses a “reduced and slightly modified” version of LGS to measure “generative qualities” (Keyes and Ryff, 1998:237). The shortened version consists of six items. Three are taken from the first category, two are taken from the third category, and one is taken from the last category. No items are taken from the fourth category, which focuses on creativity, and no items are taken from the second category, which focuses on contributions to the community. The scale cannot be said, therefore, to discriminate against people who are not volunteers.

The summated scale of six items asks a respondent the extent to which each of the following statements describes himself/herself: (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; and (6) You like to teach things to people. The response categories were 0 = not at all, 1 = a little, 2 = some, and 3 = a lot. The internal consistency ( $\alpha$ ) of the six indicators of generativity is .84 and .85 in the first and second waves, respectively.

*1995 Religion* Given the uncertainty about the accuracy of reports of frequency of church attendance in national surveys, it is advisable to use

multicomponent measures of religiosity (Driskell et al., 2008). We therefore created a multiple component latent factor for religion, consisting of four indicators: religious identification, church attendance, spirituality, and religious coping. Religious identification is a summated scale of six items: (1) How religious are you? (2) How important is religion in your life? (3) How important is it for you—or would it be important if you had children now—to send children for religious or spiritual services or instruction? (4) How closely do you identify with being a member of your religious group? (5) How much do you prefer to be with other people who are the same religion as you? and (6) How important do you think it is for people of your religion to marry other people who are the same religion? The response categories were 0 = not at all, 1 = not very, 2 = somewhat, and 3 = very. The internal consistency ( $\alpha$ ) of the six measures of religious identification is .89. Church attendance is a variable measuring frequency of attending religious service where 1 = never, 2 = less than once a month, 3 = one to three times a month, 4 = about once a week, and 5 = more than once a week. Spirituality is a summated scale of two relevant measures: (1) How spiritual are you? and (2) How important is spirituality in your life? The response categories were 0 = not at all, 1 = not very, 2 = somewhat, and 3 = very. The internal consistency ( $\alpha$ ) of the two measures of spirituality is .91. Religious coping is a summated scale of two measures: (1) When you have problems or difficulties in your family, work, or personal life, how often do you seek comfort through religious or spiritual means, such as praying, meditating, attending a religious or spiritual service, or talking to a religious or spiritual advisor? and (2) When you have decisions to make in your daily life, how often do you ask yourself what your religious or spiritual beliefs suggest you should do? The response categories were 0 = never, 1 = rarely, 2 = sometimes, and 3 = often. The internal consistency ( $\alpha$ ) of the two measures of religious coping is .86. The religion latent factor accounted for 70% of total variance made by the four indicators (see Appendix B).

### *Exogenous Variables*

*Parental Religion* A single-item measure: How important was religion in your home when you were growing up? The response categories were 0 = not at all important, 1 = not very important, 2 = somewhat important, and 3 = very important.

*Parental Sociability* An ordinal scale of the sociability of parents when the respondent was a child. First, the respondent was asked to rate two characteristics of the mother (or the woman who raised respondent) and the father (or the man who raised respondent) when s/he was growing up: (1) How

generous and helpful was s/he to people outside the family? and (2) How sociable and friendly was s/he to people outside the family? The response categories were 1 = not at all, 2 = a little, 3 = some, and 4 = a lot. Second, each of the parental sociability scores was averaged over the two items. Finally, a parental sociability variable was made by averaging mother's and father's sociability scores. When either of the parents was missing, the sociability score of an existing parent was used as proxy measure of parental sociability.

*Education* A variable indicating the highest educational grade achieved by the respondent: (1) some grade school to some high school; (2) GED or high school diploma; (3) some college (no bachelor's degree); or (4) bachelor's degree or more advanced degree.

### *Control Variables*

Several sociodemographic and socioeconomic measures have the potential to influence generativity and volunteering as well. In this study, we control for the following, all measured at baseline.

*Age* A continuous variable ranging between 20 and 74. (Eleven respondents [0.3% of the unimputed sample] gave their ages as less than 25 but we included them in the data analysis. We compared the SEM results with and without these out-of-range respondents and found that they do not change the SEM path analyses.)

*Female* A dichotomous variable where 1 = female, 0 = male.

