

Sustained Helping Without Obligation: Motivation, Longevity of Service, and Perceived Attitude Change Among AIDS Volunteers

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A conceptual framework that identifies psychological and behavioral features associated with antecedents, experiences, and consequences of volunteerism is presented, and an inventory that measures 5 specific motivations for AIDS volunteerism is developed and cross-validated. Then a field study of 116 AIDS volunteers is presented in which a helping disposition, volunteer motivations, and social support (as antecedents), and personal satisfaction and organizational integration (as experiences) are used to predict duration of service over 2½ years. Structural equation analyses indicate that dispositional helping influences satisfaction and integration but not duration of service, whereas greater motivation and less social support predict longer active volunteer service. The model is generalized to the prediction of perceived attitude change. Implications for conceptualizations of motivation, theoretical issues in helping, and practical concerns of volunteer organizations are discussed.

The study of helping has long been a mainstay of theoretical and empirical inquiry in the social and behavioral sciences. Two distinct traditions of research in psychology can be identified, each of which investigates a specific form of helping and focuses on particular issues relevant to understanding that form of helping.

One research tradition focuses on situations in which potential helpers are confronted with unexpected opportunities to help strangers (the classic example being bystander intervention; Latané & Darley, 1970). The help of interest here is typically unplanned and spontaneous, is usually confined to relatively brief encounters, and generally entails neither prior nor future contact between helper and recipient. To answer the question of why this spontaneous helping occurs, some researchers have proposed that such helping reflects intrinsically humanitarian concerns and altruistic personalities (Carlo, Eisenberg, Troyer, Switzer, & Speer, 1991; Eisenberg et al., 1989; Rushton, 1984; Staub, 1974). Other answers involve claims about motivation, including assertions that such helping is mo-

tivated by rather selfish concerns (such as to feel good, to boost self-esteem, or to secure social recognition; Archer, Diaz-Loving, Gollwitzer, Davis, & Foushee, 1981; Baumann, Cialdini, & Kenrick, 1981; Cialdini et al., 1987; Schaller & Cialdini, 1988; K. D. Smith, Keating, & Stotland, 1989) or more purely altruistic motives to benefit others (Batson, 1987, 1990).

A second research tradition focuses on people providing long-term and continuing assistance, care, and support to those suffering serious illness or chronic conditions. The bulk of this research has examined "obligated" caregivers who, because of marital bond or blood relationship, provide assistance and services to a spouse, parent, child, or sibling suffering from various ailments, including Alzheimer's disease, arthritis, or the aftermath of a stroke or serious accident (e.g., Hobfoll & Lerman, 1988; Kinney & Stephens, 1989; Revenson & Majerovitz, 1990; Schulz, Williamson, Morycz, & Biegel, 1992; Thompson & Pitts, 1992). In such relationships, the impetus for assistance seems to flow from the legal, ethical, or familial obligations that tie the helper to the recipient, thereby rendering questions of personality and motivation all but moot. Instead, this literature has focused on the nature of such caregiving: It is difficult, demanding, and stressful, and can extract tremendous tolls from the people involved. Therefore, researchers have tended to examine the coping strategies, resources, and stress-related outcomes of people who provide sustained caregiving (D. Cohen & Eisdorfer, 1988; Coyne & Smith, 1991; Folkman, Chesney, Cooke, Boccellari, & Collette, 1994; George & Gwyther, 1986; Schulz, Tompkins, & Rau, 1988; Thompson, Bundek, & Sobolew-Shubin, 1990; Wade, Legh-Smith, & Hewer, 1986), with special attention to different forms of social support and the nature of the coping resources that make it possible for both the recipient and caregiver to sustain their helping relationships (Haley, Levine, Brown, & Bartolucci, 1987; Morris, Morris, & Britton, 1988; Omoto & Crain, 1994; Pagel, Erdly, & Becker, 1987; Pruchno & Resch, 1989).

There is, however, another form of helping that has received relatively little attention in psychology, one that shares

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features with both spontaneous helping and obligated caregiving but that also possesses special properties that make it particularly amenable to addressing a wide range of questions about helping. That form of helping is the ongoing assistance and sustained support provided by volunteers who, as examples, provide companionship to the lonely, health care to the sick, counseling to the troubled, or services to the homeless. Volunteerism is a widespread phenomenon; in 1991, 94.2 million American adults engaged in some form of volunteerism, with 25.2 million giving 5 or more hours per week to volunteer service, and many doing so over the course of many years (Independent Sector, 1992).

Volunteerism represents a distinctive form of helping (D. H. Smith & Macaulay, 1980). Volunteers typically seek out their opportunities to help and may deliberate long and hard about the initiation, extent, and precise nature of their involvement. Some forms of volunteerism entail commitments that extend over considerable periods of time and sizable personal costs. Also, volunteers typically do not know those whom they help in advance, often being matched with recipients by service organizations, and volunteers are under no obligation to enter into helping relationships. As a distinctive strain of helping, volunteerism engages each of the questions associated with the existing research traditions on helping. Volunteerism raises questions of personality (is it enacted only by individuals with altruistic dispositions?), of motivation (why, in the absence of obligation, do people volunteer?), and of mechanisms for sustaining it (in what ways do personal and social resources promote long-term helping?).

At a theoretical level, then, understanding volunteerism requires broaching questions that are also of fundamental concern in other forms of helping. Yet in spite of its potential to engage a wide range of theoretical questions, there has been remarkably little psychological research on volunteerism (see Clary & Snyder, 1991; Piliavin & Charng, 1990). In the present research, we have sought an initial understanding of volunteerism, with particular emphasis on AIDS volunteerism.¹ Among the societal responses prompted by the global HIV epidemic has been the development of community-based, grassroots organizations of volunteers involved in the care of people living with AIDS (PWAs) and in public education about HIV disease and PWAs. AIDS volunteer service organizations are widespread in the United States, with volunteers providing services ranging from providing emotional support to PWAs to helping PWAs with their household chores and transportation needs, making educational presentations, and raising funds (Arno, 1986; Chambré, 1991; Kayal, 1993; Lopez & Getzel, 1987; Omoto & Berghuis, 1993; Velentgas, Bynum, & Zierler, 1990; Williams, 1988).

A Conceptual Framework for the Volunteer Process

AIDS volunteerism, to be sure, is an intriguing social phenomenon. However, it is also paradigmatic of sustained and potentially costly helping without obligation. What little research that has been done on AIDS volunteerism has been primarily descriptive (e.g., Arno, 1986; Kayal, 1993; Lopez & Getzel, 1987; Williams, 1988). Therefore, to infuse this phenomenon with theory, we have developed a conceptual analysis that iden-

tifies three stages of the volunteer process: antecedents, experiences, and consequences (for a detailed explication, see Omoto & Snyder, 1990; Omoto, Snyder, & Berghuis, 1993). This analysis provides a general framework that specifies psychological and behavioral features associated with each stage as well as the social, organizational, and societal contexts in which they occur. This theoretical framework also guides the research reported here, in which we examined constructs that are critical to and representative of each stage of the volunteer process and that can be linked to other theoretical and empirical traditions on helping.

Stage 1: Antecedents of AIDS Volunteerism

For prospective volunteers, AIDS volunteerism entails many costs and presents formidable barriers that may keep them from getting involved (e.g., limits of time and energy, fear of AIDS and death, concerns about stigmatization). The question that defines, in general terms, the concerns of the antecedents stage of the volunteer process is "What prompts some people to become AIDS volunteers (e.g., to be a 'buddy' for a PWA)?" As suggested by our review of extant traditions in the study of helping, our conceptual framework for the volunteer process proposes that answers to this question potentially can be found in considerations of the personality, motivational, and circumstantial characteristics of AIDS volunteers.

