

## Volunteer Work and Well-Being\*

PEGGY A. THOITS

LYNDI N. HEWITT

*Vanderbilt University*

Journal of Health and Social Behavior 2001, Vol 42, (June): 115–131

*Using two waves of panel data from Americans' Changing Lives (House 1995) (N = 2,681), we examine the relationships between volunteer work in the community and six aspects of personal well-being: happiness, life satisfaction, self-esteem, sense of control over life, physical health, and depression. Prior research has more often examined the effects of voluntary memberships than of volunteer work, has used cross-sectional rather than longitudinal data, and, when longitudinal, has emphasized social causation over selection effects. Focusing only on the consequences of volunteer work overlooks the antecedents of human agency. People with greater personality resources and better physical and mental health should be more likely to seek (or to be sought for) community service. Hence, we examine both selection and social causation effects. Results show that volunteer work indeed enhances all six aspects of well-being and, conversely, people who have greater well-being invest more hours in volunteer service. Given this, further understanding of self- versus social-selection processes seems an important next step. Do positive, healthy people actively seek out volunteer opportunities, or do organizations actively recruit individuals of these types (or both)? Explaining how positive consequences flow from volunteer service may offer a useful counterpoint to stress theory, which has focused primarily on negative life experiences and their sequelae.*

The United States has long been known for its rich tradition of community service. Nearly two centuries ago, Alexis de Tocqueville ([1835] 1990) commented on the American tendency to create or join voluntary associations in huge numbers and to invest their abundant energies in civic service. The United States continues to lead other Western countries in volunteer service, with American adults more than twice as likely as German and French adults to have contributed time and energy to community work in the past year (Ladd 1999; Putnam 2000). Moreover, according to several national surveys, participation in volunteer work has been increasing in the past few years, despite recent alarms raised about American withdrawal from civic engagement

more generally (e.g., Putnam 2000). For example, in 1984, 44 percent of a national sample reported that they had performed volunteer work for a church, charity, or other community group in the last year; in 1997, in answer to the same question, 58 percent reported volunteer service (Ladd 1999).<sup>1</sup> Given these trends, social scientists' interests in the determinants and consequences of volunteer participation have sharpened over time.

Although volunteer work is widely believed to be beneficial not only for the community but for the individuals who perform it, surprisingly little attention has been paid to the actual consequences of volunteer service for individuals' physical and/or psychological well-being. Most studies of well-being outcomes examine the benefits of voluntary group *membership* rather than volunteer *work* per se. Because membership in voluntary associations is consistently found to be beneficial (see below), these findings are often assumed to apply to volunteer work as well. Moreover, those stud-

\*We are grateful to Larry Griffin for his very helpful advice on this paper. Address all correspondence to the first author at Department of Sociology, Box 1811-B, Vanderbilt University, Nashville, TN 37235; email at peggy.thoits@vanderbilt.edu.

ies that demonstrate positive physical or mental health consequences of membership *or* community service are usually cross-sectional in design; researchers rarely assess the possibility that individuals who are selected (or select themselves) into community associations or service already possess more physical and psychological resources than non-volunteers. Finally, when longitudinal studies do control for prior levels of well-being, researchers almost always emphasize the "social causation" implications of their findings, pleased that they can rule out "selection" effects. That is, they are eager to demonstrate that social involvements benefit individuals net of the physical or emotional factors that might have selected those individuals into volunteer work in the first place. This is perhaps an understandable impulse for sociologists who must struggle to convince other disciplines that social forces indeed shape individuals' lives and psyches. However, by focusing on social causation processes, investigators inadvertently de-emphasize the antecedents and role of human agency (Thoits 1994). This is especially ironic, given that the topic is *volunteer* work, where agency must be involved for it to occur! We will argue that individuals' personal resources and well-being both facilitate their involvement in volunteer work and are subsequently enhanced by such work. In short, the purposes of this paper are to re-examine general well-being as an antecedent *and* a consequence of volunteer *work* in the community and to focus attention on the neglected topic of *agency*.

To this point, we have used the phrase "volunteer service" or "volunteer work" loosely. In fact, the concepts of "volunteer" and "volunteering" have a number of meanings (see Cnaan and Amroffell 1994; Cnaan, Handy, and Wadsworth 1996). For this study, we adopt a definition developed by the President's Task Force on Private Sector Initiatives (1982):

Volunteering is the voluntary giving of time and talents to deliver services or perform tasks with no direct financial compensation expected. Volunteering includes the participation of citizens in the direct delivery of service to others; citizen action groups; advocacy for causes, groups, or individuals; participation in the governance of both private and public agencies; self-help and mutual aid endeavors; and a broad range of informal helping activities. (P. 4)

In other words, volunteer work includes not

only the unpaid provision of services directly to others in need, but also political activism and community representation on boards of various agencies. We adopt the above definition with one exception: We exclude "informal helping activities" such as caregiving for family members or friends and isolated altruistic acts such as intervening in emergencies. Our focus is on what Wilson and Musick (1997) call "formal volunteering," i.e., volunteer *work* in or for the *community*, where time and effort are given for the betterment of the community in general or for specified subsets of community members who are in need (e.g., elderly shut-ins, poor residents of a housing unit, children with unfilled leisure time). Belonging to religious or secular organizations and attending services or group meetings, although clearly voluntary acts, are not sufficient to indicate volunteer *work* or *service* (which we use here as interchangeable terms).

## THEORY AND EVIDENCE

### *Sociodemographic Characteristics of Volunteers*

The literature on volunteers (both members and workers) has been and continues to be dominated by studies of their sociodemographic characteristics, motivations, attitudes, and values. Researchers have attempted to identify the "prototypical volunteer" (Curtis, Grabb, and Baer 1992; Cnaan, Kasternakis, and Wineburg 1993; Gerard 1985; Hettman and Jenkins 1990; Penner, Midili, and Kegelmeyer 1997; Van Til 1988; Wilson and Musick 1997). According to some studies, the person most likely to volunteer is a middle-aged, middle class, married woman with more than high school education and with dependent school-age children (Gerard 1985; Hettman and Jenkins 1990). However, many studies are based on samples of volunteers only, rather than samples that allow comparisons between volunteers and non-volunteers. Moreover, as mentioned earlier, studies often operationalize volunteerism as belonging to organizations or attending organization meetings rather than giving community service *per se*. Studies that explicitly compare volunteer to non-volunteer workers yield mixed findings regarding the social characteristics of the typical community volunteer (Wilson and Musick 1997). Patterns

by gender, race, or age are unclear; some studies suggest that any differences by gender, race/ethnicity, or age disappear when differences in socioeconomic status are controlled (e.g., Smith 1994). More consistently across studies, individuals with higher education and income and married persons are more likely to participate in voluntary organizations *and* to do volunteer work (Wilson and Musick 1997; Rotolo 2000). Having children at home also fosters group participation and volunteer service (Smith 1994), especially for women (Rotolo 2000).

#### *Determinants of Volunteer Work*

Beyond sociodemographic characteristics, a number of other factors have been considered as determinants of volunteerism (Gerard 1985; Penner and Finkelstein 1998; Penner et al. 1997), although their effects have not been thoroughly or consistently documented (Smith 1994). These factors can be summarized through four theoretical models of volunteer work that presently guide the literature. What might be called the “volunteer motivations model” emphasizes individuals’ motivations for or goals in volunteering. Research indicates that people give service for a variety of reasons, for example, to learn new skills, to develop the self, to enhance self-esteem, to prepare for a career, to express personal values and community commitment, and even to reduce ego-conflicts or identity threats (Omoto and Snyder 1990, 1995; Janoski, Musick, and Wilson 1998). Motivation researchers suggest that volunteering can serve different functions (i.e., motivations) for different people and sometimes multiple functions for a single individual (Omoto and Snyder 1990; Penner and Finkelstein 1998). Thus, selection into volunteer service may not be broadly socially patterned or systematic, an implication which is at odds with other empirical literature discussed below.