*White* A dichotomous race variable where 1 = white, 0 = other.

*Marital Status* A dichotomous variable where 1 = married, 0 = not married.

*Income* A 31-category measure of personal income in the past year.

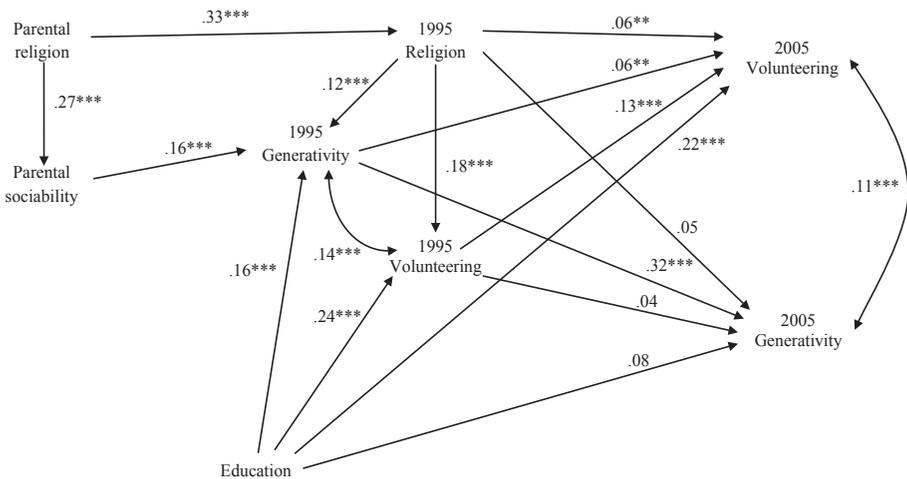
## **RESULTS**

Descriptive information on the variables used in the analysis is shown in Table I. The proportion reporting having done volunteer work rose slightly from 39% in 1995 to 43% in 2005. The mean generativity score fell

**Table I.** Variables in the Analyses (Multiple-Imputed Data Sets, Sample Weighted)

Measure	Mean ( <i>SD</i> )	Range
<i>Final Endogenous Variables (2005)</i>		
Volunteering	0.43 (0.50)	0–1
Generativity	10.80 (3.84)	0–18
<i>Intermediate Endogenous Variables (1995)</i>		
Volunteering	0.39 (0.49)	0–1
Generativity	10.98 (3.73)	0–18
Religion	–0.03 (0.99)	–3.73–3.07
<i>Exogenous Variables (Measured in 1995)</i>		
Parental religion	2.16 (0.87)	0–3
Parental sociability	3.31 (0.63)	1–4
Education	2.80 (0.96)	1–4
<i>Controls (Measured in 1995)</i>		
Age	42.83 (12.48)	20–74
Female	0.55 (0.50)	0–1
White	0.87 (0.34)	0–1
Married	0.67 (0.47)	0–1
Income	17.76 (9.81)	1–31

Notes: *N* = 3,257. Controls were imposed on all endogenous and exogenous variables, except only for education, to achieve fully saturated structural coefficients in SEM.



**Fig. 2.** SEM reciprocal analysis of the effects of volunteering and generativity using multiple-imputed data.

Notes. *N* = 3,257. All estimates are standardized. Model fits: CFI (comparative fit index) = .99; TLI (Tucker-Lewis Index) = .95; RMSEA (root mean square error of approximation) = .03;  $R^2$  (2005 volunteering) = .13;  $R^2$  (2005 generativity) = .15; MLM (maximum likelihood parameter estimates with standard errors and a mean-adjusted chi-square test statistic) estimator applied due to the nonnormality of endogenous measures. The analyses employed five weighted multiple-imputed data sets. \**p* < .05; \*\**p* < .01; \*\*\**p* < .001 (two-tailed).