In keeping with these theoretical and empirical traditions, we propose as antecedent factors: (a) personality attributes that may dispose some people to become involved in helping relationships, that is, a constellation of traits that may be said to constitute a helping disposition; (b) personal and social needs and motivations that may prompt some people to seek out and become involved in volunteer work and that may sustain their volunteer efforts over time; (c) features of people's life circumstances that create supportive social climates for them to engage in volunteer work, such as normative influences and social support provided by friends, family, and coworkers.

Stage 2: The AIDS Volunteer Experience

The second stage of our conceptual framework concerns the experiences of volunteers, particularly as those experiences may promote or deter continuing involvement. Although many parameters can be used to define people's experiences as volunteers, we focused in the present research on two properties that are central to this stage: satisfaction and organizational integration, both of which have roots in the literatures on helping and on organizations.

First, to the extent that volunteers are satisfied with their work, they should be likely to continue their volunteer involvement, as suggested by the literature on turnover among paid workers (e.g., Porter & Steers, 1973). Greater satisfaction is likely to mean volunteers who enjoy their work and believe in its importance and who will stick to it even in hard times (e.g., Gidron, 1984). Second, because AIDS volunteerism generally

¹ We refer to AIDS volunteerism throughout, although volunteers work on all fronts of the HIV epidemic and on behalf of people with HIV disease. AIDS is only one stage in the spectrum of HIV disease.

occurs in the context of community-based organizations, it is important to consider the organizational climates that may be conducive to sustained volunteerism. For example, organizational involvement has been shown to be predictive of worker absenteeism (e.g., Blau & Boal, 1987; Farris, 1971). Thus, greater integration into volunteer organizations should predict sustained volunteerism (e.g., Miller, Powell, & Seltzer, 1990). Similarly, investments have been shown to bind people to relationship partners and occupational choices even in the absence of high levels of satisfaction (e.g., Drigotas & Rusbult, 1992; Rusbult & Farrell, 1983).

Stage 3: Consequences of AIDS Volunteerism

Volunteerism may have far-reaching consequences for volunteers, recipients of volunteer services, volunteer organizations, and society at large (see Chambré, 1989; Omoto et al., 1993). Of particular concern in understanding volunteerism as sustained helping is the fact that many organizations expect their volunteers to make defined commitments to their volunteer positions (e.g., 6 months), and much organizational attention is focused on how long volunteers stay active and productive. Thus, a key consequence in our conceptual analysis is length of service as a volunteer. Specifically, we were interested in linking duration of service of AIDS volunteers to the antecedents- and experiences-stage constructs.

Also, at the consequences stage, volunteer service may influence the personal attitudes, fears, knowledge, and behaviors of volunteers. Psychological theories of attitudes emerging from actions (e.g., Bem, 1967; Festinger, 1957) provide reasons to hypothesize that, as a result of their service, AIDS volunteers should develop more favorable attitudes toward PWAs, have decreased fear and increased knowledge about AIDS, and become more favorably inclined toward volunteerism and other forms of activism (e.g., monetary donations, lobbying). Thus, assessing volunteers' perceptions of how they have been affected by their AIDS work, and examining the ability of antecedents- and experiences-stage constructs to predict perceived attitude change, may provide a broader understanding of the consequences of the volunteer process.

Investigation 1: Identifying Motivations for AIDS Volunteerism

To move from conceptual issues to operational ones requires ways to assess the constructs incorporated in our analytic framework. Standard and psychometrically sound measures already exist for some of these constructs (e.g., personality measures to tap a helping disposition), and others can be assessed by face-valid indicators readily suggested by relevant literature (e.g., social support, satisfaction, integration). Because standardized measures of motivation are generally lacking in this domain (Clary & Snyder, 1991), we developed an instrument that could assess some of the diverse motivations that may be involved in volunteerism.

In constructing an inventory of motivations for AIDS volunteerism, we adopted a functional approach. A central tenet of functionalist theorizing is that different people can and do engage in the same behaviors for different reasons, in pursuit of

different ends, and to serve different psychological functions. According to this logic, acts of volunteerism that share surface similarity may actually reflect markedly different underlying motivations; that is, they may serve distinctly different psychological functions. The functional approach is not new to psychology, having been applied productively in many diverse domains of personality and social behavior (for a review, see Snyder, 1993). Perhaps the most fully articulated instance of functionalist theorizing has occurred in the domain of attitudes, where it has been proposed that the same attitudes serve different functions for different people (e.g., Herek, 1987; Katz, 1960; M. B. Smith, Bruner, & White, 1956). In fact, the set of functions that has been identified with some regularity in theorizing about attitudes may have counterparts in the functions served by volunteering (see Clary, Snyder, & Ridge, 1992). For example, just as some attitudes may permit people to express deeply held values, so too might volunteer service be motivated by underlying values that dictate that one should make humanitarian contributions to society. Also, just as some attitudes may provide a sense of understanding of the world, so too may volunteering serve the function of satisfying volunteers' intellectual curiosity about other people and their problems. Volunteering may also serve a more social function by providing people with opportunities to make friends and to develop social ties through their work. Finally, volunteer service may help some people cope with inner conflicts and anxieties or work through personal problems just as some attitudes are thought to do. Thus, prior functional theorizing provides a heuristic point of departure for identifying possible motivations for AIDS volunteerism.

Method and Results

Generation of Items

Starting with a functional perspective, we generated a set of items to tap theoretically derived motivations for engaging in AIDS volunteerism. We added to this set of functionally derived items after interviewing staff at an AIDS organization about their perceptions of the motivations of their volunteers. Finally, a previous study of motivations relevant to AIDS (Omoto & Snyder, 1989) suggested other items. Combining these procedures, we generated a pool of 70 potential items for an inventory of motivations.

Item Selection

A sample of 116 currently active AIDS volunteers affiliated with a midwestern AIDS service organization rated how important (1 = *not at all*, 7 = *extremely*) each of the motivations was in their initial decisions to volunteer. After examining descriptive statistics, we eliminated items because of low response variability, low endorsement rates, ambiguity, and redundancy. On the basis of a preliminary factor analysis of the remaining 33 items, we deleted 8 items that loaded on multiple factors. Then we conducted a principal-components analysis on the remaining 25 items; its scree plot suggested the extraction of five factors. We conducted a maximum likelihood factor analysis in which five factors were extracted and accounted for 49% of the total variance. Visual inspection of the factor loadings after varimax rotation indicated a readily interpretable simple structure in which each factor was defined by five items with high loadings; the 25 factor loadings from this analysis ranged from .37 to .87 with a median value of .63.

To create an inventory of motivations, we assigned each item to the

one factor on which it loaded highest.² The resulting inventory produces five scale scores, each created by summing over the responses to its five items and each measuring a specific motivation for AIDS volunteerism. The five scales, named in accord with the items that define them, are: Values, Understanding, Personal Development, Community Concern, and Esteem Enhancement. A listing of the items and their factor loadings as taken from confirmatory factor analyses is contained in Table 1.

Reliabilities

The internal consistency reliability for each of the five motivation scales also is presented in Table 1. Across the five scales, the average $\alpha = .79$; when all 25 items are considered together, $\alpha = .88$.

To assess test-retest reliability, we had a separate sample of individuals in training to become volunteers at a different midwestern AIDS organization rate the 25 items on two separate occasions. Approximately 2 weeks before they were scheduled for training, 28 prospective volunteers completed a confidential mail questionnaire in which they rated how important each motivation was in their decisions to volunteer. They completed the motivation inventory again when they actually reported for training. The mean test-retest coefficient across the five scales of the inventory was $r = .72$ (range: .63-.82). Thus, the inventory of volunteer motivations appears to be reliable, both in terms of internal consistency and in terms of temporal stability.