A second model, what might be termed the “values and attitudes model,” focuses on the connection between volunteering and individuals’ beliefs about the importance of civic participation or charitable responsibility (Janoski et al. 1998; Sundeen 1992). Not surprisingly, civic-oriented values and attitudes do positively influence volunteerism. Researchers typically note the weakness of the empirical relation-

ships found; other factors seem more strongly associated with volunteer work.

A third model, the “role-identity model,” posits and shows that past volunteer service leads to the development of a “volunteer role-identity,” which in turn motivates future volunteer activity (Callero 1985; Charng, Piliavin, and Callero 1988; Penner et al. 1997; Piliavin and Callero 1991). This model is especially appropriate for examining processes that sustain volunteerism once it has begun (Grube and Piliavin 2000). A related model, what might be termed the “group-identity model” (Simon, Sturmer, and Steffens 2000; Stark and Deaux 1996), suggests that individuals are motivated to help others with whom they are collectively identified (for example, gays who are identified with the gay community will be more likely to aid those with HIV/AIDS). In this variation, prior identification with a needy or disadvantaged group may become a motivating factor for giving or continuing service.

The fourth model, what might be called “the volunteer personality model,” suggests that personality or dispositional variables motivate volunteer work (Penner and Finkelstein 1998; Penner et al. 1997). Penner and his colleagues have demonstrated that a prosocial personality orientation, including traits of “other-oriented empathy” and “helpfulness,” were related to length of service and time spent in volunteer activities. Interestingly, helpfulness was associated with other positive personality characteristics such as dominance, self-efficacy, confidence, and feelings of competence (Penner and Finkelstein 1998). Relatedly, in a literature review of the personality characteristics of community mental health volunteers, Allen and Rushton (1983) concluded that volunteer participation was higher for individuals with an internal locus of control, with higher self-esteem, and with greater emotional stability. Such results hint that people who generally have greater personal coping resources (e.g., high self-esteem or an internal locus of control) and who are in better mental health might be more likely to volunteer.

*The personal well-being model.* These findings suggest a fifth potential model which has not often been examined in the literature and upon which we focus in this paper. We might call our guiding model the “personal well-being model.” We examine personality characteristics and physical and mental health as resources necessary for seeking out (or being

sought for) and becoming involved in community service. In the stress literature, “internal or personal resources” refer to aspects of personality upon which people draw when dealing with challenges and difficulties in their lives (Pearlin and Schooler 1978; Thoits 1995). They include confidence, control, and self-worth, and they allow individuals not only to meet problems head-on but to initiate and pursue desired lines of action. Not surprisingly, people who are confident, feel in control of their lives, and have high self-esteem have good physical and mental health as well (e.g., Turner and Roszell 1994). We hypothesize that individuals who volunteer—for whatever reason, motivation, or goal—are more likely to possess such personal resources, enabling them to pursue their values or goals more easily or effectively. Just as people are selected into achieved statuses such as marriage and employment partly on the basis of their personality characteristics, interpersonal skills, and physical and mental health (Turner and Gartrell 1978; Thoits 1994), so they may be selected into or select themselves into volunteer associations and volunteer work by similar factors.

#### *Consequences of Volunteer Work*

With respect to the *consequences* of volunteering, as mentioned earlier, a large literature documents positive physical and mental health consequences of voluntary association *membership* or *frequency of organizational attendance*. For example, voluntary association membership contributes to decreased psychological distress and buffers the negative consequences of stressors (Rietschlin 1998); it increases life satisfaction and decreases depression (Van Willigen 1998); and it is associated with better physical health and lower mortality as much as 30 years later (Moen, Dempster-McClain, and Williams 1989, 1992; see also Young and Glasgow 1998; House, Landis, and Umberson 1988). These findings for voluntary group membership and attendance (which are robust and frequently reported) are consistent with the idea that volunteer work (which is less often studied) is beneficial to well-being, even net of prior levels of well-being that might have prompted or facilitated the work in the first place.

Indeed, that is what cross-sectional studies

suggest for volunteer workers (Gerard 1985; Hunter and Linn 1981; Wheeler, Gorey, and Greenblatt 1998). For example, Hunter and Linn (1981) compared elderly volunteers and non-volunteers and found that those who did volunteer *work* had significantly higher life satisfaction, a stronger will to live, greater feelings of self-respect, and fewer symptoms of depression and anxiety compared to non-volunteers. Similar positive effects of volunteer work on psychological well-being have been found repeatedly in studies of elders, who are often the focus of research on volunteer involvement, presumably because community service becomes a substitute for employment when individuals retire (see Wheeler, Gorey, and Greenblatt 1998 for a review). Additionally, Oman, Thoresen, and McMahon (1999) reported a 63 percent lower mortality rate among older adults who gave volunteer service for two or more organizations compared to non-volunteers, net of other factors known to affect mortality.

#### *Reciprocal Effects*

In sum, studies suggest that people with greater personal well-being (i.e., greater psychosocial resources and physical and mental health) may volunteer more often, and people who are involved in community service may have greater life satisfaction, self-esteem, sense of purpose in life, physical health, and mental health, among other consequences. It should be noted again that much of the empirical literature producing these sets of findings rely on cross-sectional data, leaving open the question of the direction of effects. Those few studies that involve longitudinal data do not explicitly examine the reciprocal effects of personal well-being and volunteer service.

There are good reasons to expect bi-directionality in the relationship between various aspects of personal well-being and volunteer work. Persons who are in superior physical and mental health are not only physically able to engage in volunteer work (Moen et al. 1992) but are likely to be equipped with the kinds of internal coping resources that expedite seeking out volunteer opportunities, becoming involved, and staying involved (e.g., high self-esteem, a strong sense of mastery or control over life). Volunteer work in turn is likely to require or maintain certain minimal levels of

physical activity, and the intrinsic and extrinsic gratifications of the work may generate feelings of self-worth, self-efficacy, happiness, and satisfaction-aspects of positive mental health (Jahoda 1958). In short, we expect personal well-being to select individuals into volunteer work, and we also expect volunteer service to enhance well-being, net of pre-existing levels of personal well-being and volunteer efforts. Moreover, we expect these relationships to hold even when we control for current membership in and attendance at other voluntary organizations, both religious and secular. Although the integration, social support, and sense of belonging provided by membership in and attendance at voluntary associations should contribute to well-being (as numerous studies have shown), we anticipate that spending time in tangible work providing needed services to others or to the general community provides additional gratification and thus should enhance well-being over and above these well-documented effects of group membership.<sup>2</sup>

## METHODS

For the purposes of this analysis we use a two-wave panel study based on a national sample of adults: *Americans' Changing Lives* (House 1995). A multistage stratified area probability sample was drawn of individuals who were 25 years or older, living in the continental United States. Elderly people (60 years of age and over) and African Americans were disproportionately sampled at twice the rate of those under 60 and whites, respectively, in order to aid comparisons between age groups and across races. We do not correct for this over-sampling here but take advantage of it; we are more interested in theoretical relationships among variables than in generalizing to the U.S. adult population as a whole.

