Aging is a life course event and an important component of one's life (Herzog & Morgan, 1993). In addition, participation in voluntary associations is important in supplying societal goods and services and bringing satisfaction and meaning to individuals. Although a wealth of information about association participation has accumulated, questions remain unanswered. Are Americans continuing to be joiners as de Tocqueville asserted 170 years ago (Curtis, Grabb, & Baer, 1992; Hausknecht, 1962; Lipset, 1985)? Does the pattern of voluntary participation show a curvilinear relationship by age as is often claimed? As Rotolo (1999) noted, there is little consensus. For example, Putnam (1995) asserted that participation in voluntary associations has declined precipitously in the last few decades. Putnam is also representative of those who asserted that middle-aged people are the most likely to participate in voluntary associations and that the rates of participation for both their older and younger counterparts are lower (for a review, see Smith, 1994). It is the latter question that is the particular focus of this article.

Forecast after forecast (Chambré, 1993; Cnaan & Cwikel, 1992; Harootyan & Vorek, 1994; Warburton, Le Brocque, & Rosenman, 1998) has suggested that voluntary participation will increase in importance among older persons as resources shrink and retirement lengthens. The literature also contends that voluntary participation ebbs and flows over the life course. Within gerontology, numerous hypotheses for these shifts have been offered, often building on continuity theory (Monk, 1995), activity theory (Chambré, 1984; Herzog & Morgan, 1993; Stevens, 1993), or life-course models (Babchuk & Booth, 1973; Chambré, 1993). Missing are attempts to disentangle ramifications implicit in various models from compositional characteristics of diverse cohorts as they move through life.

In his original commentary, de Tocqueville asserted that analogous patterns exist for people of all ages, dispositions, and circumstances. Yet there is ample evidence suggesting formal participation in voluntary associations is typical of younger, more affluent, and better-educated groups (Curtis et al., 1992; Fischer & Schaffer, 1993; Smith, 1994). In terms of our interests here, two overlapping patterns have been described. First, there is a contention that older persons’ membership in voluntary associations tapers off, and that they are less likely to belong to or be affiliated with voluntary associations than their younger counterparts (Chambré, 1984, 1993; Dye, Goodman, Roth, Bley, & Jensen, 1973; Monk, 1995). At the same time, the relationship between age and voluntary association participation has been described as curvilinear, reflecting time and resources available to people of differing ages (Cutler, 1976; Herzog & Morgan, 1993).

Several explanations have been proffered to account for differential rates of voluntary association participation. Generally speaking, one stream is grounded in sociodemographic characteristics, those attributes usually categorized within the array of human capital variables. Despite fluctuations and some variation, there is consensus that the correlation between these factors and voluntary membership is direct and linear. A second stream revolves around a life-course perspective which suggests that differing levels of voluntary association affiliation reflect emerging priorities and role substitutions undertaken in order to maintain self-concepts (Chambré, 1993; Gecas & Burke, 1995; Herzog & House, 1991; Moen, 1996; Musick, Herzog, & House, 1999). Although a life-course perspective is inherently attractive, speculation without first controlling for composi-
tional changes in key variables may lead to spurious conclusions and will not shed light on the shifting patterns observed among diverse age groups. Few studies of developmental shifts in voluntary association membership or participation have explicitly addressed the role played by shifting compositional factors and how they may mitigate the appearance of developmental or age changes. Our goal in this analysis is to address exactly that point.

Data from the National Opinion Research Center’s General Social Surveys (GSS) were brought to bear on an examination of membership in voluntary associations by age. We looked at gender, perceived health, marital status, presence of children, race, and personal and social resources known to affect propensity to join voluntary associations. Due to the nature of our data, our analysis was confined to age differences and to membership in voluntary associations. We were unable to examine individual-level age changes or other measures of types and degree of participation or involvement. Because of the nature of our data, our analysis speaks only to levels of association membership and not to other aspects of voluntary participation, activities that may take place in nonassociational contexts. Despite these limitations, the size of the sample, the capacity to examine patterns of differences through the age group 85+, and the robustness of our analysis provide tangible insights that will help ground subsequent life-course explanations of patterns of voluntary association membership and participation.