**Table II.** Standardized Total, Direct, and Indirect Effects of Exogenous Variables and Mediators on Volunteering and Generativity Using Multiple-Imputed Data

Paths	$\beta$	Proportion (%)
<i>Endogenous Measure: 2005 Volunteering</i>		
From PR to V2005 (total)	0.034	—
PR $\rightarrow$ R1995 $\rightarrow$ V2005	0.021	62
PR $\rightarrow$ R1995 $\rightarrow$ V1995 $\rightarrow$ V2005	0.008	23
PR $\rightarrow$ PS $\rightarrow$ G1995 $\rightarrow$ V2005	0.003	9
PR $\rightarrow$ R1995 $\rightarrow$ G1995 $\rightarrow$ V2005	0.002	6
From PS to G1995 to V2005	0.009	—
From Educ to V2005 (total)	0.257	—
Educ $\rightarrow$ V2005 (direct)	0.218	85
Educ $\rightarrow$ V1995 $\rightarrow$ V2005	0.030	11
Educ $\rightarrow$ G1995 $\rightarrow$ V2005	0.009	4
From R1995 to V2005 (total)	0.095	—
R1995 $\rightarrow$ V2005 (direct)	0.064	68
R1995 $\rightarrow$ V1995 $\rightarrow$ V2005	0.024	25
R1995 $\rightarrow$ G1995 $\rightarrow$ V2005	0.007	7
<i>Endogenous Measure: 2005 Generativity</i>		
From PR to G2005 (total)	0.045	—
PR $\rightarrow$ R1995 $\rightarrow$ G2005	0.016	36
PR $\rightarrow$ R1995 $\rightarrow$ V1995 $\rightarrow$ G2005	0.002	4
PR $\rightarrow$ PS $\rightarrow$ G1995 $\rightarrow$ G2005	0.014	31
PR $\rightarrow$ R1995 $\rightarrow$ G1995 $\rightarrow$ G2005	0.013	29
From PS to G1995 to G2005	0.050	—
From Educ to G2005 (total)	0.138	—
Educ $\rightarrow$ G2005 (direct)	0.078	56
Educ $\rightarrow$ V1995 $\rightarrow$ G2005	0.009	7
Educ $\rightarrow$ G1995 $\rightarrow$ G2005	0.051	37
From R1995 to G2005 (total)	0.093	—
R1995 $\rightarrow$ G2005 (direct)	0.048	52
R1995 $\rightarrow$ V1995 $\rightarrow$ G2005	0.007	7
R1995 $\rightarrow$ G1995 $\rightarrow$ G2005	0.038	41

Notes: PR = parental religion, PS = parental sociability, R1995 = 1995 religion, G1995 = 1995 generativity, V1995 = 1995 volunteering, G2005 = 2005 generativity, V2005 = 2005 volunteering. 1995 generativity and 1995 volunteering do not involve indirect paths to endogenous measures. The SEM software (Mplus) does not provide indirect effects estimates when using multiple-imputed data; thus  $\beta$  coefficients were averaged across five multiple-imputed data (statistical significance is not reported due to deflated standard errors).

slightly from 10.98 in 1995 to 10.8 in 2005. The average age of sampled respondents in 1995 was 43, 55% were female, 87% were white, and 67% were married.

Correlations between the variables used in this analysis are shown in Appendix A. Volunteering in 2005 is positively related to volunteering in 1995, generativity in 2005 and 1995, religion in 1995, parental religion, parental sociability, education, being female, married, and having higher income. It is negatively related to age. Generativity in 2005 is positively related to generativity in 1995, volunteering in 1995, religion in 1995, parental religion, parental sociability, education, being female, and earning more money. Nonwhites are more generative than whites. In summary, the core variables in the study, religion and generativity and education and generativity, are positively related

to each other, as expected, and both volunteering and generativity are positively connected across the waves of the study.

The results of the structural equation modeling are shown in Fig. 2. Overall, the theoretical model displayed in Fig. 1 predicted the results of the analysis well. We were able to obtain excellent model fit indices with only minor modifications to the theoretical model. We had anticipated that education would affect 2005 volunteering only indirectly, through either generativity or 1995 volunteering. In fact, the model fitted better if we included a path directly from education to 2005 volunteering. Another path we inserted linked parental religion and parental sociability. Although these retrospective measures must be treated as cross-sectional in nature, it seems justified to posit a positive influence of religion on sociability for the parents rather than the reverse. The influence proved to be significant and improved the fit of the model.

The model shows that generativity does have a positive effect on volunteering 10 years later (.06\*\*), controlling for baseline volunteering and several other confounders known to determine adult volunteering. Although the influence is not strong, it does confirm that generative qualities encourage volunteering, a generative behavior. Of the other exogenous variables, education is the strongest predictor of 2005 volunteering.