In 1986, 3,617 respondents were interviewed at home by interviewers from the Survey Research Center at the University of Michigan; the response rate at the first wave was 67 percent. Three years later, 2,867 of the original respondents were re-interviewed, an attrition rate of 21 percent. Of the 750 who did not participate in the second wave, 166 had died and the remainder could not be located or refused to continue. Thus, excluding those who died, the response rate at the second wave was

83 percent. Patterns in attrition from Time 1 to Time 2 are discussed below.

## Measures

*Volunteer work.* At both Time 1 and Time 2, interviewers said, "Now let's talk about volunteer work you may have done during the last 12 months. Did you do volunteer work in the last year for a church, synagogue, or other religious organization? for a school or educational organization? for a political group or labor union? for a senior citizens group or related organization? In the last 12 months did you do volunteer work for any *other* national or local organization, including United Fund, hospitals, and the like?" Answers to each of these probes were coded 1 = yes, 0 = no. If respondents had worked for at least one of these groups, they were coded as having done volunteer work during the past 12 months (1 = did volunteer work, 0 = did not).

At both time points, respondents were also asked, "About how many hours did you spend on volunteer work of (this kind/these kinds) during the last 12 months?" Respondents were offered ordinal categories from which to choose. The variable is coded with the mid-points of the ordinal categories: 0 = did not volunteer at all in the past year, 10 = less than 20 hours, 30 = 20 to 39 hours, 60 = 40 to 79 hours, 120 = 80 to 159 hours, 200 = 160 hours or more. Table 1 shows the distribution of this ordinal variable at Times 1 and 2. About 60 percent of the sample did no volunteer work in the past year; 40 percent devoted some time in the past year to such service. (About 24% volunteered for a religious organization, 14% for an educational one, 9% for a senior citizens group, 6% for a political group, and 15% for some "other" group; percents sum to more than 40% because some individuals volunteered for more than one type of organization [data not shown].) This 40 percent volunteerism rate is somewhat lower than the 45 percent to 55 percent found in other national surveys for adults in the United States who spend time as unpaid volunteers for service organizations (Independent Sector 1994), and it is probably due to over-sampling by race and old age in the *Americans' Changing Lives* (ACL) design. (In the ACL data, African Americans and older adults were significantly less likely to volunteer [data not shown].)

**TABLE 1. Number of Hours of Volunteer Work Performed in the Past 12 Months, Assessed at Time 1 and Time 2**

Volunteer Hours:	TIME 1	TIME 2
0 hours	60.1% (2,173)	57.3% (1,642)
10 hours	13.8% (500)	13.7% (393)
30 hours	8.9% (323)	9.4% (270)
60 hours	6.7% (242)	6.6% (190)
120 hours	4.4% (159)	5.8% (167)
200 hours	6.1% (220)	7.2% (205)
Total	100.0% (3,617)	100.0% (2,867)

Given the skewed distribution of volunteer hours, we use the log of volunteer hours in the analyses that follow, computed as the natural log of the number of hours plus .01, to avoid taking the log of zero.

*Church and other organizational participation.* At both waves, respondents were asked how often they usually attended religious services, coded here as: 0 = never, 1 = less than once a month, 2 = about once a month, 3 = 2 or 3 times a month, 4 = once a week, and 5 = more than once a week. Respondents also reported how often they usually attended meetings or programs of groups, clubs, or organizations to which they belonged. Response options were the same as those for church attendance and were coded similarly, so higher values indicated more frequent attendance. We use respondents' replies to these questions as controls for their levels of social integration.

*Well-being.* We examine two general aspects of well-being (life satisfaction and happiness), two coping resources that are thought to be components of or associated with psychological well-being (self-esteem and a sense of mastery or control over life), and two health-related indicators of well-being (physical health and depression).

*Life satisfaction* is a single-item measure: "Now please think about your life as a whole. How satisfied are you with it—are you completely satisfied, very satisfied, somewhat satisfied . . . not at all satisfied?" At Time 1, responses were coded from 1 = not at all satisfied to 5 = completely satisfied; at Time 2, a wider range of responses were elicited, coded from 1 = not at all satisfied to 7 = completely satisfied. To standardize these measures, we transformed them into z-scores.

*Happiness* was also measured with one item at each wave. At Time 1, this item was negatively worded, "My life could be happier than it is now." Responses were coded: 1 = strongly

agree to 4 = strongly disagree, so more disagreement indicated greater happiness with one's life. At Time 2, the item was positively worded: "Taking all things together, how would you say things are these days—would you say you're very happy, pretty happy, or not too happy these days?" Responses were coded here as 1 = not too happy, 2 = pretty happy, and 3 = very happy. Not surprisingly, given the very different wording and response categories available, Time 1 and Time 2 measures of happiness were only moderately correlated,  $r = .27$  ( $p = .01$ ) over the three year period; in contrast, the two more-similarly measured life satisfaction variables were correlated  $.39$  ( $p = .01$ ). To standardize the happiness indicators, each was converted to z-scores.

*Self-esteem* was measured using three items from Rosenberg's (1979) 10-item global self-esteem scale, included in both waves. Items were, "I take a positive attitude toward myself," "At times I think I am no good at all," and "All in all, I am inclined to feel that I am a failure." Responses were coded from 1 = strongly agree to 4 = strongly disagree. Answers for the one positive item were reverse-coded and then the three items were summed to form a measure of self-esteem. Unfortunately, due to the inclusion of only three items, two of which were negatively worded, Cronbach's alpha for the 3-item scale was low at Time 1 (.57) and at threshold acceptability (.60) at Time 2. Further analysis showed that the alphas improved at both time points if the positively-worded item was excluded (at both time points, Cronbach's alpha became .64). Consequently, we use the 2-item score as our measure of self-esteem at each wave. Self-esteem thus ranges from 2 (low) to 8 (high).

To measure *mastery*, three items drawn from Pearlin et alia's (1981) sense of mastery scale were included in the two survey interviews. These were, "I can do anything I really set my mind to do," "Sometimes I feel I am being pushed around in life," and "There is really no way I can solve the problems I have." Responses were coded 1 = strongly agree to 4 = strongly disagree. When the positively-worded item was reverse coded and then the three responses were summed, it was apparent that this scale had unacceptably low internal consistencies at the two time points (alpha = .42 at Times 1 and 2). Further analysis indicated that eliminating the positively-worded item would increase the reliability of the scale only to .50

at both time points, still unacceptably low. Other item combinations did not improve reliability. We therefore retained the sum of the two negatively-worded items so that scores range from 2 (low sense of control or mastery) to 8 (high mastery). We include the 2-item mastery scores in the analyses below despite their low reliability, for a number of reasons. First, the scores have construct validity; they are positively associated with self-esteem ( $r = .46, p = .001$  at Time 1;  $r = .49, p = .001$  at Time 2) and negatively associated with depression ( $r = -.45, p = .001$  at Time 1;  $r = -.47, p = .001$  at Time 2), as expected from theory and prior research findings (e.g., Thoits 1994). Second, the scores are distributed unequally by social status in patterns consistent with previous studies (e.g., Turner and Roszell 1994). Finally, as will be seen below, results with these scores are consistent with theoretical expectations and usually parallel those for self-esteem (another measure of personal coping resources). Although we include them, we will interpret findings with the mastery scores with caution due to their low reliability.