Relevance of Membership in Voluntary Associations

Membership in voluntary associations may be a source of solidarity and social integration. At the same time, it has the potential to provide much needed goods and services. We recognize that even though association membership is not tantamount to participation, the latter is largely contingent on the former. Although membership in a few specific types of voluntary associations may have declined in the past few decades (Putnam, 1995; Rotolo, 1999), participation in voluntary groups is increasingly being “marketed” as a noble, cost-saving endeavor crucial to economic and communal well-being for one or another type of association (Curtis et al., 1992). One recent estimate has older volunteers contributing over $77.2 billion worth of services in 1995 (Independent Sector, 1998). If this figure is even approximately correct, the “volunteer marketplace” is an apt portrayal in many respects as various forms of associations find themselves vying for members. In an analysis of church-based associations, Bibby (1987) postulated that sectarian competition has prompted vigorous promotional approaches to joining and to participation among religious groups, as well as in secular organizations. He attributed the competition to the fact that voluntary memberships provide unpaid labor for deserving issues (Knoke, 1990).

From an individual’s point of view, membership or participation in voluntary associations takes many forms and can mean different things to different people at different points in life. Ordinarily, though, it provides a sense of belonging, bonding, participation, and support (Janoski & Wilson, 1995; Putnam, 1995; Rotolo, 1999). Generally, joining one or another type of voluntary association nurtures a sense of well-being and provides opportunities for compensatory roles, affiliations, recognition, and ego gratification (Fischer & Schaffer, 1993; Monk, 1995; Musick, Herzog, & House, 1999). With the use of a conceptual template drawn from a life-course perspective, it appears that the propensity to join differs by event history and by role obligations—in family life, for example—as these have been demonstrated to be important determinants of association membership (Babchuk & Booth, 1973; Knoke & Thompson, 1977; Rotolo, 1999). Insofar as life satisfaction or a sense of well-being is derived from distinctive activities at diverse points in life (N. E. Cutler, 1981–82), a thoughtful age-appropriate life-course perspective can build on closer attention to compositional differences to highlight the significance of membership in voluntary associations across the life span.

Inconsistencies in Findings on Patterns and Correlates of Voluntary Association Membership

Factors linked with voluntary association affiliation are often assessed through bivariate analyses or put into a model that regresses number of memberships against composite indicators of human capital or demographic attributes, with a descriptive association offered by way of causal explanation (McPherson & Rotolo, 1996). Janoski and Wilson (1995) noted that most researchers attribute greater levels of voluntary association affiliation to advantageous socioeconomic factors, with rates anchored in human capital characteristics and changes that occur over the life course. Discriminant analyses routinely suggest that among socioeconomic factors, occupational level, education, income, and being married are positively related to rates of participation, other obligations are negatively associated, and age has a curvilinear relationship, with middle-aged adults being most affiliated. Attitudinal characteristics associated with membership in voluntary groups include altruism, a sense of well-being, and other manifestations of positive affect (Axelrod, 1973; Babchuk & Booth, 1973; Fischer & Schaffer, 1993).

In terms of our specific interest in age differences, the results are inconsistent (Babchuk & Booth, 1973; Chambré, 1993; Cutler, 1977; Monk, 1995; Rotolo, 1999). Chambré (1984) originally asserted that older people volunteer less than their younger counterparts. She reported that a quarter of the general population, but only one sixth of those older than age 60, volunteered. Looking at the intensity or hours spent volunteering, she claimed that older volunteers spent less time volunteering; as few as 5% reported 100 hours of voluntary activity in the previous year.

Cutler (1976) and Knoke and Thompson (1977) reported comparable curvilinear patterns of association membership. Explanations for the pattern among younger respondents remain problematic but may relate, independent of socioeconomic facilitators or inhibitors, to time constraints and the presence of very young children. In commenting on the apparent decline among older respondents, Cutler (1976) noted that it is unclear whether differences in affiliation and participation are a function of age, or of other factors related to family life cycle; human capital variables linked to different cohorts; or to unknown factors (see also Smith, 1994). Cutler (1976) pointed out that exactly those variables known to be correlated with lower levels of voluntary asso-
association membership and participation are also characteristic of compositional differences between cohorts.

Other investigators reported no decline in membership with age. In another study, Cutler (1977) discovered no apparent age-based declines in a small longitudinal study. He contended that rates remain stable until the very oldest years when declining health or other impediments intervene. As he and others have pointed out, what has been lacking is analysis of representative patterns that control for compositional factors differentiating diverse cohorts (Cutler, 1976, 1977; Herzog, Kahn, Morgan, Jackson, & Antonucci, 1989; McPherson & Rotolo, 1996).