We now turn to a discussion of the model as fitted, guided by our interest in the possibility that the influence of religion and education on volunteering could be explained by generativity.

### *Religion*

The strong religious influence on volunteering found in other studies is reconfirmed in these analyses, as shown in the direct path from 1995 religion to 2005 volunteering. However, in contrast to many cross-sectional studies, we are able to show that religion influences later levels of volunteering, net of volunteer levels in 1995, thus adding some credence to a causal interpretation. Making use of the retrospective data, we also show how the seeds for adult volunteering are sown in the environment in which people were raised. This works in a number of ways. Respondents who were raised in religious homes are more likely to have become religious themselves, which, in turn, means they are more likely to volunteer in 2005, net of their level of volunteering in 1995. Table II shows that this fairly direct pathway accounts for almost two-thirds (62%) of the influence of parental religiosity on volunteering.

Second, respondents raised in religious homes, because they were more likely to be religious in 1995, were also more likely to be volunteering in 1995 and this in turn increases their chances of volunteering 10 years later. This pathway accounts for just under a quarter of the influence of parental religion on volunteering. No generativity is involved in either of these pathways.

However, generativity does help mediate the effect of religion in two ways. First, because religious parents are more likely to be sociable, they encourage their offspring to be generative, which, in turn, means the adult children are more likely to volunteer. Second, because religious parents raise their children to be religious, they also have more generative offspring who are, in turn, more likely to volunteer. Generativity does therefore provide a partial explanation for the influence of religious background on volunteering, accounting for 15% of the effect. In addition, generativity mediates the influence of 1995 religion on 2005 volunteering (7%). In both cases, religious people are more likely to volunteer, in part, because they have more generative qualities.

### *Education*

Education has a positive effect on volunteering, as many other studies have shown. As noted above, adding a direct effect of education on 2005 volunteering improved the fit of the model and indicates that educational achievement leads to volunteerism not only because it encourages generativity. Indeed, this direct pathway accounts for most (85%) of the influence of education on 2005 volunteering. This suggests that educational achievement functions in midlife as an “ability signaler” (to recruiters) or an enabler (as a resource for would-be volunteers) above and beyond the part it plays in initially involving people in volunteer work. This means two things: first, the longer people stay in school, the more likely are they to make volunteering a “career” (i.e., they are more likely to continue volunteering over time); and, second, that education encourages taking up volunteer work later in life, regardless of whether one has volunteered before. Social networks might well be an explanation for this direct effect.

There are also indirect effects. First, education increases the chances of volunteering in 1995 and those respondents who were volunteering in 1995 were more likely to be volunteering 10 years later (11% of the education effect on 2005 volunteering). We treat the information on educational achievement given in 1995, when all but 0.3% of the respondents in MIDUS were at least 25, as retrospective data and therefore feel justified in treating 1995 volunteering as a mediator between education and 2005 volunteering. Simply put, people who were volunteering in 2005 were doing so because they had been volunteering in 1995 and they were volunteering in 1995 because of the education they had already acquired. In some ways, then, education has a cumulative effect: it inspires volunteerism initially but continues to have an additional positive influence. The second indirect effect is the one we are chiefly interested in. Part of the explanation for why more highly educated people volunteer is that they are more generative. The contribution of generativity to the explanation of education’s effect on volunteering is, however, small (4%).

*Reciprocal Effects of Volunteering on Generativity*

As noted in the introduction to this article, several authorities have suggested that generativity might be the result, rather than the cause, of doing volunteer work. This argument has theoretical credentials: it is not unknown for self-perceptions to be the result as well as the cause of actions. We tested for this by including a measure of 2005 generativity in the model. It was certainly correlated with 2005 volunteering and 1995 generativity scores were positively related to scores 10 years later. However, there is no evidence here that volunteering influences later generativity once these earlier levels of generativity are taken into account (see Fig. 2).