To measure *physical health*, we summed three items tapping respondents' evaluations of their physical health to form a simple scale. Respondents were asked how satisfied they were with their health in general, reverse-coded here as 1 = not at all satisfied, 2 = not very satisfied, 3 = somewhat satisfied, 4 = very satisfied, and 5 = completely satisfied; they were asked how they would rate their health at the present time, (reverse-coded) from 1 = poor, 2 = fair, 3 = good, 4 = very good, to 5 = excellent; and they were asked to assess the extent to which their daily activities are limited in any way by their health or health-related problems, with responses coded as 1 = a great deal, 2 = quite a bit, 3 = some, 4 = a little, and 5 = not at all. Scores ranged from 3 (low self-reported health) to 15 (high). Cronbach's alpha for the health scale was .82 at both Time 1 and Time 2.

Eleven items from the Center for Epidemiological Studies-Depression (CES-D) scale (Radloff 1977) were included in both waves of the survey to measure *depression*, although the response categories were modified from the original CES-D scale. Respondents reported how often (1 = hardly ever, 2 = some of the time, 3 = most of the time) in the past week they felt: depressed, sad, happy, lonely, everything was an effort, my

sleep was restless, people were unfriendly, I enjoyed life, I did not feel like eating, people disliked me, and I could not get going. Responses to positively-worded items were reverse-coded. To reduce missing values, each respondent's valid responses were summed and then divided by the total number of items that the respondent answered, so scores ranged from 1 (no depression) to 3 (high depression). The internal consistency of this scale was high at both waves: alpha = .83 at Time 1 and .82 at Time 2.

*Sociodemographic variables.* All sociodemographic variables are measured at Time 1. Because well-being can depend on the interaction of gender and marital status, gender by marital status subgroups are represented in the analyses, with each subgroup (married women, married men, unmarried women, unmarried men) indicated by a dummy variable; married men serve as the omitted comparison group. Age is coded in years; a squared age term is also included in the analyses to check for curvilinearity in the relationships examined (see Wilson and Musick 1997; Mirowsky and Ross 1989). White is coded 1 = white, 0 = otherwise. Education is coded as the highest year of education completed by the respondent. Family income is classified into 10 ordinal categories, ranging from less than \$5,000 last year to \$80,000 or more. The respondent's employment status is coded 1 = employed, 0 = otherwise. If a respondent has one or more children living at home, he or she is coded 1, otherwise 0.

#### *Attrition*

Attrition by Time 2 was regressed logistically on the set of sociodemographic variables, the set of six well-being variables, frequency of attending religious services, frequency of attending other group meetings, and number of volunteer hours worked in the past year (all assessed at Time 1). Results (not shown) indicated that individuals who left the sample (for whatever reason) differed from "stayers" on several of these variables. "Leavers" were significantly more likely to have been men, not employed, and of lower family incomes, and, importantly, they less frequently attended religious services or group meetings and volunteered fewer hours in the last year. In other words, women, those of higher socioeconomic

status, and those more socially integrated into the community at Time 1 were more likely to be “stayers.” Although there were no significant differences between leavers and stayers on the well-being variables, the loss of lower income and less socially integrated individuals over time may dampen differences between volunteers and non-volunteers in well-being; income and social integration are consistent, positive correlates of physical and mental health.

## RESULTS

### *Correlations among Variables*

Table 2 displays the means, standard deviations, and correlations among key variables at Time 1. In column 1, we see that volunteer hours are moderately and positively correlated with frequent attendance at religious services and at meetings of other groups. These correlations are not surprising for two reasons. First, people who are involved in volunteer work tend to be involved in other voluntary activities, and second, most volunteer work flows through church and other social organizations; indeed, the questions that assess volunteer work ask whether respondents volunteered in the last year for various types of organizations.

The social distributions of volunteer work are generally consistent with previous studies reviewed earlier. Married men and women, whites, those with higher education, those with greater family income, employed persons, and those with children at home volunteer more hours; unmarried men, unmarried women, and older individuals volunteer fewer hours.<sup>3</sup>

The number of hours of volunteer work in the past year correlates very weakly but significantly with all six measures of well-being, in the directions expected. Note that frequent attendance at religious services and other organizational meetings is also associated weakly with various indicators of well-being in the expected directions (in columns 2 and 3), although frequent church attendance does not relate to self-esteem or a strong sense of mastery over life.

### *Reciprocity in the Relationship between Volunteer Work and Personal Well-Being*

As argued earlier, volunteer service and

each of the six measures of well-being should mutually influence one another. Because we are hypothesizing reciprocal effects, two-stage least squares estimation would be appropriate. Unfortunately, the wording of the questions used to measure hours of volunteer work and various aspects of well-being make that estimation strategy potentially much less useful. Recall that hours of volunteer work were assessed as service given *during the last 12 months*. On the other hand, the well-being measures were assessed as of the interview itself, or, for depression, questions referred to symptoms experienced *in the past week*. Thus, most volunteer hours had no doubt already occurred when measures of well-being were taken. Given the time referents in the questions, volunteer hours might more plausibly affect well-being at each time point than the reverse.

This is indeed what we found with two-stage least squares estimation of the reciprocal influences of volunteer work and well-being at Time 2. The instrument for each endogenous variable at Time 2 was its value at Time 1. We also controlled in each structural equation the set of sociodemographic variables and respondents' reported Time 2 frequency of church attendance and organizational attendance (as controls for current levels of social integration). The results (not presented)<sup>4</sup> showed that volunteer hours significantly increased happiness, life satisfaction, mastery, and physical health (its effects on self-esteem and depression were in the right directions but were not significant). Conversely, none of the six well-being variables affected hours of volunteer work, as we suspected might happen on the basis of question wording. Sensitivity analyses showed these patterns of results to be quite robust.

Given the temporal referents of the questions, we needed an alternative strategy for observing the effects of personal well-being on volunteer work hours. We therefore capitalized on the time referents in the measures and the panel data by examining the influences of the *Time 1* measures of psychological and physical resources on *Time 2* hours of volunteerism. Because simultaneous determination is not a problem here, we estimate the equations with ordinary least squares regression.



TABLE 2. Correlations Among Key Variables at Time 1 (N = 3,617)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1 Log vol hrs	1.00																			
2 Freq church	.29**	1.00																		
3 Freq organiza	.44**	.40**	1.00																	
4 Married man	.05*	-.04*	.03	1.00																
5 Married woman	.11**	.09**	.05**	-.37**	1.00															
6 Unmarr man	-.08**	-.16**	-.06**	-.22**	-.26**	1.00														
7 Unmarr wom	-.09**	.06**	-.03	-.39**	-.45**	-.27**	1.00													
8 Age	-.11**	.11**	.03	-.07**	-.02	-.06**	.12**	1.00												
9 White	.08**	-.17**	-.00	.09**	.14**	-.05**	-.18**	.08**	1.00											
10 Education	.19**	-.03	.13**	.05**	.06**	-.01	-.10**	-.31**	.14**	1.00										
11 Fam income	.24**	-.05**	.14**	.28**	.23**	-.08**	-.42**	-.30**	.26**	.37**	1.00									
12 Employed	.14**	-.05**	.04**	.20**	-.08**	-.06**	-.15**	-.54**	.01	.22**	.42**	1.00								
13 Child home	.07**	.02	-.01	.13**	.03	-.21**	.01	-.46**	-.14**	.06**	.12**	.23**	1.00							
14 Z-Happy	.09**	.06**	.06**	.09**	.10**	-.08**	-.12**	.11**	.14**	.03	.16**	-.03	-.07**	1.00						
15 Z-Life satis	.08**	.14**	.09**	.07**	.12**	-.11**	-.10**	.16**	.10**	-.03	.07**	-.04*	-.08**	.35**	1.00					
16 Self-esteem	.12**	.01	.09**	.08**	.00	-.00	-.07**	.03	.05**	.11**	.18**	.09**	-.04*	.20**	.22**	1.00				
17 Mastery	.10**	.02	.09**	.08**	.03	.02	-.11**	.04*	.15**	.15**	.21**	.07**	-.07**	.29**	.27**	.46**	1.00			
18 Depression	-.14**	-.08**	-.14**	-.15**	-.08**	.04*	.19**	-.06**	-.16**	-.14**	-.23**	-.11**	.04*	-.31**	-.40**	-.42**	-.45**	1.00		
19 Phys health	.17**	.04*	.11**	.10**	.02	.02	-.12**	-.34**	.05**	.22**	.33**	.39**	.13**	.14**	.21**	.21**	.24**	-.38**	1.00	
Mean	-1.3	2.5	1.8	.24	.30	.13	.36	54.0	.65	11.6	4.4	.52	.42	.40	.00	6.7	6.2	1.4	11.2	
St. Dev.	4.1	1.8	1.8	.43	.46	.34	.47	17.7	.48	5.8	2.6	.50	.49	1.0	1.0	1.6	1.6	1.4	3.0	