Cnaan and Cwikel (1992) associated the patterns commonly identified not to human factors, per se, but to shifts in the societal ethos. They contended that following the 1960s, a period of heightened social involvement, rates of voluntary membership have been relatively flat. Putnam (1995) however, argued that rates are currently declining rather significantly. Further, Cnaan and Cwikel (1992) asserted that voluntary association affiliation rates do not increase with age or as a consequence of retirement or more free time. Chambré (1993), who also referred to voluntarism in the 1960s, argued that the activists of the 1960s have grown older, which accounts for the increase in rates of voluntary participation among older persons. She based her conjecture on results reported in over a dozen studies conducted between 1969 and 1990. She had made a comparable claim in an earlier piece and suggested that participation rates among older persons are a consequence of rates established earlier in life and continued into old age (Chambré, 1984, 1993). At the same time, she commented on a changing social ethos concerning appropriate activities in old age and shifts in the demographics of the elderly. As a cautionary note, she alluded to short-term considerations affecting voluntary participation—specifically, seasonal variations, differences by formal (narrow) versus informal (broad) interpretations of participation, as well as variance stemming from type of organizations analyzed.

Relying on GSS data comparable to what we utilize, McPherson and Rotolo (1996) pointed out that although both education and income yield high, positive correlations with voluntary association membership, not all voluntary groups are solely peopled by the well-educated and wealthy. In addition, little is known about the turnover in association memberships, types of associations with which individuals affiliate, and what induces the apparent curvilinear relationship between age and voluntary affiliations. Is it really a function of age or, as Cutler (1976) implied, might conflating factors be involved (Hausknecht, 1962; McPherson & Rotolo, 1996; Rotolo, 1999)? Moreover, if there is indeed a curvilinear relationship, might age discrimination be involved to the extent that positions for volunteers reflect the logic of the labor market (Kieffer, 1986)? Similarly, older persons undoubtedly seek meaningful engagements, and do not simply join groups willy-nilly or volunteer to dispense directions or go for coffee. By bringing a robust, concatenated data set to some of these questions, and by conducting a multivariate analysis among diverse age categories, we seek to shed light on age-related patterns of voluntary association participation in general and membership in particular.

Factors Associated With Voluntary Membership

Wilensky’s (1961) now classic assertion that membership in voluntary associations varies by age, stratum, and social group has fueled considerable debate. He was prophetic in his caveat that rates cannot be examined in a vacuum; they are linked to previous experience, family, work, and consumption cycles, and to compositional characteristics of groups. Key characteristics highlighted by previous research and relevant to this study follow.

Education.—Educational attainment appears to have a universal, positive relationship with membership in volunteer groups (Fischer, Mueller, & Cooper, 1991; McPherson & Ranger-Moore, 1991; McPherson & Rotolo, 1996; Monk, 1995; Rotolo, 1999; Smith, 1994), in terms of both number of memberships in voluntary associations and “intensity” of voluntarism. Whether that connection is because better-educated individuals have more volunteer and membership options or is due to other factors is difficult to say. McPherson and Ranger-Moore (1991) examined education over a 15-year period using GSS data, and concluded that it is a stable, strong predictor of membership in voluntary associations. The Minnesota Study of Volunteering reported a linear, positive link between education and organizational, familial, and individual-based volunteering, including voluntary associations (L. R. Fischer et al., 1991). To identify the relevance of education, we utilized five widely recognized educational intervals in examining the relationship net of the influence of other factors.

Employment status.—Work-related influences on voluntary participation are discussed in terms of occupational ranking or whether an individual is employed full-time or part-time or is retired. As far as the role of employment status is concerned, opinions have been mixed (Harootyan & Vorek, 1994). Some researchers asserted that retirees may relish a full exit from paid and volunteer obligations (Chambré, 1987, 1993; Fischer & Schaffer, 1993) and therefore rates will decline. There is a countervailing view that because time is limited, participation may increase when other obligations lessen—a sort of substitution hypothesis (Chambré, 1984). Then again, being active at work may encourage activity in other realms (Fischer & Schaffer, 1993; Warburton, Le Brocque, & Rosenman, 1998). Smith (1994) reviewed a number of empirical investigations of voluntary association participation and reported that many found higher rates among full-time employees than among any other group. For a sense of which way the pattern flows, we examined employment status.

Marital status.—Married persons join voluntary associations more than their unmarried counterparts, especially in associational and familial contexts (L. R. Fischer, Mueller, & Cooper, 1991; Smith, 1994). An exception to the pattern was noted by Warburton and colleagues (1998) in an analysis of volunteering in Australia. They did not find marital status to be predictive. When marital status is found to be related to voluntary memberships, it is not clear whether the differences are due to broader social networks in general or are linked to income and other resources (L. R. Fischer,
Mueller, & Cooper, 1991). Because there is reasonable consensus that marital status, independent of household size, does affect membership in voluntary associations, we included a four-category measure of this variable.