**DISCUSSION**

Research has documented that churchgoing and years of schooling are consistent and quite powerful predictors of who volunteers. The issue that remains is to explain why religion and education are so influential. Theory points us in the direction of two kinds of factors. The first is structural. Religion and education somehow alter people's position in society or their relations to others. For example, educational achievement functions as an "ability signaler" to volunteer recruiters, or church going increases social integration. The second theory is cultural. Religion and education change the way people think about themselves and the world around them in such a way that they are more disposed to volunteer. Little is known about the precise role of either set of factors in the explanation of volunteerism and yet the search for mechanisms is one of the most important tasks confronting social scientists interested in developing better theories of volunteerism. We need to know not only that frequent churchgoers or the more highly educated are more likely to volunteer, but why.

In this study we focus on the role of cultural factors to ask whether subjective dispositions explain the influence of religion or education on volunteerism. The results show that people who see themselves as having generative qualities are indeed more likely to volunteer 10 years later, regardless of their current level of volunteering, their religiosity, their education, or their age, race, gender, marital status, and income. Although the effect is quite modest, it is nevertheless a validation of the assumption that generative qualities will lead to generative behaviors. The results also show that generativity helps explain why religion and education influence volunteerism. Although the influence is modest, the results have theoretical significance. They suggest that socialization helps explain the influence of these social institutions on volunteerism.

As far as education is concerned, there has been much speculation about the role schools play in creating an active citizenry, especially among social

scientists interested in human development: “acquiring a sense of civic-mindedness early in life is important for developing responsible and civically active adults” (Oesterle et al., 2004:1141). Generativity could be one pathway through which well-educated people are more likely to become “civically active adults.” However, the results of our study indicate this is a minor role at best. Generativity accounts for only 4% of the influence of education on volunteering. Other pathways, through social integration, ability signaling, and civic skills, are more important. On the other hand, years of schooling or degree earned are very crude measures of educational socialization. It remains to be seen whether generativity would play a more prominent role if data were available on service learning experiences and particular majors or concentrations (Nie and Hillygus, 2001).

Our measure of religion is comprehensive, including components of religion that indicate how important religion is to the respondent and how much the respondent uses religion as a coping mechanism. It is a more reliable measure of religion than those that depend solely on reports of church attendance, which have been shown to be inaccurate. We also consider it a more plausible measure of the respondent’s exposure to religious teachings and role models. Generativity does a better job of explaining the connection between religion and volunteering than it does the connection between education and volunteering. It helps us understand not only why people from religious backgrounds are more likely to volunteer, but also why religious respondents in 1995 were more likely to be volunteers in 2005 regardless of their 1995 volunteer activity. This would suggest two compatible possibilities. The first is that religious organizations spend more time and place more emphasis on cultivating generative qualities in people (or that generative people are attracted to religious organizations). The second is that volunteering in connection with a religious organization (and that is where most churchgoers direct their volunteer help) is of a type that calls for and encourages the expression of generative qualities—activities that involve teaching, mentoring, personal care, feeding the hungry, and the like.

Although the evidence presented here supports the theory that generativity plays a role in mediating the effect of religion and education on volunteering, but it is perhaps more modest than what some of the authors cited earlier would have expected. There are a number of possible reasons for this. First, “for specific patterns of behavior, predictability increases as the measure of attitudes increases in specificity” (Liska, 1974:264). Generativity does not specifically refer to volunteer work and volunteering is by no means the only way to act out one’s generative impulses. Their main outlet is likely to be caring for family members, but some occupations, such as teaching, civil service, non-profit management, public safety, and healthcare, also provide an outlet for generative impulses (Colby et al., 2001). Second, not all forms of volunteer work call for generativity. Some people do volunteer work to enhance their careers. Others volunteer because they are caught up in a web of social reciprocity, as when mothers take turns volunteering at the day-care center their

children attend. Third, attitudes and behaviors may link only under conditions that we have not specified in our models. For example, attitudes lead to behavior more reliably if they receive social support from important reference groups (Liska, 1974:268). Generativity might more reliably lead to volunteer behavior among more highly integrated respondents.

We have not discussed religious affiliation in this study. Future research should pay attention to the possibility that the answer to how generativity helps religion foster volunteerism might depend on religious affiliation. For example, in the Protestant tradition, evangelicals are said to be more focused on spiritual concerns and the personal salvation of individuals (Driskell et al., 2008). They are more likely to see volunteer work as an expression of spiritual values, a form of witnessing. Liberal Protestants and Catholics, on the other hand, are more inclined to see volunteer work as a form of social obligation or stewardship (Bekker and Dhingra, 2001:328). Intuitively, it seems likely that generativity functions more as a mechanism for the latter than for the former.