Cross-Validation

To determine if the factor structure of the inventory would replicate in different samples of volunteers, and to assess the psychometric properties of the inventory in independent samples, we examined data from two other samples of volunteers.

Sample 1: AIDS volunteers. We administered an anonymous questionnaire to 615 AIDS volunteers currently active in a variety of volunteer roles at 26 different AIDS service organizations across the United States. In one part of the inventory, respondents rated on 7-point scales (1 = *not at all*, 7 = *extremely*) the importance of each of the 25 items of the motivation inventory to their continuing involvement in AIDS volunteer work; 604 respondents provided complete data. A five-factor maximum likelihood factor analysis accounted for 50% of the total variance. After varimax rotation, visual comparisons of the factor pattern matrices for this sample and the initial sample revealed a highly similar simple structure with the same five items loading highly on each of the five factors. To quantify this similarity, we computed Tucker's (1951) coefficient of congruence for each factor following Procrustes transformation of the cross-validation sample factor pattern matrix (Schönemann, 1966). Averaging the congruence coefficients (range: .75-.96) revealed a mean of .90, indicating highly congruent pattern matrices. That is, the loadings of individual items on the five factors is highly similar across samples. In addition, the internal consistency reliabilities obtained in this cross-validation sample, shown in Table 1, are comparable to those of the initial sample.

Sample 2: Hospice volunteers. A sample of 108 hospice volunteers attending workshops on hospice care also completed the 25-item motivation inventory (with some minor wording changes to make the items applicable to hospice service).³ Like AIDS volunteers, hospice volunteers work with individuals who are seriously ill, may need assistance with daily chores, and may be close to death. The hospice volunteers rated the importance (1 = *not at all*, 7 = *extremely*) of each item "in motivating you to volunteer." A five-factor maximum likelihood factor analysis yielded a solution that accounted for 54% of the variance and had a simple structure that was very similar to the structure obtained in the samples of AIDS volunteers. Coefficients of congruence (Tucker, 1951) for the five factors with the initial sample were high, ranging from .77 to .94, with a mean congruence coefficient of .86. The internal con-

sistency reliabilities obtained in the hospice sample, furthermore, are similar in magnitude to those for the samples of AIDS volunteers (see Table 1).

Discussion

Taken together, the results from the initial sample and two cross-validation samples suggest that the underlying structure of five specific motivations for volunteer work can be consistently identified, with each motivation reliably assessed by a scale comprised of five items. Factor analyses in each sample revealed highly similar results, both as indicated by "eyeball" tests and as quantified by congruence coefficients. In addition, the motivation scales each possess high internal consistency reliability, with the levels of these reliabilities very similar across samples. Finally, the inventory demonstrated substantial test-retest reliability.

These highly consistent patterns emerged across diverse samples (AIDS volunteers and hospice volunteers) and across variation in item wording and time frame (motivation for becoming a volunteer and motivation for continuing to volunteer). The fact that the results are so consistent across these sources of variation bolsters our confidence that we have identified five recurring themes in motivations for volunteer work that can be reliably tapped by our 25-item inventory, that are not sample specific, and that may be common to diverse forms of volunteerism. Nevertheless, we do not claim to have provided an exhaustive catalog of volunteer motivations; in fact, we recognize that attempts to measure motivations for AIDS volunteerism from other theoretical perspectives may reveal additional motives (e.g., Williams, 1988; Wong, Ouellette Kobasa, Cassel, & Platt, 1991).

At a theoretical level, the set of motivations for AIDS volunteerism tapped by our inventory has conceptual linkages to functional analyses in diverse domains of individual and social behavior. It is a set that is highly compatible with those proposed by attitude theorists of functional (e.g., Katz, 1960; M. B. Smith et al., 1956) and neo-functional (Herek, 1987) persuasions. Moreover, there are parallels between this set of motivations and attempts to construct catalogs of basic human needs (e.g., Maslow, 1968), fundamental dimensions of personality (e.g., McCrae & Costa, 1987), goals mediated by social interaction (e.g., Jones & Thibaut, 1958), and other attempts to measure motivations for volunteerism (Clary et al., 1992). Thus, volunteerism may be a distinct form of helping, but it may share underlying motivations that are consistent with a variety of concerns in personality and social psychology.

Investigation 2: Examining a Model of the Volunteer Process

Having developed a reliable measure of motivation, we next simultaneously considered constructs critical to each stage of

² One item had a loading exceeding .42 on two different factors. We assigned this item to a scale on the basis of conceptual grounds. In addition, although we report results for factor analyses with orthogonal solutions, the results when an oblique solution is specified are exactly the same.

³ We thank Dale Larson for making these raw data available to us.

Table 1
Scale Items, Factor Loadings, and Internal Consistency Reliabilities for Motivation Scales in Three Samples of Volunteers

Scales and items	AIDS volunteers: initial sample (n = 116)		AIDS volunteers: cross-validation (n = 604)		Hospice volunteers: cross-validation (n = 108)	
	Alpha	Factor loading	Alpha	Factor loading	Alpha	Factor loading
Values	.74	.539	.73	.574	.79	.678
Because of my humanitarian obligation to help others.		.468		.580		.718
Because I enjoy helping other people.		.645		.652		.740
Because I consider myself to be a loving and caring person.		.588		.552		.545
Because people should do something about issues that are important to them.		.733		.629		.710
Because of my personal values, convictions, and beliefs.						
Understanding	.80	.689	.80	.593	.82	.558
To learn more about how to prevent AIDS.		.493		.672		.788
To learn how to help people with AIDS.		.591		.522		.535
To deal with my personal fears and anxiety about AIDS.		.760		.788		.802
To learn about how people cope with AIDS.		.803		.788		.828
To understand AIDS and what it does to people.						
Personal Development	.77	.812	.75	.415	.77	.536
To get to know people who are similar to myself.		.816		.583		.619
To meet new people and make new friends.		.404		.674		.704
To gain experience dealing with emotionally difficult topics.		.535		.678		.645
To challenge myself and test my skills.		.472		.744		.658
To learn about myself and my strengths and weaknesses.						
Community Concern	.82	.643	.87	.814	.75	.425
Because of my sense of obligation to the gay community.		.623		.701		.577
Because I consider myself an advocate for gay-related issues.		.768		.848		.639
Because of my concern and worry about the gay community.		.622		.510		.734
To get to know people in the gay community.		.841		.898		.610
To help members of the gay community.						
Esteem Enhancement	.80	.635	.78	.597	.74	.579
To make my life more stable.		.671		.623		.627
To escape other pressures and stress in my life (e.g., from work, from home).		.722		.674		.628
To feel less lonely.		.577		.603		.605
To feel needed.		.767		.742		.608
To feel better about myself.						
Average α	.79		.79		.77	
Total α across all 25 items	.88		.88		.92	
Total variance explained (%)	49.4		50.4		53.9	

Note. Loadings are for each item on its own factor and are taken from confirmatory factor analyses.

the volunteer process and their interrelations in a study of active volunteers in a community-based AIDS service organization. Guided by our conceptual analysis of volunteerism and by the literatures on other forms of helping, we assessed three constructs from the antecedents stage of the volunteer process: a helping disposition, motivations for volunteering, and social support. We also assessed two constructs at the experiences stage that may sustain volunteerism: satisfaction with volunteer activities and integration into the volunteer organization. Finally, with respect to consequences, length of volunteer service and perceived attitude change served as outcomes to be predicted.