\*  $p < .01$ , \*\*  $p < .001$

*The Influence of Well-Being on Volunteer Work: Selection Effects*

To assess selection effects, we regressed Time 2 volunteer hours on each Time 1 measure of well-being and controlled in each equation the set of sociodemographic variables. Results are reported in Table 3.

Scanning across the columns of the first panel in Table 3, we see that people who were happier, more satisfied with their lives, higher in self-esteem, in good health, and low in depression at Time 1 worked significantly more volunteer hours at Time 2. (Although a strong sense of mastery over life was unrelated to volunteer hours, the coefficient was in the expected direction.) In short, consistent with predictions, personal well-being increased hours of volunteer community service.<sup>5</sup>

Do we still obtain significant influences of personal well-being variables on volunteer hours when memberships in other voluntary groups are controlled? Individuals who are in better mental and physical health may be more likely to get involved in a variety of religious and secular organizations, which in turn may increase their structural access to volunteer options; thus, social integration may mediate the relationship between well-being and volunteer work. To examine this possibility, we reestimated the Table 3 equations, adding indicators of social integration at Time 2 (attendance at church and at the meetings of other social organizations) to assess whether they transmitted the influence of well-being at Time 1 to

volunteer hours at Time 2. In a final step, we entered a control for individuals' prior levels of volunteer work at Time 1 to examine influences net of earlier community service. We show the results in panels A and B of Table 4.

When one compares the coefficients for the well-being indicators in panel A of Table 4 to those in Table 3, one sees that current levels of social integration explain much of the effect of well-being on volunteer work. The Table 4 coefficients are noticeably smaller in size, and four of the five initially significant coefficients in Table 3 have become nonsignificant in panel A of Table 4—those for happiness, life satisfaction, self-esteem, and physical health at Time 1. Only depression remains marginally significant and negative. Thus, participation in religious and other community organizations fully mediates the effects of four components of well-being on volunteer work hours and partially mediates the influence of depression. These results reflect the fact that respondents were asked whether and for what kinds of organizations they had done volunteer work in the past year (for example, "Did you do volunteer work in the last year for a church, synagogue, or other religious organization? for a school or educational organization?" and so forth), thus tying community involvements directly to volunteer service.

In panel B of Table 4, most well-being coefficients become even smaller in size, and the depression coefficient becomes nonsignificant. These patterns hint that the relationships between the well-being indicators at Time 1

**TABLE 3. The Effects of Well-Being at Time 1 on Hours of Volunteer Work at Time 2 (logged)**

	1	2	3	4	5	6
Z-Happiness, T1	.19*	—	—	—	—	—
Z-Life satisfaction, T1	—	.17*	—	—	—	—
Self-esteem, T1	—	—	.11*	—	—	—
Mastery, T1	—	—	—	.03	—	—
Physical health, T1	—	—	—	—	.10***	—
Depression, T1	—	—	—	—	—	-.81***
Married woman (0,1)	.32	.31	.34+	.38	.32	.35+
Unmarried woman (0,1)	-.50*	-.50*	-.53*	-.54*	-.56*	-.44+
Unmarried man (0,1)	-.50+	-.48+	-.54+	-.55+	-.56*	-.48+
Age	.07*	.06+	.06+	.06+	.07*	.06+
Age squared	-.001+	-.00	.00	-.00	-.01+	-.00
White (0,1)	.08	.09	.11	.10	.09	.05
Education	.30***	.30***	.29***	.30***	.29***	.29***
Family income	.07+	.08*	.08+	.08*	.07+	.07+
Children at home (0,1)	.59***	.60***	.59***	.59**	.60***	.59***
Employed (0,1)	.18	.15	.14	.16	.05	.10
Constant	-7.00***	-6.98***	-7.58***	-7.08***	-8.10***	-5.38***
Adjusted R-square	.10	.10	.10	.09	.10	.10

+  $p < .10$  \*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

Note: Unstandardized coefficients are reported. N = 2,681.

**TABLE 4. The Effects of Well-Being at Time 1 on Hours of Volunteer Work at Time 2 (logged), Controlling for Current Social Integration and Then Prior Volunteer Hours<sup>a</sup>**

PANEL A	1	2	3	4	5	6
Z-Happiness, T1	.11	—	—	—	—	—
Z-Life satisfaction, T1	—	.07	—	—	—	—
Self-esteem, T1	—	—	.06	—	—	—
Mastery, T1	—	—	—	-.01	—	—
Physical health, T1	—	—	—	—	.03	—
Depression, T1	—	—	—	—	—	-.41+
Frequency church attend, T2	.43***	.43***	.44***	.44***	.43***	.43***
Frequency org. attend, T2	.80***	.80***	.80***	.80***	.80***	.80***
Constant	-7.12***	-7.15***	-7.48***	-7.07***	-7.56***	-6.34***
Adjusted R-square	.29	.29	.29	.29	.29	.29
PANEL B	1	2	3	4	5	6
Z-Happiness, T1	.03	—	—	—	—	—
Z-Life satisfaction, T1	—	-.01	—	—	—	—
Self-esteem, T1	—	—	.03	—	—	—
Mastery, T1	—	—	—	-.02	—	—
Physical health, T1	—	—	—	—	.02	—
Depression, T1	—	—	—	—	—	-.22
Frequency church attend, T2	.29***	.29***	.29***	.29***	.29***	.29***
Frequency org. attend, T2	.55***	.55***	.55***	.55***	.55***	.55***
Log volunteer hours, T1	.39***	.39***	.39***	.39***	.39***	.39***
Constant	-4.37***	-4.35***	-4.51***	-4.24***	-4.56***	-3.94**
Adjusted R-square	.40	.40	.40	.40	.40	.40

+  $p < .10$  \*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

Note: Unstandardized coefficients are reported.