Gender.—Findings concerning the linkage between gender and voluntary association participation are inconsistent. In a number of empirical investigations, men appeared to have higher participation rates than women (Curtis, Grabb, & Baer, 1992). In contrast, Chambré (1984, 1987) claimed that at least among elderly individuals, more older women participate and volunteer because there are more older women than older men. Babchuk and Booth (1973) commented on the gender-based inconsistencies and hypothesized they might result from greater variability by age among men. Warburton and colleagues (1998) believed the absence of a significant gender difference in their data could be due to the blurring of gendered distinctions. As long ago as the mid-1970s, Cutler (1976) suggested male rates are higher at all ages than female rates. In contrast, Chambré (1984) and others asserted that women are more likely than men to join and to volunteer regardless of age. However, close scrutiny may reveal that women are more likely to hold voluntary membership in religious and other expressive organizations and men are more likely to claim voluntary memberships that are worklike in nature (Babchuk, Peters, Hoyt, & Kayser, 1979; Gallagher, 1994). Fischer, Rapkin, and Rappaport (1991) and others (Wilson & Musick, 1997) urged caution in formulating any generalizations by pointing to the difficulties of separating gender from other factors related to employment experiences and income. We incorporated gender into our multivariate analysis to try to isolate its role, net of other factors.

Presence of dependent children.—The literature has long supported the idea that the presence of dependent children promotes voluntary participation, perhaps because child-centered activities are a major avenue of involvement (Harootyan & Vorek, 1994; Smith, 1994). Wilson and Musick (1997) reported that number of children present in the home has a significant positive effect on formal voluntary memberships. However, age and voluntary association memberships are worklike in nature (Babchuk, Peters, Hoyt, & Kayser, 1979; Gallagher, 1994). Fischer, Rapkin, and Rappaport (1991) and others (Wilson & Musick, 1997) urged caution in formulating any generalizations by pointing to the difficulties of separating gender from other factors related to employment experiences and income. We incorporated gender into our multivariate analysis to try to isolate its role, net of other factors.

Age.—Investigations of age differences trace to the pre-World War II era, when Myrdal echoed de Tocqueville’s assertion that Americans tend to join voluntary associations, and continued into the 1950s and 1960s (Mayo, 1950; Rose, 1960). Wilensky (1961) examined more than a dozen studies reporting age differences in voluntary association participation but noted that few attempted to disentangle age from compositional components characterizing cohorts, such as education, income, and so on. He was among the first to call for statistical controls over intervening factors that might contribute to the apparent age differences. In our investigation we categorized age into 14 intervals and explored its relative importance, net of the effects of related predictors.

Race.—Less is known about the relationship between voluntary association involvement and race or ethnicity than should be the case. Evidence from a 1990 AARP survey suggests African Americans are significantly more likely to volunteer and spend more hours doing it than others (Harootyan & Vorek, 1994). The curious aspect of this finding is that it runs counter to what is usually assumed to be the case in light of education and income differences. Despite mixed results, and the need for greater specification concerning types of voluntary participation (Gallagher, 1994; Smith, 1994; Wilson & Musick, 1997), there may be subcultural and institutional factors that abet one another, promoting an ethic of reciprocity and helpfulness that overrides other sociodemographic variables (Harootyan & Vorek, 1994). Based on the variables available in the GSS data set, we employed a global White/non-White distinction.

Self-perceived health.—Health status and self-perceived health are correlated with many measures of life satisfaction and with voluntary association membership and participation (K. Fischer et al., 1991). Both actual health status and subjective assessments have been linked with participation (Chambré, 1987; Herzog & Morgan, 1993; Smith, 1994). Warburton and colleagues (1998) found that although subjective health was associated with rates of voluntary activity, actual health was not. In reversing the usual directionality, Young and Glasgow (1998) reported a strong relationship between perceived health, net of all other factors, and participation in what they termed instrumental (service-related) organizations for both men and women, although for women this was the case only in expressive (self- gratification) organizations. We utilized a global question of self-perceived health as a criterion variable.

Methods

Data

As noted earlier, the data for this analysis were drawn from the National Opinion Research Center’s General Social Surveys (GSS) (Davis & Smith, 1994). Based on the availability of variables used in the analysis, 12 surveys conducted between 1974 and 1994 (total N = 18,295) were selected for inclusion: 1974 (N = 1,484), 1975 (N = 1,490), 1977 (N = 1,530), 1980 (N = 1,468), 1984 (N = 1,473), 1987 (N = 1,819), 1988 (N = 1,481), 1989 (N = 1,537), 1990 (N = 1,372), 1991 (N = 1,517), 1993 (N = 1,606), and 1994A (N = 1,518). Sampling for 1974 and half of the 1975 survey was based on a block quota design; the remaining half of the 1975 survey and all other years used full probability sampling designs. Each sample was representative of the population of English-speaking persons 18 years of age and older living in noninstitutional arrangements in the United States.