Method

Participants and Procedure

On the basis of an exhaustive sampling of the names listed in the database of a midwestern AIDS service organization, and after eliminating 128 because they did not serve in any specific volunteer capacity (e.g., they were benefactors) or because they were not currently active, we attempted to contact the remaining 317 volunteers. Of these, we contacted 225 by telephone (with a minimum of 7.0, and an average of 8.8, attempts for those not contacted) and invited them to participate in a confidential survey that would last about 1 hour and for which they would receive an honorarium of \$5.00. Potential participants were informed that the survey was being administered by investigators not associated with the AIDS organization and that their decision to participate would have no effect on their future dealings with the organization.

The survey instrument assessed demographic characteristics, information about current and past volunteer service, and also contained multiple-item measures of constructs at each stage of the volunteer process. We administered it to small groups of volunteers at specially arranged times at the AIDS service organization. A total of 116 active volunteers completed it. This sample proved to be representative of the population of volunteers in the organization's database. For example, the database indicated that the organization's volunteers were 67% male and 33% female, whereas the participant sample was 63% male and 36% female. In addition, agency records indicated that 63% of volunteers were providing transportation, in-home assistance, or emotional and social support to PWAs; in comparison, 67% of our sample served in these capacities. Similarly, 36% of the volunteer population and 33% of our sample performed other volunteer activities (e.g., speakers' bureau, office work, hotline).

One year after the survey, we contacted respondents by telephone to assess their current status as an AIDS volunteer; we reached 78% of the initial sample (9% had moved out of state, 12% could not be contacted). We asked volunteers who were no longer active to report the date on which they had ceased their service. In addition, we used the records of the volunteer organization to confirm the quit dates that volunteers gave us or, in instances when volunteers could not be reached, to establish quit dates. In a second follow-up 1½ years later, or a full 2½ years after the initial survey, we checked agency records to establish the quit dates (and, subsequently, total duration of service) of volunteers who had been active at the first follow-up but who had since stopped volunteering.

Measures

Antecedents stage. The survey contained three individual-difference measures that, when considered together, can be construed to triangulate on a disposition to be helpful. Specifically, respondents used a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*) in completing a

7-item measure of empathic concern (Davis, 1980) and an 8-item measure of social responsibility (Berkowitz & Lutterman, 1968). In addition, respondents answered 10 true-false items from the Nurture scale of the Personality Research Form (Jackson, 1974). Together, these scales assess dispositional tendencies to feel concern for others, a desire to help people, and feelings of responsibility to society and people in need, each of which has been used in prior research on helping and prosocial behavior (e.g., Batson, Bolen, Cross, & Neuringer-Benefiel, 1986; Carlo et al., 1991; Penner, Fritzsche, Craiger, & Freifeld, 1995; Romer, Gruder, & Lizzadro, 1986; Rushton, 1984). In short, they tap a helping disposition potentially relevant to volunteerism.

The survey also included our inventory of motivations for AIDS volunteerism. The instructions asked respondents to rate the importance of each of the items in motivating them to initiate volunteer work at the AIDS organization (1 = *not at all important*, 7 = *extremely important*). From these ratings, we computed scores for each of the five motivation scales as well as a global measure of motivation by summing the five z-transformed scale scores. For conceptual clarity, we wished to treat the motivations as separate dimensions. However, it is possible that the individual motivations may operate in a similar manner; that is, higher motivation of any kind may represent stronger pushes toward action. Thus, in addition to examining the specific motivations, we also treated motivation as a global construct.

In measuring social support, we sought to be consistent with previous research by including measures both of network size and of perceived availability of support (Barrera & Ainlay, 1983; S. Cohen & McKay, 1984; S. Cohen & Wills, 1985; Hobfoll & Stokes, 1988; Sarason, Levine, Basham, & Sarason, 1983). Respondents reported the number of close friends they had (later log transformed to reduce positive skew). In addition, respondents separately rated how much emotional and psychological support they received from each of: friends, family, people at work and/or school, and current relationship partners (1 = *none at all*, 7 = *a great deal*). Finally, respondents rated their agreement, on a 7-point scale, with the statement "People who are important to me support my volunteer work." In keeping with the social support literature, then, our measures tapped perceived support and network structure; we also asked about specific sources of support, not just global assessments of support (see Winemiller, Mitchell, Sutliff, & Cline, 1993, for a review).

Experiences stage. The survey contained 14 items that measured volunteer satisfaction. Respondents rated (1 = *not at all*, 7 = *extremely*) their experiences as volunteers on the nine dimensions: satisfying, rewarding, exciting, interesting, important, disappointing, enjoyable, challenging, and boring. Volunteers also used 7-point scales (1 = *strongly disagree*, 7 = *strongly agree*) to rate their agreement with five general satisfaction items (e.g., "Overall, I am satisfied with my experience as an AIDS volunteer," "I look forward to doing my volunteer work").

In the survey, six items tapped organizational integration. Two items assessed the volunteer's perception of how important it was to attend organization-sponsored meetings. In one item, volunteers rated "How important to you is it to attend organizational meetings?" on a 7-point scale (1 = *not at all*, 7 = *extremely*); in the other, volunteers estimated the number of agency-related meetings they had attended in the last 3 months (later log transformed to reduce skew). In addition, volunteers estimated the number of friends they had at the AIDS organization (also log transformed). Finally, on three separate items (1 = *not at all*, 7 = *extremely*), respondents rated their acceptance of the philosophy, goals, and purposes of the AIDS organization, their willingness to recruit new volunteers for the organization, and the extent to which they would like to take on additional assignments at the organization.

Consequences stage. To measure total duration of service, we used a multimethod approach that combined information from volunteers' self-reports and from agency records. In response to questionnaire

Table 2
Demographic Characteristics of AIDS Volunteers

Characteristic	Summary statistics
Sex (%)	
Male	63
Female	36
Race (%)	
White	97
Black	1
Asian	1
Hispanic	1
Age	
<i>M</i>	36.4 years
<i>SD</i>	9.4 years
Range	20–66 years
Sexual orientation (%)	
Predominately or exclusively heterosexual	34
Bisexual	6
Predominately or exclusively homosexual	59
Annual household income (%)	
\$20,000 or less	25
\$20,001–\$50,000	52
\$50,001–\$100,000	20
\$100,001 or more	3
Religious affiliation (%)	
None	20
Protestant	35
Catholic	30
Jewish	3
Other	5
Highest education level completed (%)	
High school or less	3
Trade/technical school or some college	29
College degree	50
Advanced study or degree	17
Employment (%)	
Full time (40 hr/week or more)	72
Part time	20
None	7
Student status (%)	
Student	20
Nonstudent	79
Relationship status (%)	
Not involved in a relationship	44
Dating more than one person	10
Involved in an exclusive relationship	45
Knew a person with AIDS prior to volunteering (%)	
Yes	67
No	32
Self-rated political ideology ^a	
<i>M</i>	2.55
<i>SD</i>	1.27
Range	1–6
Self-rated social and political activism ^b	
<i>M</i>	3.78
<i>SD</i>	1.58
Range	1–7

Note. $n = 116$, although because of rounding and missing data, percentages do not sum to 100.

^a 1 = extremely liberal, 7 = extremely conservative. ^b 1 = not at all active, 7 = extremely active.

items, volunteers indicated (in years, months, or both) how long to date they had been active at the AIDS organization. We also obtained information on each volunteer from our 1- and 2½-year follow-ups. We constructed a measure of total duration of service for each volunteer by combining length-of-service estimates from volunteers' initial questionnaires with the information from the two follow-ups.

Guided by our conceptual framework, we also assessed how volunteerism might affect volunteers by including questionnaire items in which volunteers rated their perceived attitude change as a result of their service. Respondents used 7-point scales (1 = become less favorable, 7 = become more favorable) to rate the change in their attitudes toward PWAs, volunteer work and volunteer agencies, people who do AIDS volunteer work, homosexuals, the gay community, themselves, and their outlook on life.