<sup>a</sup>Sociodemographic variables controlled in Table 3 are controlled in these models, but their effects are not shown here.

and volunteer work at Time 2 might be spurious products of prior volunteer service. To examine this possibility, we re-estimated the Table 3 equations again, adding Time 1 volunteer work hours before adding the social integration variables (not shown). Three of the five initially significant well-being coefficients (in Table 3) became nonsignificant when initial volunteer hours were controlled—those for happiness, life satisfaction, and self-esteem; physical health and low depression remained significant positive predictors of Time 2 volunteer hours (becoming nonsignificant only after the social integration variables were added in the second step). These results suggested spuriousness in the relationships of happiness, life satisfaction, and self-esteem with subsequent volunteer service. However, an alternative possibility is that *levels* of happiness, life satisfaction, and self-esteem at Time 1 are unrelated to *changes* in volunteer hours from Time 1 to Time 2 (the dependent variable effectively becomes change in volunteer hours over time when initial hours have been controlled). Unfortunately, there is no way to adjudicate statistically between these alternative interpretations. We discount the likelihood of spuriousness for three reasons. First, it is

implausible that the well-being-to-volunteer-work link is *solely* the product of prior volunteer work, on purely theoretical grounds. Second, demonstrating that implausibility, some well-being indicators, specifically good health and low depression, significantly increased volunteer service when prior levels of volunteer hours were controlled (as mentioned above, not shown). Finally, a mechanism through which five of six well-being variables positively influenced volunteer service was identified in panel A of Table 4: social integration. Those results indicated that people with physical and psychological resources are more involved in voluntary organizations that in turn sponsor the volunteer work that they do. Identifying a mechanism that links personal well-being to volunteerism supports the inference that well-being variables play a causal role.

#### *The Influence of Volunteer Work on Personal Well-Being: Social Causation Effects*

Does volunteer service in turn enhance personal well-being over and above other forms of current community participation? To first

demonstrate social causation effects, we regressed each well-being indicator at Time 2 on volunteer hours at Time 2 and the set of sociodemographic variables. (Recall that volunteer hours at Time 2 referred to hours contributed in the past year; the two-state least squares analyses indicated that influences at Time 2 flowed from volunteer work to well-being and not the reverse.) In a second step, we added variables for the frequency of attendance at religious and other social organizations at Time 2 to control for individuals' current levels of social integration. In a third step, the Time 1 value of the well-being variable was entered to assess effects net of initial levels of well-being. Because the results of each of these steps do not alter in any way our conclusions about the influences of volunteer work on well-being, we present in Table 5 only the coefficients from the final equations.

The first row of coefficients in Table 5 shows that volunteer work hours in the last twelve months significantly enhance all six aspects of well-being at the Time 2 interview.<sup>6</sup> Specifically, the more hours of volunteer work, the greater a person's happiness, life satisfaction, self-esteem, sense of mastery, and physical health, and the lower his or her depression. These effects of volunteerism hold even after

individuals' participation in other voluntary groups and their prior levels of personal well-being have been controlled.<sup>7</sup> In short, volunteer service is beneficial to personal well-being independent of other forms of religious and secular community participation, as we expected.

Note that frequent church attenders are happier and more satisfied with their lives at Time 2 (church attendance became unrelated to the other four indicators of personal well-being after the Time 1 values of the well-being variables were added to the equations). Attending meetings of other social groups significantly increases happiness, life satisfaction, and physical health, and it significantly decreases depression. These patterns are generally consistent with considerable literature showing that belonging to community organizations has beneficial physical and mental health consequences.<sup>8</sup> In short, both voluntary group participation *and* volunteer work significantly enhance multiple aspects of personal well-being.

## DISCUSSION AND CONCLUSIONS

Certain kinds of people volunteer their time

**TABLE 5. The Influence of Volunteer Work at Time 2 on Different Aspects of Well-Being at Time 2, Controlling for Current Social Integration**

	Z-Happy Time 2	Z-Life satisfaction Time 2	Self- Esteem Time 2	Mastery Time 2	Health Time 2	Depression Time 2
Log volunteer hours, T2	.01*	.02***	.01+	.03***	.03*	-.004*
Frequency church attend, T2	.04***	.03**	.01	.01	.02	-.01
Frequency org. attend, T2	.03**	.03*	.02	-.01	.07**	-.09*
Z-Happiness, T1	.23***	—	—	—	—	—
Z-Life satisfaction, T1	—	.36***	—	—	—	—
Self-esteem, T1	—	—	.38***	—	—	—
Mastery, T1	—	—	—	.34***	—	—
Depression, T1	—	—	—	—	.63***	—
Physical health, T1	—	—	—	—	—	.43***
Married woman (0,1)	-.03	-.05	-.07	-.16*	.02	.02
Unmarried woman (0,1)	-.08	-.04	.05	.05	-.18	.00
Unmarried man (0,1)	-.07	.01	.03	-.11	-.06	.02
Age	-.02*	-.01	.01	-.01	-.03*	.00
Age squared	.001**	.001*	-.00	.00	.00	-.00
White (0,1)	.16***	.10*	.10+	.23***	.01	-.04***
Education	-.00	-.02**	.02	.01	.04**	-.01*
Family income	.03**	.02*	.07***	.06***	.03	-.01***
Children at home (0,1)	-.03	-.03	-.13*	-.19**	-.10	.03*
Employed (0,1)	.12**	.06	.13+	.21**	.32**	-.05**
Constant	-.12	.10	3.53***	3.67***	4.21***	.96***
Adjusted R-square	.11	.18	.22	.18	.50	.30

+  $p < .10$  \*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

Note: Unstandardized coefficients are reported. N = 2,681.

and effort to the community good, specifically people with socioeconomic resources (e.g., education) and personality “goods” (e.g., happiness, self-esteem, low depression) who are socially integrated (i.e., active members of religious and other organized community groups). In general, people with greater well-being invest more hours in volunteer service work (Table 3), and volunteer work promotes positive well-being (Table 5). We have evidence here of a positive cycle of selection and social causation processes. Although aspects of personal well-being are linked to volunteer work primarily through individuals’ participation in religious and secular organizations (Table 4), the fact that social integration mediates the well-being-to-volunteer-work relationship strengthens our conclusion that voluntary activities are products of personal well-being.

It should be remembered that several indicators of well-being used here have uncertain reliability; several were single-item measures, and the mastery “scale” had demonstrably low internal consistency. However, because similar findings were obtained across multiple (imperfect) indicators of well-being, we are more confident about our general conclusions than if we had relied on one or two indicators alone.

Although we proposed reciprocity in the relationships between volunteerism and well-being, the time referents in the questions measuring our key constructs made documenting that reciprocity impossible. Nevertheless, by taking advantage of the question wording and the panel data, we were at least able to show that the expected relationships occurred over time.

Additional concerns can be raised about the measure of volunteer work hours. Respondents’ estimates of the number of hours of work they performed over the past year are likely to be flawed due to inaccurate recall, unrealistic demands for precision in hours, and social desirability pressures. Recall problems may have depressed the number of hours reported; precision and social desirability problems may have inflated them. Moreover, this summary measure does not take into account variations in the timing of volunteer service. Some people may have compressed all of their hours into the summertime, coaching Little League, for example; others may have spread their hours evenly throughout the year; still others may have had intermittent spells of intense volunteer effort followed by no volun-

teer activity at all. These patterns in service work are likely to vary systematically by respondents’ social characteristics and structural circumstances, and they may have differential effects on respondents’ well-being as well. Given these problems and uncertainties, it is impressive that we observed relationships between volunteerism and aspects of well-being at all.