Changes in content coverage over the history of the GSS resulted in a reduction of the total N for the 12 surveys. Several of the variables used in the analysis (age, gender, race, education, employment status, marital status, and presence of children in the household) are part of the series of permanent items asked of all respondents in each survey. Other items have been included on a rotational basis to allow more topics to be covered. Through 1987, rotating items were in-
cluded in 2 of 3 surveys. Beginning in 1988, the rotation was switched to one in which selected items were asked of two thirds of the respondents within each survey. Information on both voluntary association memberships and self-perceived health was asked of all respondents in the first six surveys listed above. From 1988 through 1994, however, these items were asked of partially overlapping subsets of two thirds of the samples with the effect that information on both association memberships and health was obtained from only about one third of the respondents in these years.

In addition to the reduction in the total N due to the GSS’s rotational system, the number of available cases was further reduced by the exclusion of respondents with missing data on any of the variables used in the analysis. The final Ns, with missing data from all sources excluded, are presented in Table 1 by age and survey year.

Given the substantial reduction in the number of cases available for analysis (from 18,295 to 11,789), frequency distributions on selected variables were compared for the full sample and the analysis sample to check for the presence of bias. Variables examined were gender, race, and education, and the results are presented in Table 2. For race, the distributions were identical; for gender, they differed by less than 1%; and for education, none of the categories differed by more than 2%. Although the GSS rotational system and other missing data resulted in a considerably smaller sample, these distributional comparisons showed minimal differences between the samples and suggest that bias is not a concern in this analysis.

Variables

Our measure of number of voluntary association memberships was based on the following question: “Now we would like to know something about the groups or organizations to which individuals belong. Here is a list of various organizations. Could you tell me whether or not you are a member of each type?” The 16 types included fraternal groups; service clubs; veterans’ groups; political clubs; labor unions; sports groups; youth groups; school service groups; hobby or garden clubs; school fraternities or sororities; nationality groups; farm organizations; literary, art, discussion or study groups; professional or academic societies; church-affiliated groups; any other groups. Following Rotolo (1999) and others, number of association memberships was operationalized as a count of the types of voluntary associations to which respondents belonged (corrected for a coding error for the years 1989–1994 [Helliwell & Putnam, 1996]), with scores ranging from 0 to 16. As types rather than actual number were utilized, the estimate is conservative and cannot be taken as a measure of the intensity of voluntary participation.

We employed other variables in the analysis, in addition to gender. To enable us to look at detailed patterns occurring at the older ages, age was categorized into 14 groups as shown in Table 3. Self-perceived health was based on the following question: “Would you say your own health, in general, is excellent, good, fair, or poor?” Educational attainment was divided into five categories as shown in Table 3. (Although several studies [e.g., K. Fischer, Rapkin, &

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*Data are from the National Opinion Research Center’s (NORC) General Social Surveys.

Table 1. Number of Cases, by Age and Year

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<th>Analysis Sample</th>
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<td>(11,789)</td>
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<td>16.2%</td>
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<tr>
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<td>(11,789)</td>
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<td>Elementary</td>
<td>11.7%</td>
<td>13.2%</td>
</tr>
<tr>
<td>Some H.S.</td>
<td>15.6%</td>
<td>17.0%</td>
</tr>
<tr>
<td>H.S. Grad</td>
<td>32.2%</td>
<td>32.8%</td>
</tr>
<tr>
<td>Some College</td>
<td>21.6%</td>
<td>19.9%</td>
</tr>
<tr>
<td>College Grad. or +</td>
<td>19.9%</td>
<td>17.0%</td>
</tr>
<tr>
<td>(N)</td>
<td>(18,236)</td>
<td>(11,789)</td>
</tr>
</tbody>
</table>

*Data are from 12 years of the NORC General Social Surveys.
Rappaport, 1991] noted that income has a direct influence on various forms of voluntary participation, we chose not to include family income as another indicator of socioeconomic status to prevent additional loss of cases from missing data and because of its significant correlation with education [$r = .384, p < .001$].  Employment status was categorized as working full-time, working part-time, unemployed, retired, and other. Marital status was characterized as married, widowed, divorced or separated, and never married. A dichotomous variable was constructed to indicate presence of children in the household (through age 18 years), and race was also a dichotomy, comparing Whites and non-Whites.