Results

Overall, these volunteers were a diverse group with substantial variability in their demographic characteristics, social and political views, and prior experience with HIV disease (for descriptive information see Table 2). Respondents had been involved with this AIDS service organization from 2 to 42 months ($mdn = 12$ months) and currently devoted an average of 4.8 hr per week to AIDS volunteer service ($mdn = 4.0$ hr).⁴ With respect to their motivations for getting involved in volunteer work, respondents most strongly endorsed Values, followed by Community Concern, Understanding, Personal Development, and Esteem Enhancement (see Table 3). At the time of the survey, 90% of respondents expected to continue volunteering with the agency for at least another year. In actuality, 54% of the volunteers were still active 1 year later, whereas only 16% of them were still active 2½ years later.

Building the Model

A priori specifications. In our conceptual framework, the volunteer process unfolds over time as antecedents-stage variables give way to experiences-stage variables, which, in turn, lead to the consequences of volunteerism. In this investigation, helping disposition, volunteer motivations, and social support are antecedents-stage constructs that were hypothesized to influence constructs at the experiences and consequences stages. Satisfaction and organizational integration are experiences-stage constructs hypothesized to influence the consequences but not the antecedents of volunteerism. Duration of service is the consequence of primary concern and was considered to be completely endogenous.

Tests of demographic variables. We began by creating composite measures of our constructs by grouping items and scales and then summing the z-score transformed scores for these indicators. Item groupings reflect a few general rules: we kept existing scales intact (e.g., empathic concern, specific motiva-

⁴ Despite this variability, direct comparisons between relatively inexperienced and experienced volunteers in this sample revealed no significant differences on any of the demographic characteristics or on any of the variables of interest in this investigation. As might be expected in this sample of AIDS volunteers, moreover, men were likely to identify themselves as homosexual (88%) whereas women primarily identified themselves as heterosexual (83%).

Table 3
Descriptive Information on Indicators

Indicator	Helping			Motivation			Social support			Satisfaction			Organizational integration			Duration			Attitude change		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		
1. Nurtureance	.54***	—																			
2. Empathic concern	.49***	.51***	—																		
3. Social responsibility	.47***	.41***	.50***	—																	
4. Values	.09	.12	.18	.36***	—																
5. Community concern	.11	.17	.08	.25**	.41***	—															
6. Understanding	.16	.16	.03	.20**	.46***	.44***	—														
7. Personal development	.07	.10	-.04	.26***	.31***	.25***	.45***	—													
8. Esteem enhancement	.16	.20**	.23**	.12	-.02	.01	.01	-.31***	—												
9. Social support availability	.24**	.27***	.20**	.22**	-.03	.05	-.11	-.15	.40***	—											
10. Social network	.19	.24**	.23**	.29***	.14	.26***	.09	.05	.04	.04	—										
11. Satisfaction adjectives	.28***	.29***	.31***	.38***	.14	.19	.04	-.01	.10	.16	.75***	—									
12. Satisfaction statements	.03	-.02	.01	-.03	.05	.00	.04	.01	-.02	-.05	.11	.16	—								
13. Meeting attendance	.11	.10	.20**	.04	.19	.08	.11	-.05	.18	.05	.15	.18	.42***	—							
14. Organizational acceptance	.39***	.21**	.36***	.34***	.13	.18	.07	.16	.11	.14	.21**	.23**	.24**	.40***	—						
15. Additional involvement	.05	-.01	.04	.06	.15	.26***	.25**	.26***	-.23**	-.05	.20**	.20**	-.06	.16	.09	—					
16. Duration of service	.22**	.32***	.40***	.32***	.19**	.31***	.06	.06	.10	.11	.23**	.29**	.01	.20**	.42***	.01	—				
17. PWAs and volunteerism	.16	.28***	.31***	.27***	.18	.26***	.04	-.10	.06	.10	.25***	.20***	-.02	.10	.23**	.07	.59***	—			
18. Homosexuals	.17	.23**	.25***	.34***	.30***	.35***	.24**	.23**	.07	.26***	.35***	.34***	.03	.19**	.24**	.19**	.57***	.61***	—		
19. Self	.078	.568	.573	.526	.413	.359	.333	2.63	4.23	0.05	5.67	5.42	0.03	-.001	0.00	30.91	5.69	5.43	5.30		
M	0.16	0.72	0.72	1.07	1.56	1.44	1.38	1.36	1.11	0.70	0.85	0.84	0.92	0.78	0.84	19.42	0.93	1.14	1.12		
SD																					

Note. Correlations are for $n = 107$ for individuals with complete data for all variables. PWA = person living with AIDS.
*** $p < .05$. ** $p < .01$.

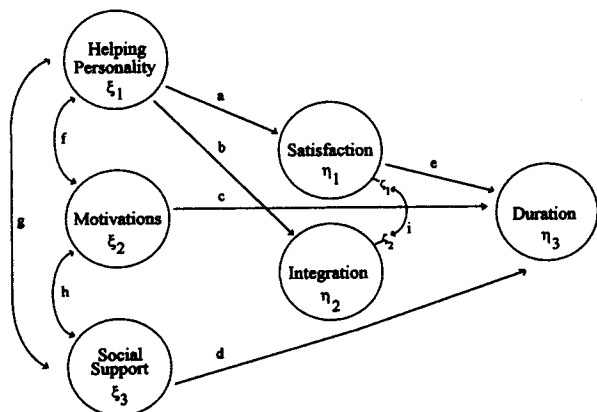


Figure 1. Structural model of the volunteer process.

tions), we considered items measured on the same response scale together, and we randomly grouped remaining items. Tables 3 and 4 provide descriptive information for each of the indicators and the constructs in the model.

We next examined the power of demographic characteristics of the volunteers to predict the endogenous constructs in our model. Specifically, we separately regressed satisfaction, organizational integration, and duration of service on a set of demographic variables that included gender, age, income, sexual orientation, and education. None of the individual beta coefficients (β s < .27, *ns*), or the overall regression equations, were significant (F s < 1.1, *ns*, R^2 s < .05). Thus, the demographic variables did not appear to be important in predicting the variables at the experiences and consequences stages. We also used hierarchical regression analyses (J. Cohen & Cohen, 1983) to test all possible two-way interactions among the demographic variables as predictors of the endogenous constructs. Only 1 of the 30 interactions tested was significant; for remaining F changes, p s > .05.⁵ This preponderance of null effects gave us confidence that we could safely exclude the demographic variables from our model and proceed to examine psychological predictors of duration of service.

Regression analyses and model specification. We used multiple regression analyses to suggest direct paths between constructs across stages of the volunteer process. Specifically, we separately regressed the satisfaction and integration composites (experiences-stage constructs) and duration of service (consequences) on the antecedents-stage constructs; we also regressed duration of service on the experiences-stage constructs. To minimize Type II error, any predictor whose regression coefficient had an associated t value with p < .15 was included in the complete three-stage model.

Testing the Model

On the basis of the results of the four regression analyses, we posited that five direct paths be included in our model, as shown in Figure 1. We then tested this completely specified model of the volunteer process with multiple indicators for each construct (see Table 4) and permitting all possible correlations

among constructs within stages (using LISREL VII, Jöreskog & Sörbom, 1989). In addition to confirming the importance of the causal paths identified in the regression analyses, the structural equation analysis permits a test of a more complete and complex model than regression analyses, one that involves the simultaneous consideration of several causal paths.