Assuming for the moment that these findings are veridical, at least two broad process questions emerge. First, although it is clear that selection effects are operating, it is not clear whether these are primarily *self*-selection or *social* selection effects. Do educated, confident, healthy people simply seek out volunteer work opportunities on their own initiative? Or do organizations and churches recruit such people differentially for service activities? In some circumstances, it is likely that both processes occur. As McAdam (1988) demonstrates in his study of Freedom Summer workers, willing volunteers already belonged to relevant organizations (in this case, civil rights groups) and a majority already had social ties with civil rights activists. Thus, Freedom Summer participants had selected themselves into structures (organizations and networks) that apprized them of volunteer opportunities and encouraged them to apply. McAdam also shows, however, that Student Non-Violent Coordinating Committee (SNCC) recruiters were explicitly advised to screen applicants on the basis of applicants’ personal orientations (paternalism, insensitivity to others, rigidity, unwillingness to follow orders); SNCC selectively accepted some applicants and rejected others. In the case of Freedom Summer in 1964, the lives of the volunteers and those they served were at serious risk. When volunteers can cause damage to others (e.g., while working crisis hot lines) or can be damaged themselves (e.g., while providing disaster relief), organizational screening may be more likely. Ironically, acts that on the surface seem purely ones of agency (seeking out and performing volunteer service) may instead also reflect varying degrees of social selection (being differentially recruited and accepted for service). Individuals’ personal characteristics and resources may be key factors in both self-selection and social selection processes, but the extent to which self-selection, or personal agency, operates becomes less clear. In short, to what extent is each process involved for dif-

ferent types of volunteer work, and are there differential benefits for those who primarily self-select into volunteerism and for those who are recruited?

A second broad class of process questions concerns how the positive effects of volunteer work on well-being are generated. What are the mechanisms through which happiness, life satisfaction, self-esteem, a sense of control, good health, and lower depression result from volunteer work? Some scholars point to beliefs that one is needed or important to other people—that one “matters” (Rosenberg and McCullough 1981); others suggest that volunteer work is a role-identity that provides a sense of meaning and purpose in life, which in turn can enhance well-being (Thoits 1992); and still others point to the instrumental and socioemotional rewards that accrue from service-giving (Smith 1981). Alternatively, perhaps doing volunteer work is less important for well-being than the particular conditions of the work that is done (for example, the work provides opportunities for self-direction and autonomy, the work is non-routine and challenging, and so forth). Better understanding of how volunteer work fosters personal well-being would offer a positive theoretical complement to stress theory, which has focused almost exclusively on explaining how and why negative life experiences produce physical and psychological problems. We have thought far less about life experiences that lead to the accrual of personal coping resources and improvements in physical and mental health. Volunteer work seems a fruitful domain for further research on these issues. As a byproduct, we may discover ways to enhance volunteers’ service experiences or sharpen organizations’ recruitment strategies, to the benefit of all.

#### NOTES

1. However, even though greater numbers of Americans report having performed volunteer work in the past year, additional evidence suggests that they may be investing fewer hours in volunteer work on average (Ladd 1999; Putnam 2000).
2. One reviewer for this paper pointed out that organizational meetings are often part of volunteer work, or meetings set up work that is to be done; hence, attending meet-

ings may be just as important to well-being as performing community services. We agree that active involvement in group organizations (attending them or even running them) is generally beneficial to personal well-being; indeed, this is what the empirical literature shows. We do not argue that volunteer work is *more* important than organizational participation; rather we suggest that giving service to the community or to groups in need *adds to* the gratifications and other benefits obtained from group involvements.

3. We performed logistic regressions to examine the social characteristics of people who volunteered for each kind of organization (religious, educational, political, senior citizen, other group) at Time 1 (results available on request). Married women were more likely than married men (the omitted comparison group) to volunteer for religious, educational, and senior citizens organizations. Unmarried women volunteered for educational groups more often than married men. Unmarried men were less likely than husbands to work for religious groups but more likely to work for political ones. Older individuals gave service to religious and senior citizen groups but were less likely to work for educational groups, suggesting that stage in the life cycle influences not only whether, but for what kinds of groups, individuals volunteer. Whites’ higher numbers of volunteer hours compared to minority group members (see Table 2) was due to their work for groups *other* than churches, schools, political parties, and senior citizens. (Coaching children’s sports, working in hospitals, environmental clean-ups, and many other such activities likely fall into the “other” category.) Those with higher education were more likely to volunteer for all organizations, regardless of their type, compared to people with lower education. Greater family income was associated with volunteer work for educational, political, and “other” groups; working for religious and senior citizen groups was not associated with income. Not surprisingly, parents with children at home were more likely to volunteer for schools and related educational groups. Attending church was positively related to volunteering for all types of groups except political and “other” organizations; church

attenders were especially likely to volunteer for a religious organization compared to non-attenders. Those who attended the meetings of a voluntary organization (other than religious) were more likely to give volunteer service to all types of organizations, compared to those who did not belong or attend such groups.

4. Tables are available upon request from the first author.
5. The Time 1 well-being variables uniquely add .5% to 2% to explained variance in Time 2 volunteer hours.
6. The number of volunteer hours worked at Time 2 uniquely accounts for 1% to 3% of explained variance in the Time 2 well-being outcomes.
7. The results in Table 5 hold even when a control for volunteer work hours at Time 1 was added (not shown). Prior volunteer work has minimal effects on well-being (it significantly enhances only happiness and health at Time 2); effects on well-being flow primarily through recent volunteer service.
8. We conducted two-stage least squares analyses to assess the reciprocal influences of social integration and well-being at Time 2 because it is plausible that those with greater physical and psychological resources are more likely to join and attend religious and other social organizations. There were few significant effects of the social integration variables on the well-being variables and vice versa; the few significant effects were not patterned. It is possible that we lacked appropriate instruments for estimating reciprocity; two-stage least squares results are often dependent on which instruments are used. Alternatively, these variables may not have influenced each other instantaneously, which is assumed by two-stage least squares estimation. Ordinary least squares regressions verified that social integration variables at Time 1 significantly increased most indicators of well-being at Time 2 and that most indicators of well-being at Time 1 significantly increased attendance at religious and secular organizations at Time 2.

## REFERENCES

- Allen, Natalie J. and J. Philippe Rushton. 1983. "Personality Characteristics of Community Mental Health Volunteers: A Review." *Journal of Voluntary Action Research* 12:36-49.
- Callero, Peter L. 1985. "Role-Identity Salience." *Social Psychology Quarterly* 48:203-25.
- Chang, Hong Wen, Jane Allyn Piliavin, and Peter L. Callero. 1988. "Role Identity and Reasoned Action in the Prediction of Repeated Behavior." *Social Psychology Quarterly* 51:303-17.
- Cnaan, Ram A. and Laura Amroffell. 1994. "Mapping Volunteer Activity." *Nonprofit and Voluntary Sector Quarterly* 23:335-51.
- Cnaan, Ram A., Femida Handy, and Margaret Wadsworth. 1996. "Defining Who Is a Volunteer: Conceptual and Empirical Considerations." *Nonprofit and Voluntary Sector Quarterly* 25:364-83.
- Cnaan, Ram A., Amy Kasternakis, and Robert J. Wineburg. 1993. "Religious People, Religious Congregations, and Volunteerism in Human Services: Is There A Link?" *Nonprofit and Voluntary Sector Quarterly* 22:33-51.
- Curtis, James E., Edward G. Grabb, and Douglas E. Baer. 1992. "Voluntary Association Membership in Fifteen Countries: A Comparative Analysis." *American Sociological Review* 57:139-52.
- Gerard, David. 1985. "What Makes a Volunteer?" *New Society* 8:236-38.
- Grube, Jean A. and Jane Allyn Piliavin. 2000. "Role Identity, Organizational Experiences, and Volunteer Performance." *Personality and Social Psychology Bulletin* 26:1108-19.
- Hettman, Dennis W. and Elizabeth Jenkins. 1990. "Volunteerism and Social Interest." *Individual Psychology* 46(3):298-303.
- House, James S. 1995. *Americans' Changing Lives: Waves I and II, 1986 and 1989*. Ann Arbor, MI: Survey Research Center, University of Michigan [producer]. Ann Arbor, MI: Inter-University Consortium for Political and Social Research [distributor].
- House, James S., Karl Richard Landis, and Debra Umberson. 1988. "Social Relationships and Health." *Science* 241(29 July):540-45.
- Hunter, Kathleen I. and Margaret W. Linn. 1981. "Psychosocial Differences between Elderly Volunteers and Non-Volunteers." *International Journal of Aging and Human Development* 12(3):205-13.
- Independent Sector. 1994. *Giving and Volunteering in the United States: Findings from a National Survey, 1994*. Washington, DC: Independent Sector.
- Jahoda, Marie. 1958. *Current Concepts of Positive Mental Health*. New York: Basic Books.
- Janoski, Thomas, Marc Musick, and John Wilson. 1998. "Being Volunteered? The Impact of Social Participation and Pro-Social Attitudes on Volunteering." *Sociological Forum* 13:495-519.
- Ladd, Everett Carl. 1999. *The Ladd Report*. New York: Free Press.