### Analysis

Multiple Classification Analysis (MCA) was the principal data analysis method. This multivariate technique can be used to examine the relationship between a single predictor variable and a dependent variable (e.g., the relationship between age and number of voluntary association memberships) or between each of a set of predictor variables and a dependent variable controlling the effects of the remaining predictors (e.g., the relationship between age and number of voluntary association memberships after the effects of the several control variables are removed). It is particularly well suited to this analysis as no assumption of linearity is required. To determine the relationship between an independent and a dependent variable, MCA yields gross or unadjusted mean scores on the dependent variable for respondents in each category of the independent variable. When multiple predictors are utilized, MCA provides an adjusted net score, which is equivalent to the mean value of the dependent variable for each category of that predictor after controlling for the effects of the remaining predictors. Also available are eta and beta coefficients to evaluate the strength of relationships at the bivariate and multivariate levels, respectively, and $F$ tests to determine whether any given predictor (e.g., age) explains a significant proportion of the variance in the dependent variable before and after other predictors are held constant.

### Results

Our initial step in the analysis was to determine whether the data could be aggregated across the 12 surveys. Using OLS regression, we examined the effects of survey year, age, age$^2$, and an interaction term for age$^2$ and survey year on number of memberships. Age and age$^2$ were entered to reflect the likely curvilinear relationship between age and number of memberships, and the age$^2$/survey year interaction term was entered to determine if the form of the relationship between age and number of memberships did not vary over time. Of particular interest is the finding that neither survey year ($t = -1.431, p = .153$) nor the age$^2$/year interaction term ($t = .716, p = .474$) was significant, suggesting that the nature of the relationship between age and number of memberships did not vary over time. In the interests of parsimony and, most important, to have a sufficient number of cases to examine the patterns of membership in some detail at the very oldest ages, we based the remainder of the analysis on the composite of all time points.

The data presented in Table 3 show the relationships between age, the other predictors, and number of voluntary association memberships. The bivariate relationship between age and number of memberships, as indicated by the gross mean scores, is statistically significant and consistent with the curvilinear pattern noted in previous studies. Member-
ship rates are low at the younger ages and rise to a peak among those aged 40–44 years. Thereafter, membership levels decline fairly steadily, with a substantial decrease occurring between the age groups 55–59 and 60–64 years. Those aged 75–79 years show a membership rate at about the same level as persons aged 18–24 years, and respondents aged 80–84 and 85+ exhibit the lowest rates of any age group examined.

Our central concern was to address the reasons for the successively lower membership levels among older persons. As noted earlier, there are important compositional differences between age groups and considerable evidence suggesting that voluntary association membership levels are related to these compositional characteristics. For the data analyzed here, there was a clear relationship between age and self-perceived health: older persons were significantly more likely to report their health as poor and they were less likely to describe their health as excellent ($\chi^2 = 1190.2$, $df = 21$, $p < .001$). Similarly, older persons had lower levels of educational attainment and they were less likely to be working full-time and part-time and were more likely to be retired ($\chi^2 = 2120.4$, $df = 28$, $p < .001$). Older persons were less likely to be working full-time and part-time and were more likely to be retired ($\chi^2 = 5452.7$, $df = 28$, $p < .001$). The older age groups also had higher percentages of females ($\chi^2 = 29.6$, $df = 7$, $p < .001$), respondents who were widowed ($\chi^2 = 6014.2$, $df = 21$, $p < .001$), and persons living in households without children ($\chi^2 = 3057.7$, $df = 7$, $p < .001$). Finally, there was a small but significant tendency for the group aged 85+ to have a higher percentage of non-Whites ($\chi^2 = 50.0$, $df = 7$, $p < .001$).

As the data in Table 3 indicate, mean voluntary association membership levels were in turn related to each of these compositional characteristics. Lower membership levels were significantly associated with poorer self-perceived health, lower educational attainment, being retired, being female, being widowed, residing in a household where children are not present, and being non-White.

Given that the compositional characteristics of older age groups differed in ways that implied lower levels of voluntary association memberships, it was essential to determine the pattern of age differences in membership levels after controlling for the effects of these compositional differences. The net mean scores presented in Table 3 indicate the effects of age differences on association memberships after partialling out effects due to compositional characteristics. These net mean scores clearly indicate that a major source of the lower association memberships observed in the bivariate data among the older age groups stemmed from their compositional characteristics. As is apparent, mean membership levels remained low at the younger ages, but steadily rose through ages 55–59, dropped somewhat in the 60–64 age group, and then remained relatively stable up through ages 85+. In other words, the pronounced curvilinear pattern of age differences in association memberships observed at the bivariate level was replaced by a statistically significant pattern that peaked at a later age and was far more stable at the older ages. Closer scrutiny actually revealed that once compositional differences are taken into account, persons 55–59, 65–69, and 75–79 had the highest net mean levels of affiliation. This latter finding is particularly relevant given what has customarily been reported for the relationship between age and voluntary association membership.