The results of the structural equation analysis, summarized in Table 5, reveal that our model marginally fit the data. The statistical test for fit, which is known to be influenced by sample size, was $\chi^2(96, N = 107) = 147.01, p = .001$. By other commonly used criteria, however, the model fit was good; goodness of fit index (GFI) = .86, and $\chi^2/df = 1.53$ (which is less than 2, as suggested by Carmines & McIver, 1981).⁶ Because we combined the five motivation scales into a single, global motivation construct, it is likely that some of the model misfit is due to treating a multidimensional construct as unidimensional. In subsequent analyses, therefore, we expected to obtain even better fit for our model when the separate motivation scales were substituted for the global motivation construct (see Bollen, 1989).

In terms of the adequacy of the measurement model, the squared multiple correlations for the endogenous construct indicators range from .23 to .96 and have an average R^2 of .56. The total coefficient of determination for these variables is a substantial .99. For the antecedents-stage variables, R^2 values range from .21 to .54 and have a mean R^2 of .41. The total coefficient of determination for these exogenous variables is .97. For the extent of prediction of the endogenous variables: volunteer satisfaction $R^2 = .18$, volunteer integration $R^2 = .15$, and duration of service $R^2 = .26$, with a total coefficient of determination of .41. Examination of the path coefficients and correlations estimated by LISREL, shown in Table 6, reveals that all of the causal paths are significant; that is, the absolute value of each path exceeds twice its standard error (Hayduk, 1987). Correlations between antecedents-stage constructs range from $-.08$ to .47.

As shown by the path coefficients for this model, the helping disposition construct directly and positively influences satisfaction and organizational integration. In turn, greater satisfaction is related to longer length of service, whereas integration is not related to longevity of service. Separate examination of the in-

⁵ The interaction between gender and income was significant for the prediction of organizational integration, F change = 4.34, $p < .05$. The regression lines for this interaction indicate that women with higher incomes reported less organizational integration, although this interaction appears to be due to a single extreme case. Removing this one case reduces this interaction to nonsignificance.

⁶ Rather than make the unrealistic assumption that duration of service was measured without error (see Fornell, 1983), we set the measurement error for this single-indicator construct at .25, which is the mean error residual identified by Andrews (1982) in a review of social science research. The R^2 for duration of service increases when its error residual is set to a higher value; when no measurement error is assumed, $R^2 = .19$. However, the model fit statistics and path coefficients do not change with alterations in the value of this error residual. In addition, testing this same model with duration of service information from only the 1-year follow-up and not the complete 2½-year follow-up revealed highly similar fit statistics to those reported, $\chi^2(96, N = 107) = 151.64, p < .001, GFI = .86, RMR = .10, \chi^2/df = 1.58$.

Table 4
Constructs and Indicators in the Model

Constructs and indicators	No. items in indicator	Average inter-indicator <i>r</i>
Helping personality (ξ_1)		.49
Nurturance (λ_1)	10	
Empathic concern (λ_2)	7	
Social responsibility (λ_3)	8	
Motivations for volunteering (ξ_2)		.34
Values (λ_4)	5	
Understanding (λ_5)	5	
Personal development (λ_6)	5	
Community concern (λ_7)	5	
Esteem enhancement (λ_8)	5	
Social support (ξ_3)		.40
Social support availability (λ_9)	4	
Social network (λ_{10})	2	
Personal satisfaction (η_1)		.74
Satisfaction adjectives (λ_{11})	9	
Satisfaction statements (λ_{12})	5	
Organizational integration (η_2)		.34
Meeting attendance (λ_{13})	2	
Social and organizational acceptance (λ_{14})	2	
Additional involvement (λ_{15})	2	
Duration (η_3): Duration of service (λ_{16})	1	
Attitude change (alternate η_3)		.58
PWAs and volunteerism (λ_{16})	3	
Homosexuals (λ_{17})	2	
Self (λ_{18})	2	

Note. PWA = person living with AIDS.

direct effect of helping disposition on duration of service through its influence on satisfaction revealed a small effect that was only marginally different from 0 (coefficient/standard error = 1.7, $p < .10$, two-tailed).

Further examination of path coefficients for this model indicates that the motivation construct has no path to satisfaction or to integration but does have a direct and positive influence on length of service. In this model, therefore, greater overall motivation for volunteerism predicts longer service as an AIDS volunteer.

In this model, social support has a negative path to longevity of service; the greater a volunteer's social support, the less time that volunteer remains active. To isolate the source of this effect, we conducted separate tests of the model, using a perceived support construct and a network size construct (using responses to the marital status and relationship status questions to supple-

ment the number-of-friends question as an indicator for this construct). The social-support-to-duration-of-service path is negative in both of these models, although the magnitude of the path is significant only in the model with perceived social support. If anything, then, perceived support is responsible for the magnitude of this negative path, although the (more unreliable) measure of network size reveals a similar pattern of influence.

To summarize the direct influences on longevity of service in this model, AIDS volunteers serve longer to the extent that they are strongly motivated and find their efforts to be satisfying, but they perceive themselves to have relatively little social support. Despite the fact that this model revealed good fit to the data and significant structural paths, there may exist other models, or modified versions of the present one, that could account for the correlations in the data as well as or better than this model. To

Table 5
Fit Statistics for the Duration of Service Models

Motivation construct	χ^2	<i>df</i>	<i>p</i>	GFI	RMR	χ^2/df
Global motivation	147.01	96	.001	.86	.10	1.53
Values	79.84	69	<i>ns</i>	.90	.08	1.16
Understanding	78.36	69	<i>ns</i>	.91	.07	1.14
Personal Development	79.33	69	<i>ns</i>	.91	.07	1.15
Community Concern	58.83	69	<i>ns</i>	.93	.06	0.85
Esteem Enhancement	81.43	69	<i>ns</i>	.91	.07	1.18

Note. For all analyses, $n = 107$. GFI = goodness of fit index; RMR = root mean squared residual.

Table 6
Path Coefficients and Correlations in the Duration of Service Models

Motivation construct	Path coefficients					Correlations			
	a	b	c	d	e	f	g	h	i
Global motivation	.42**	.39**	.31**	-.31**	.24**	.36**	.47**	-.08	.16
Values	.46**	.40**	.09	-.36**	.27**	.73**	.45**	.26*	.14
Understanding	.42**	.37**	.28**	-.34**	.26**	.22*	.45**	.06	.16
Personal Development	.42**	.36**	.27**	-.31**	.28**	.20**	.47**	-.06	.17
Community Concern	.43**	.39**	.13	-.33**	.28**	.24*	.45**	.00	.16
Esteem Enhancement	.41**	.37**	.24*	-.25	.29**	.09	.44**	-.40**	.17

Note. Path coefficients and correlations are from the standardized solution. For a depiction of the model, see Figure 1.

* $p < .10$. ** $p < .05$.

evaluate these possibilities, we used the data-driven process of examining the LISREL modification indices to see if the addition of any structural paths would result in improved model fit. None of the modification indices exceeded the commonly used criterion value of 5 (Marsh, 1987; all indices $< .7$), meaning that model fit cannot be improved by the addition of any causal paths.⁷

Testing the model using specific motivations. Next we examined the five specific motivations separately by testing models in which we successively replaced the global motivation construct with each of the specific motivations. For these analyses we created three indicators for each motivation construct by randomly pairing scale items (resulting in two indicators) and having one single-item indicator. In all other respects the models were the same as the one shown in Figure 1.

The five model tests are summarized in Tables 5 and 6. For all five models, fit indices indicate greatly improved and generally excellent fit between the models and the data, all $\chi^2(69, N = 107) < 82$, $ps > .10$, GFIs $> .90$, $\chi^2/dfs < 1.20$. However, some estimated model parameters are nearly constant across the analyses, whereas others change depending on the specific motivation being tested. For example, the estimated structural paths from helping disposition remain virtually the same (Columns a and b in Table 6), but the correlations among antecedent constructs vary (Columns f-h). The magnitude of the path from motivation to duration of service also varies between analyses (Column c). All remaining structural paths are significant and in the same direction as in the model for global motivation (except social support to duration for the Esteem Enhancement model—this path is still negative but not significant).