- McAdam, Doug. 1988. *Freedom Summer*. New York: Oxford University Press.
- Mirowsky, John and Catherine E. Ross. 1989. *Social Causes of Psychological Distress*. New York: Aldine de Gruyter.
- Moen, Phyllis, Donna Dempster-McClain, and Robin M. Williams, Jr. 1989. "Social Integration and Longevity: An Event History Analysis of Women's Roles and Resilience." *American Sociological Review* 54(4):635-47.
- . 1992. "Successful Aging: A Life-Course Perspective on Women's Multiple Roles and Health." *American Journal of Sociology* 97(6):1612-38.
- Oman, Doug, Carl E. Thoresen, and Kay McMahon. 1999. "Volunteerism and Mortality among the Community-Dwelling Elderly." *Journal of Health Psychology* 4:301-16.
- Omoto, Allen M. and Mark Snyder. 1990. "Basic Research in Action: Volunteerism and Society's Responses to AIDS." *Personality and Social Psychology Bulletin* 16:152-56.
- . 1995. "Sustained Helping without Obligation: Motivation, Longevity of Service, and Perceived Attitude Change among AIDS Volunteers." *Journal of Personality and Social Psychology* 68:671-87.
- Pearlin, Leonard I. and Carmi Schooler. 1978. "The Structure of Coping." *Journal of Health and Social Behavior* 19:2-21.
- Pearlin, Leonard I., Morton A. Lieberman, Elizabeth G. Menaghan and Joseph T. Mullan. 1981. "The Stress Process." *Journal of Health and Social Behavior* 22:337-56.
- Penner, Louis A. and Marcia A. Finkelstein. 1998. "Dispositional and Structural Determinants of Volunteerism." *Journal of Personality and Social Psychology* 74(2):525-37.
- Penner, Louis A., Alison R. Midili, and Jill Kegelmeyer. 1997. "Beyond Job Attitudes: A Personality and Social Psychological Perspective on the Causes of Organizational Citizenship Behavior." *Human Performance* 10:111-32.
- Piliavin, Jane A. and Peter Callero. 1991. *Giving Blood: The Development of an Altruistic Identity*. Baltimore, MD: Johns Hopkins University Press.
- President's Task Force on Private Sector Initiatives. 1982. *Volunteers: A Valuable Resource*. Washington, DC: Author.
- Putnam, Robert D. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon and Schuster.
- Radloff, Lenore S. 1977. "The CES-D Scale: A Self-Report Depression Scale for Research in the General Population." *Applied Psychological Measurement* 1:385-401.
- Rietschlin, John. 1998. "Voluntary Association Membership and Psychological Distress." *Journal of Health and Social Behavior* 39:348-55.
- Rosenberg, Morris. 1979. *Conceiving the Self*. New York: Basic Books.
- Rosenberg, Morris and B. Claire McCullough. 1981. "Mattering: Inferred Significance and Mental Health among Adolescents." *Research in Community and Mental Health* 2:163-82.
- Rotolo, Thomas. 2000. "A Time to Join, A Time to Quit: The Influence of Life Cycle Transitions on Voluntary Association Membership." *Social Forces* 78:1133-61.
- Simon, Bernd, Stefan Sturmer, and Kerstin Steffens. 2000. "Helping Individuals or Group Members? The Role of Individual and Collective Identification in AIDS Volunteerism." *Personality and Social Psychology Bulletin* 26:497-506.
- Smith, David Horton. 1981. "Altruism, Volunteers, and Volunteerism." *Journal of Voluntary Action Research* 10:21-36.
- . 1994. "Determinants of Voluntary Association Participation and Volunteering: A Literature Review." *Nonprofit and Voluntary Sector Quarterly* 23:243-63.
- Stark, Beth and Kay Deaux. 1996. "Identity and Motive: An Integrated Theory of Voluntarism." Department of Psychology, Graduate School and University Center, City University of New York, NY. Unpublished manuscript.
- Sundeen, Richard A. 1992. "Differences in Personal Goals and Attitudes Among Volunteers." *Nonprofit and Voluntary Sector Quarterly* 21:271-91.
- Thoits, Peggy A. 1992. "Identity Structures and Psychological Well-Being: Gender and Marital Status Comparisons." *Social Psychology Quarterly* 55:236-56.
- . 1994. "Stressors and Problem-Solving: The Individual as Psychological Activist." *Journal of Health and Social Behavior* 35:143-59.
- . 1995. "Stress, Coping and Social Support Processes: Where Are We? What Next?" *Journal of Health and Social Behavior* (extra issue):53-79.
- Tocqueville, Alexis de. [1835] 1990. *Democracy in America*. New York: Vintage Books.
- Turner, R. Jay and John W. Gartrell. 1978. "Social Factors in Psychiatric Outcome: Toward the Resolution of Interpretive Controversies." *American Sociological Review* 43:368-82.
- Turner, R. Jay and Patricia Roszell. 1994. "Psychosocial Resources and the Stress Process." Pp. 179-210 in *Stress and Mental Health: Contemporary Issues and Prospects for the Future*, edited by William R. Avison and Ian H. Gotlib. New York: Plenum.
- Van Til, Jon. 1988. *Mapping the Third Sector: Voluntarism in a Changing Social Economy*. Washington, DC: Foundation Center.
- Van Willigen, Marieke. 1998. "Doing Good, Feeling Better: The Effect of Voluntary Association Membership on Individual Well-Being." Paper



- presented at the annual meeting of the American Sociological Association, August, San Francisco, CA.
- Wheeler, Judith A., Kevin M. Gorey, and Bernard Greenblatt. 1998. "The Beneficial Effects of Volunteering for Older Volunteers and the People They Serve: A Meta-Analysis." *International Journal of Aging and Human Development* 47:69–79.
- Wilson, John and Marc Musick. 1997. "Who Cares? Toward an Integrated Theory of Volunteer Work." *American Sociological Review* 62:694–713.
- Young, Frank W. and Nina Glasgow. 1998. "Voluntary Social Participation and Health." *Research on Aging* 20:339–62.

**Peggy A. Thoits** is Professor of Sociology at Vanderbilt University. Her research focuses on the interplay between multiple role-identities and psychological well-being; stress, coping, and social support factors in health and mental health outcomes; and the role of emotional deviance in the self-labeling and social labeling of mental illness.

**Lyndi N. Hewitt** obtained her B. A. in Sociology at Vanderbilt University and is an entering graduate student in Vanderbilt's Sociology graduate program. Her research interests include the evolution of public opinion on political issues, how social movements influence policy, and the social determinants and consequences of volunteerism.