The net effects of the remaining predictors continue to be significant. Although the strength of the relationship was reduced, number of association memberships was clearly related to self-perceived health. Level of educational attainment
exerted the strongest effect of all the predictors. Employment status and marital status differences were somewhat reduced in magnitude but, of interest, the net mean membership levels of retirees and widows were higher than the corresponding gross mean levels. The introduction of the controls, in other words, appears to have had the same effect on these age-associated categories as it did for the older age groups. Men and Whites continued to exhibit higher membership levels, although here again the magnitude of the gender and racial differences was diminished after partia
ing the effects of the other control variables. Finally, net of the other predictors, having children in the household exerted an even stronger effect on number of voluntary association memberships than was the case prior to the introduction of the controls.

The combined data from the 12 surveys are presented in another way to facilitate visual inspection. Figure 1 plots the gross and net mean number of voluntary association memberships for each age group as well as the 95% confidence intervals for the gross means. If the array of compositional characteristics were to have no bearing on the relationship between age and average number of association memberships, the gross and net effects would not differ and the plotted lines would converge. If the net mean score for any age group were to be higher than its gross mean score, it would indicate that compositional characteristics act to dampen its membership levels compared to other age groups having characteristics that were more favorable to voluntary association memberships. Conversely, if the net mean score for a particular age group were to be lower than its gross mean score, favorable characteristics would operate to inflate its membership level. The 95% confidence intervals are used to provide a rough approximation of the significance of the changes between the gross and net means for each of the age groups.

The plotted data in Figure 1 bring the data presented in Table 3 into bold relief. The graph suggests that the voluntary association membership levels of persons aged 25–49 years tended to be inflated due to their more favorable compositional characteristics and to be deflated for the older age groups because of their less favorable characteristics. As the figure shows, the point at which the major dampening effect began to occur was with the 55–59 age interval, and in general it was increasingly pronounced with advancing age.

The 95% confidence intervals are presented under the assumption that whether an age group’s net mean score falls within or outside of the interval for its gross mean can be taken as an approximate indication of the significance of the change when compositional differences are controlled. Inspection of the confidence intervals in Figure 1 provides further support for our conclusions. Specifically, the adjusted means fall within the 95% confidence intervals for three of the age groups: 18–24 (X_net = 1.44; CI_gross = 1.35–1.54), 45–49 (X_net = 1.90; CI_gross = 1.84–2.10), and 50–54 (X_net = 2.00; CI_gross = 1.79–2.06). In these instances, the adjustment process had little effect. For the remaining age groups, the net mean scores lie outside of the gross mean’s confidence interval: 25–29 (X_net = 1.26; CI_gross = 1.44–1.63), 30–34 (X_net = 1.54; CI_gross = 1.73–1.94), 35–39 (X_net = 1.64; CI_gross = 1.84–2.07), 40–44 (X_net = 1.85; CI_gross = 1.97–2.21), 55–59 (X_net = 2.17; CI_gross = 1.81–2.10), 60–64 (X_net = 1.93; CI_gross = 1.46–1.72), 65–69 (X_net = 2.01; CI_gross = 1.49–1.73), 70–74 (X_net = 1.92; CI_gross = 1.34–1.62), 75–79 (X_net = 2.03; CI_gross = 1.29–1.62), 80–84 (X_net = 1.95; CI_gross = 1.15–1.54), and 85+ (X_net = 1.88; CI_gross = .96–1.47). For these age groups, controls in place for compositional characteristics appear to have had an appreciable effect.

Discussion

Our analysis speaks to several aspects of membership in formal voluntary associations but principally to the question of age differences in number of memberships. Previous research has yielded some inconsistencies in what we know about rates of association involvement in the face of important compositional factors affecting lifestyle and related behaviors. Considerable speculation has appeared about role substitution, developmental differences, and emerging priorities. Without addressing the relative importance of compositional factors, explanations of rates of membership or the curvilinear pattern of voluntary participation among the elderly are problematic and perhaps misleading. By focusing on the compositional make-up of diverse age cohorts, we are able to unravel some of the relationships about which others have speculated. Taking compositional factors into account, these data lead us to conclude that older persons are not less likely to be members of voluntary associations than other age categories (at least in terms of affiliation) but may actually be more involved.