Although all of the structural paths between specific motivations and duration of service are positive, only Understanding and Personal Development significantly predict duration of service; in addition, the estimated path from Esteem Enhancement is marginally significant (R^2 s for duration $> .23$). These analyses suggest that AIDS volunteerism motivated by relatively more self-oriented motivations (such as developing personal skills and feeling better about oneself) leads to longer duration of service, whereas AIDS volunteerism emanating from values or community concerns is not reliably related to length of service. These models also suggest that the specific motivations are not related to volunteer satisfaction or organizational integration, nor do their effects on longevity of service appear to be mediated by these experiences-stage constructs.

Testing the generalizability of the model. We next examined the generalizability of the model in predicting perceived attitude change, a conceptually different but theoretically relevant consequence in the volunteer process. To do so, we tested the model presented in Figure 1 after replacing duration of service with perceived attitude change (with three indicators). As summa-

⁷ The modification indices did suggest that model fit would be improved by adding correlations among the uniquenesses in our measurement model; that is, between the error terms of the indicators of our constructs. Including four such correlations within only the antecedents stage does indeed improve the overall model fit, $\chi^2(92, N = 107) = 114.50$, $p > .05$, GFI = .89, RMR = .09, $\chi^2/df = 1.24$. As suggested by the correlations in Table 3, three of the four correlated uniquenesses that improve model fit are between indicators of the helping disposition and Values motivation.

Table 7
Fit Statistics for the Perceived Attitude Change Models

Motivation construct	χ^2	df	p	GFI	RMR	χ^2/df
Global motivation	187.11	126	<.001	.84	.10	1.49
Values	112.63	95	ns	.88	.08	1.19
Understanding	115.33	95	.08	.89	.08	1.21
Personal Development	124.75	95	.02	.87	.08	1.31
Community Concern	97.89	95	ns	.90	.07	1.03
Esteem Enhancement	120.99	95	.04	.88	.07	1.27

Note. For all analyses, $n = 107$. GFI = goodness of fit index; RMR = root mean squared residual.

Table 8
Path Coefficients and Correlations in the Perceived Attitude Change Models

Motivation construct	Path coefficients					Correlations			
	a	b	c	d	e	f	g	h	i
Global motivation	.44**	.40**	.44**	.27*	.26**	.40**	.49**	-.06	.17
Values	.47**	.42**	.36**	.13	.23**	.74**	.48**	.30*	.15
Understanding	.44**	.38**	.36**	.24*	.30**	.24*	.51**	.07	.17
Personal Development	.43**	.37**	.16	.27*	.36**	.21	.50**	-.10	.19
Community Concern	.44**	.40**	.34**	.26*	.31**	.25*	.50**	-.02	.17
Esteem Enhancement	.42**	.39**	.38**	.40**	.33**	.10	.52**	-.42**	.18

Note. Path coefficients and correlations are from the standardized solution. For a depiction of the model, see Figure 1.

* $p < .10$. ** $p < .05$.

alized in Table 7, the statistical fit of this model is not particularly good by one criterion ($\chi^2[126, N = 107] = 187.11, p < .001$, although this statistic is influenced by sample size) but is acceptable by other commonly used criteria (GFI = .84, $\chi^2/df = 1.49$). Statistics for the measurement model are very similar to those for the model predicting duration of service. The coefficient of determination for the endogenous variables is .99; for the exogenous variables, .97. The attitude change indicators all have R^2 values greater than .50. For prediction of the endogenous constructs, $R^2 = .19$ for volunteer satisfaction, .16 for volunteer integration, and .39 for attitude change. The total coefficient of determination for the structural equations is .47.

The estimated path coefficients and correlations for this model are presented in the top row of Table 8. All of the paths are significant except the path from social support to perceived attitude change, which is only marginally significant. Unlike the previous model, however, all of the paths in this model are positive. Thus, satisfaction, motivation, and social support (marginally) all directly and positively influence perceived attitude change toward topics and issues associated with AIDS volunteerism. As with the model for duration of service, none of the LISREL modification indices suggested that other causal paths should be added to the model (all indices < 1.9).

Finally, we substituted each of the specific motivations for the global motivation construct in this model. The fit of these models is again considerably better than that of the model for global motivation (Tables 7 and 8). In predicting perceived attitude change, moreover, four of the motivations (Values, Understanding, Community Concern, and Esteem Enhancement) all have significant positive influences on perceived attitude change.

General Discussion

These studies of volunteers in AIDS service organizations have been guided by a conceptualization of volunteerism that identifies psychological features associated with the antecedents, experiences, and consequences stages of the volunteer process (Omoto et al., 1993). We began by using exploratory and confirmatory analytic techniques to develop and cross-validate an inventory that reliably assesses five functionally oriented motivations for AIDS volunteerism. Next we developed and

tested a model that included constructs across all stages of the volunteer process. A causal model with structural paths between helping disposition and satisfaction, between helping disposition and integration, between volunteer motivation and duration of service, and between social support and duration of service adequately fit data from AIDS volunteers collected over a 2½-year period. Finally, as a test of generalizability, we determined that the same model that predicted longevity of service also predicted perceived attitude change.

On the basis of the modeling results, what can we say about the volunteer process? We chose each of the constructs in the model because of its plausible involvement, as indicated by our conceptual analysis of the volunteer process and by theory and research on helping, in promoting and sustaining volunteer service. Thus, the linkages that are absent from our models may be as noteworthy as those that are present. First, it was not necessary to include a direct path from helping disposition to duration of service in any of our models. In fact, duration of service was not related to any of the indicators of the helping disposition (all r s < .05, n s, see Table 3). Thus, having a helping disposition (one marked by relatively empathic, nurturant, and socially responsible attributes) did not, in this study, guarantee longer life as an active AIDS volunteer. One explanation for this lack of a path is methodological; perhaps we used inappropriate indicators of a helping disposition. We think not. Guided by theoretical considerations, we specifically chose indicators because of their relevance to helping in general, to volunteerism in particular, and especially to volunteer service that incorporates caregiving, advocacy, and community education; moreover, these measures have been used in other research on helping (e.g., Penner et al., 1995). Nevertheless, the lack of a direct path to duration of service may be due to unreliability of the indicators of a helping disposition. The data speak convincingly against this possibility as well. The helping construct was one of the most reliable in our model. In addition, it was not so unreliable so as to have no significant paths at all; it was positively related to satisfaction and to integration.

At a conceptual level, the lack of direct paths from helping disposition to duration of service and to perceived attitude change may suggest that dispositional propensities, even a helping disposition, may represent only general orientations, and it may be unrealistic to expect such broadly defined tendencies

to serve as unmoderated predictors of specific outcomes of the volunteer process (e.g., Bem & Allen, 1974; Mischel, 1968). The gaps between dispositions to help and continuing volunteer service and perceived attitude change may be too large to bridge conceptually as well as statistically. Had we used a personality predictor specifically matched to the criterion to be predicted, such as a measure of a long-serving volunteer personality, or if we had used a multiple-act criterion to cast a wider net of alternative outcomes (see Ajzen & Fishbein, 1977; Epstein, 1983), significant direct paths between a dispositional construct and consequences very well may have emerged. Yet to have done so may have violated much of the spirit of personality psychology, which holds out the promise that it is possible to predict specific outcomes from general dispositions.