Finally, we took advantage of the longitudinal structure of the data set to tackle the question of which comes first, attitudes or action. Does participating in volunteer work make people more generative? Viewed in cross-section, generativity and volunteering are correlated (see Appendix A, 0.18,  $p < .001$  in 1995 and 0.17,  $p < .001$  in 2005). There even seems to be a lagged effect of volunteering on generativity because the correlation between 1995 volunteering and 2005 generativity is 0.10,  $p < .001$ , but these zero-order “effects” are misleading. Once we control for the lagged effect between 1995 and 2005 generativity, no amount of volunteering has any effect on later generativity. This could be interpreted a number of ways. It gives support to the more persuasive of the arguments in the attitudes-action debate, which is that attitudes guide and precede actions. Second, it could mean that generativity is a deeply ingrained set of attitudes about the self that are not subject to change easily. (The correlation between generativity in the two waves is 0.35 [ $p < .001$ ].) It could also mean that many forms of volunteer work simply do not reinforce generativity concerns, they do not educate volunteers about caring for the next generation, and they do not encourage volunteers to think about themselves in new ways. The benefits of volunteering are various, including the desire to influence public policy, a sense of duty or desire to contribute to the welfare of the community, the social gratifications of working with others, and include even material benefits, such as jobs, career advancement, and help with personal or family problems. Further exploration of the effects of specific kinds of volunteer work on future generativity would help answer these questions.

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**APPENDIX A: ZERO-ORDER CORRELATION AMONG THE VARIABLES (IMPUTED DATA [N = 3,257], SAMPLE WEIGHTED)**

	1	2	3	4	5	6	7	8	9	10	11	12
1. 2005 volunteering	—											
2. 2005 generativity	.17***	—										
3. 1995 volunteering	.21***	.10***	—									
4. 1995 generativity	.13***	.35***	.18***	—								
5. 1995 religion	.13***	.12***	.19***	.14***	—							
6. Parental religion	.09***	.10***	.07***	.11***	.36***	—						
7. Parental sociability	.07***	.14***	.01	.16***	.12***	.27***	—					
8. Education	.28***	.18***	.23***	.19***	.04*	.07***	.01	—				
9. Age	-.06***	-.01	.03	.02	.13***	.12***	.03	-.10***	—			
10. Female	.07***	.04*	.04*	.04*	.19***	.03	.00	-.07***	.03	—		
11. White	.03	-.04*	.02	-.04*	-.09***	-.10***	-.05**	.04*	.09***	-.02	—	
12. Married	.08***	-.03	.12***	-.01	.06***	.02	.01	.01	.08***	-.07***	.10***	—
13. Income	.07***	.11***	-.01	.11***	-.12***	-.00	-.01	.30***	-.22***	-.35***	.02	.03

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

APPENDIX B: LATENT FACTOR OF 1995 RELIGION

Factors and Indicators	Factor Loading
<i>Factor Eigenvalues<sup>a</sup></i>	
Factor I	2.80 <sup>b</sup>
Factor II	0.58
Factor III	0.35
Factor IV	0.27
<i>Factor Scoring on Factor I (1995 Religion)</i>	
Religious identification (summated scale of six items)	0.88
How religious are you?	
How important is religion in your life?	
Sending children for religious services.	
Identify with being a member of religious group.	
Prefer to be with those of the same religion.	
Marry other people of the same religion.	
Church attendance (single item)	0.84
How often do you usually attend religious or spiritual services?	
Spirituality (summated scale of two items)	0.78
How spiritual are you?	
Importance of spirituality.	
Religious coping (summated scale of two items)	0.86
How often do you seek comfort through religious means (e.g., praying) when having problems or difficulties in family, work, or personal life?	
How often do you ask yourself what your religion or spiritual beliefs suggest you should do when making decisions in your daily life?	

<sup>a</sup>Principal component, minimal eigenvalue of 1, and varimax rotation.

<sup>b</sup>The factor loading of 2.80 means that Factor I explains 70% of all the variation made by the four indicators of religiosity.