To reach this conclusion, we aggregated 12 years of the GSS after having determined that the nature of the relationship between age and number of memberships did not vary over the 20-year period encompassed by the surveys. Utilizing a multivariate strategy, we looked at gross and adjusted mean levels of voluntary association membership across 14 age intervals. With no controls in place, there appears to be a curvilinear relationship with peak levels of participation occurring among respondents in the 40–44 year age interval. If we had looked no further, we might have joined those who have maintained that rates of voluntary association membership first build then decline later in life. On first inspection, we might have concluded that older persons have substantially lower levels of affiliation than all but the initial adult age group (18–24).

Realizing that many of the compositional factors characterizing older cohorts have also been identified as affecting propensities to belong to voluntary associations, we submitted these same data to multivariate procedures in the form of a Multiple Classification Analysis capable of examining the net effects of age independent of other characteristics thought to affect membership rates. As is apparent in Table 3, beginning with the 25–29 year age interval, there was a more nearly direct, linear increase in voluntary association memberships through ages 55–59 years when compositional differences were controlled, a slight decrease in the 60–64 age group, and generally stable membership levels thereafter through the 85+ age group. These age differences cannot be construed as conclusive, to be sure, but they are certainly at variance with what is often reported.

Figure 1 shows that age differences and the effects of compositional factors were significant. Had the latter been irrelevant to a group’s propensity to claim membership in
voluntary associations, the two lines would be identical. As noted, between the ages of 25 and 44 years, an array of human capital variables and sociodemographic factors facilitate greater rates of affiliation than are seen in younger or older age intervals. When persons reach a point somewhere in their 50s, these factors dampen previous patterns, leading to the assumption that older persons are less inclined to join voluntary groups. Yet, when the effects of factors such as male mortality and levels of educational attainment accrued at earlier points in the life cycle are partialed out, thereby in effect comparing different age groups with comparable human capital and sociodemographic attributes, the long-identified curvilinear relationship disappears.

One obvious conclusion from these data is that the older age groups are virtually the most involved, at least in terms of number of memberships, when intervening conditions are controlled. A possible consequence of that fact is that upward shifts in educational attainment and improved longevity for men will yield even higher rates of voluntary association membership among future cohorts of older persons. This prospect is particularly relevant to discussions of whether older persons are merely a drain on available resources or also make productive contributions to society through their various affiliations (Hendricks, Hatch, & Cutler, 1999). The findings also bear on the contention that there has been a decline in civic participation in the United States (Putnam, 1995; Helliwell & Putnam, 1996). Using the same data employed in our analysis, Rotolo (1999) demonstrated that voluntary association membership has, in fact, been increasing since 1984. That the characteristics of future cohorts of older persons will likely predispose them to higher levels of voluntary association membership and participation suggests that this recent trend will continue. Given the implications of the work of Musick, Herzog, and House (1999), among others (e.g., Moen, Dempster-McClain, & Williams, 1992), that volunteering has a protective effect on mortality and sense of well-being, our findings imply that the situation among older persons who volunteer may not be as dire as some have suggested.

Because our study had only one question pertaining to perceived health status, our findings are surely tentative. Nonetheless, we noted a significant link between how respondents described their health and their net rates of association membership. Also, in light of what some investigators have noted about voluntarism being nested in church or religious affiliations on the one hand and in union membership on the other, we intend to examine these two spheres in subsequent analyses. With the temporally based shifts occurring in each in terms of their prominence on the national scene, it will be meaningful to look at gross and net levels of voluntary participation when church and union memberships are controlled.

Though our focus has been on rates of formal voluntary association memberships, it is important to point out there is more to voluntary participation than meets the eye (Herzog et al., 1989). In an overview of the issues, Monk (1995) pointed out that definitions of voluntary participation range from assisting formal organizations to meet their goals, to playing in adult sports leagues, to helping a neighbor with a chore. K. Fischer and colleagues (1991) offered a threefold typology based on whether volunteering is “formal” or “informal” or regular or occasional, and on how it relates to the nature of the activity itself. If the measure of volunteering is membership in a formal or charitable organization, church-related activities may indeed account for the lion’s share of association memberships (K. Fischer et al., 1991). A thoughtful analysis of the issues must also recognize that from a societal or organizational point of view, voluntary participation is no less thorny. As others have noted, social science tends to “measure what we treasure,” and therefore unpaid involvement or memberships have traditionally been excluded from definitions of productive activity. For these and other reasons, it is important to isolate exactly what membership in voluntary associations means (Committee on an Aging Society, 1986; Herzog et al., 1989).

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AGE AND ASSOCIATION MEMBERSHIPS


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