Also notably absent from our models were paths from organizational integration to duration of service and perceived attitude change. The literature on organizations provided reasons to hypothesize the existence of such paths (e.g., Porter & Steers, 1973). Moreover, volunteer organizations often invest much effort in increasing the integration of their volunteers into the organization, using such means as regular meetings with organization staff, newsletters and other mailings, and volunteer recognition and appreciation events. These attempts to bind volunteers to the organization are thought to promote continuing service and favorable attitudes (American Red Cross, 1988). However, as important as these goals may be, the findings from our current modeling analyses suggest that they are unlikely to be reached by strategies oriented toward organizational integration.

One of the most intriguing findings to emerge from our modeling of the volunteer process was the *negative* path from social support to duration of service. Individuals who reported greater social support in their life circumstances actually served less time as AIDS volunteers. At first glance, this negative relation seems to stand in marked contrast to the literature that has suggested that social support buffers people from the deleterious effects of negative life events and daily hassles (S. Cohen & McKay, 1984; S. Cohen & Wills, 1985; Thoits, 1986; but see Riley & Eckenrode, 1986; Rook, 1984). However, on further consideration, it appears that there is a viable explanation for this negative path, one that revolves around the seeking of social support and that involves two separate component processes.

To the extent that volunteers have large and available social support networks in other domains of their lives, they may be particularly affected by the psychic costs associated with AIDS volunteerism (see Omoto & Snyder, 1990; Pearlin, Semple, & Turner, 1989; Snyder & Omoto, 1992) as they compare their lives before and after becoming a volunteer. Despite its other (potentially positive) effects, AIDS service may also add "grief" to these people's lives, and they may quit volunteering as an attempt to reestablish a happier state in which they feel supported and accepted by their friends and associates. This argument may explain why people high in social support are early casualties of the stress associated with AIDS volunteerism; they may be retreating to the social support in other areas of their lives. In a complementary fashion, people low in social support may approach volunteer organizations as an attempt to meet people and make friends. Supporting this reasoning, the motivations associated with personal desires to make friends and to

feel better about oneself (Personal Development and Esteem Enhancement) were positively related to duration of service in our model, even in the context of the negative impact of social support. Thus, volunteerism may provide some of its practitioners with new networks of friends and added reserves of social support that they may seek to preserve by continuing their service. Taken together, these two hypothesized mechanisms suggest an important role for the seeking of social support in understanding how long people serve as volunteers. Those who lack social support may be seeking to acquire it through volunteer service, and those with social support may be taking refuge from the stresses of volunteering by seeking the support they possess elsewhere.

Finally, in our model we found that global motivation directly and significantly influenced duration of service. Moreover, the predictive power of global motivation was seen to derive primarily from the specific motivations of Understanding, Personal Development, and Esteem Enhancement. However, motivation (global or specific) was not related to volunteer satisfaction or organizational integration in the context of the current model, nor does it appear that the effects of motivation on duration of service and perceived attitude change are mediated by the experiences-stage constructs (see also Table 3). The fact that motivation was directly related to two conceptually distinct consequences of volunteerism testifies to the important roles that motivational concerns play not only in the initiation of tasks (such as volunteer work) but also in the outcomes that derive from them (here, length of service and perceived attitude change). Clearly, then, there may be utility not only in focusing on motivation but also in conceiving of volunteerism as a process of sustained helping in which events at earlier stages affect events and outcomes at later stages of the process.

In our study, it was not the humanitarian desires to do good on behalf of others, nor concern for communities affected by HIV, that kept volunteers involved. Rather, it appears that the opportunity to have personal, self-oriented, and perhaps even selfish functions served by volunteering was what kept volunteers actively involved. Our identification of relatively self-oriented and other-oriented motivations for volunteerism is reminiscent of the distinction between egoistic and altruistic motivation often made in the social psychological literature on helping (Batson, 1987, 1990; Piliavin & Charng, 1990). We found both types of motivation among AIDS volunteers. It appears, ironically, that volunteers motivated by more self-oriented concerns may actually provide greater benefits to others through their longer lengths of active service (but see Clary & Orenstein, 1991). In addition, global motivation (and the specific motivations of Values, Understanding, Personal Development, and Community Concern) significantly and positively influenced perceived attitude change toward topics associated with AIDS volunteerism. These findings may contain a practical lesson for volunteer service organizations. To encourage continuing volunteerism and favorable attitude change, organizations may want to stress the ways in which volunteers personally benefit from their service rather than just underscoring how their efforts benefit others (e.g., clients, society).

Conclusions

In our theoretical analysis, we have considered volunteerism as a form of sustained helping that incorporates features of

helping phenomena as diverse as short-term spontaneous interventions in emergencies (when assistance occurs between strangers) and long-term obligated caregiving (in which help is ongoing and effortful). Volunteerism is also actively and deliberately sought out; as such, it possesses features that mark it as a distinctive type of helping. In our empirical work, we have focused specifically on volunteers in AIDS service organizations as prototypical examples of individuals who seek out opportunities to help, make sustained and ongoing service commitments, offer assistance in stressful circumstances, and do so without any preexisting bonds to the recipients of their services.

The conceptual framework of the volunteer process that has guided our investigations is one that is informed by psychological theory and research, that identifies relevant constructs at each stage of the volunteer process, and that grounds these constructs in diverse theoretical and empirical contexts in personality and social psychology. Thus, one strength of our investigations is that they integrated constructs from diverse traditions of inquiry into a coherent model that was subjected to rigorous quantitative tests. Another strength is that these investigations involved actual volunteers in naturalistic settings, data collected over time (2½ years in the test of the model of the volunteer process), and included information solicited from volunteers themselves and from agency records. Although we tested a model partially suggested by data-driven processes, we were able to test the generality of many of our findings either through cross-validation in different samples or by substituting different antecedents (specific motivations instead of global motivation) and consequences (perceived attitude change instead of duration of service) constructs in modeling analyses. Ideally, though, the current model ought to be replicated with other, larger samples of volunteers (perhaps with the addition of other relevant constructs) before final conclusions are drawn about the specifics of the volunteer process as it unfolds over time.

Over and above the opportunities that volunteerism provides to address issues in the study of helping, our investigations may speak to more general theoretical concerns about personality, motivation, and social behavior. In our model, we found that motivation influenced length of volunteer service and perceived attitude change, but at the same time we found no evidence that a helping disposition influenced these outcomes. That we found such strong relations for measures of motivation but not for dispositional measures may be revealing of fundamental differences between these psychological constructs. Our results, as well as our general strategy of inquiry, are compatible with a great deal of contemporary theorizing in personality and social psychology that emphasizes the motivational and purposive agendas that guide and direct human thoughts, feelings, and behaviors in a wide variety of life domains and that distinguishes between sets of traits and goal-directed action (e.g., Cantor, 1994; Snyder, 1993). From the perspective of such theorizing, motivational properties simply may be linked more readily than dispositional attributes to the characteristics of volunteerism that most clearly invoke agentic considerations of purpose, namely, that it is actively sought out, deliberately pursued, and sustained over time.

In closing, we underscore the basic and applied nature of this research. By all accounts, the number of AIDS cases will only increase in the years ahead as more people become infected with

HIV, as those already infected become ill, and as medical advances extend the life expectancy of PWAs. Moreover, the combination of an aging population and an increased number of people living in nontraditional family units may mean that, as society struggles to care for growing numbers of its ill and aging members, there will be increasing demands for nonobligated voluntary caregivers. In our research, we have intentionally melded theoretical and practical concerns and sought to develop and test psychological theory in a naturally occurring context (see Chein, Cook, & Harding, 1948; Lewin, 1947; McGuire, 1969). This research strategy, we suggest, has the potential to contribute to a theoretically informed and practically applicable understanding of helping and the roles of volunteerism in society.

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