Altruism is only part of the story:

A longitudinal study of AIDS volunteers

by

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Abstract

ALTRUISM IS ONLY PART OF THE STORY:

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This study of AIDS volunteers examined participants' reasons for volunteering, how their reasons changed, and the relationship between their reasons and the consequences of volunteering. The three-wave data set was collected from 587 volunteers at Gay Men's Health Crisis (GMHC) in New York City between 1988 and 1991.

Participants completed a scale that measured six different reasons for volunteering. Cluster analysis identified seven distinct patterns of reasons, or types of volunteers. For example, "self-sacrificers" seemed, relative to others, more altruistic in their pattern of reasons for volunteering. In contrast, another group was labeled "getters" because they sought mostly to gain certain experiences and personal growth for themselves through volunteering. The typology was moderately related to participants' demographic characteristics and previous HIV/AIDS experiences.

Several months after they started volunteering, participants again completed the same measure of reasons in terms of why they *continued* to volunteer. Most

participants had a different pattern of reasons. Equal numbers of participants became more altruistic and less altruistic, and an increase in altruism was related to being a gay male volunteer and to more AIDS-related experiences prior to volunteering. Changes in reasons were unrelated to the volunteering experiences measured.

Volunteers' patterns of reasons were *not* related to their volunteering behavior, including choice of role, but were related to their emotional reactions to the work. For example, the "self-sacrificers" in this study expressed the least amount of burnout, gratification, and personal growth; while behaviorally engaged in the work, they were emotionally disengaged from it relative to other volunteers.

This study breaks new ground for research on altruism: it was prospective and longitudinal, included multiple measures of reasons for volunteering, and was conducted entirely using people engaged in real, long-term helping behavior. Several ways of extending this research are discussed. This study also provides a methodological template for the use of cluster analysis as a tool for defining types of people; implications are drawn from this for further research on personality traits. Finally, practical implications are discussed for AIDS organizations that rely on volunteers.

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I am truly indebted to the hundreds of GMHC volunteers who participated in this study and made it possible.

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In memory of my father, Joseph Ellis Cassel.

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Introduction

Why do people volunteer to work in an AIDS organization? Are AIDS volunteers altruists? Do people continue to volunteer for the same reasons that got them started in the first place, or do their reasons change over time? Does it make any difference if I volunteer for one set of reasons and you volunteer for entirely different ones? These are the guiding questions for this secondary analysis of data collected in a prospective, longitudinal, field study of AIDS volunteers at the nation's first and largest community-based AIDS organization.

Volunteers respond to AIDS

Since 1982, Americans have demonstrated a unique approach to the AIDS epidemic: the formation of numerous voluntary organizations that focus on responding to AIDS. For the most part, these associations seek to increase awareness and knowledge of HIV/AIDS, serve people affected by the epidemic, and change the course of the response of institutions such as the government, the church, and the health care establishment. Particular communities have taken on the responsibility of responding to the epidemic and have provided immeasurable leadership in defining how to curb the spread of the virus and how to care for the sick and affected. Although there is now more active response to the epidemic from established institutions, voluntary associations continue to be in the vanguard in the fight against AIDS.

A defining characteristic of these organizations is that they were forged in the intense lack of support and help from existing social institutions such as the mass

media, churches, hospitals, and all levels of government. Faced with an utter lack of compassion and understanding from such sources, gay men and their allies began to wage a very personal and community-based war on the new disease. People came together as volunteers, bonding around natural leaders, providing whatever skills and resources they had to offer. From the early chaos of the epidemic rose hundreds of such associations (see Altman, 1994; Ouellette Kobasa, 1990).

We need to understand this new social phenomenon at all levels of analysis. Journalists have documented some aspects of AIDS voluntarism (e.g., Shilts, 1987) and social scientists have explained it in socio-political-historical terms (e.g., Altman, 1994; Chambré, 1991b; Kayal, 1993; Ouellette Kobasa, 1990). These organizations' relatively novel model of providing education, advocacy, and services through volunteers has been described elsewhere by practitioners and observers (Arno, 1986, 1988; Katoff & Ince, 1991; Lopez & Getzel, 1987). Psychologists bear responsibility for exploring these organizations in terms of the individuals who comprise their membership. It is crucial that we understand why individuals join AIDS organizations as volunteers and seek out the opportunity to help strangers in this way. Two bodies of research should begin to give us an understanding of this issue: research on the antecedents of helping behavior in general, and research on other kinds of volunteers in particular.

Research on the antecedents of helping behavior

Seeking to answer questions of why people help, most psychological research has been conducted in the paradigm of short-term aid-provision encounters with

strangers (Dovidio, 1984; Eagly & Crowley, 1986). In general, these studies were designed to predict who provides aid to whom and under what circumstances. Researchers have revealed that both positive and negative moods (Cialdini, Kenrick, & Baumann, 1982), personality traits (Staub, 1980), situational empathy (Batson, Bolen, Cross, & Neuriner-Benefiel, 1986; Batson, 1987; Batson & Shaw, 1991; Cialdini, Schaller, Houlihan, Arps, Fultz, & Beaman, 1987), the gender of both the helper and the recipient (Eagly & Crowley, 1986), and a variety of other situational factors (Latané & Darley, 1970; Latané & Nida, 1981; Darley & Batson, 1973; Steblay, 1987) can affect whether one person will come to the aid of another. In addition to illuminating aid provision as a topic of concern, the research conducted in this area has expanded our understanding of gender roles, social inhibition, and affect management, among other issues.

Unfortunately, this body of research does not provides much insight into why volunteers engage in long-term helping behavior, and whether their motives change over time. The use of the experimental research paradigm in this case provides one of the most obvious examples of how distant academic research on a topic can be from the common real-world experience of natural helpers such as volunteers. Indeed, this research is subject to the concerns raised in recent years that modern social psychological research ignores social phenomena, does not study true social interaction between real people, and relies too much on "clean" experimental methods (e.g., Carlson, 1984; Wachtel, 1980).

Research on why people volunteer

Although this body of research is quite limited in scope, rather uninteresting, and not rigorously conducted (Omoto & Snyder, 1995) it is reviewed briefly here. Voluntary helping is characterized by membership in a voluntary organization such as Habitat for Humanity, American Red Cross, March of Dimes, or more local organization, where the primary purpose of the organization is to help people in some way. Volunteer roles may involve direct helping or the support of others who are directly helping; for instance, at Habitat for Humanity a "direct" helping role might be carpentry or plumbing, while a "support" role might be the preparation of refreshments for the volunteers who are doing direct work. Voluntary helping includes both kinds of tasks, but must be done through an organization, and the focus of the organization must include helping or aiding people (and not be limited to political lobbying, religious worship, or other activities).

Several kinds of reasons for joining such organizations have been documented in research with volunteers, including the desire to help others, to meet others, and to do work that is interesting, worthwhile, and that provides one with an opportunity to gain knowledge and skills (e.g., Frisch & Gerard, 1981; Miller, 1985; Phillips, 1982; Qureshi, Davies, & Challis, 1979; D.H. Smith, 1981; Vallance & D'Augelli, 1982). This research is often conducted using checklists and rankings of reasons, rather than more rigorous measurement approaches. Most studies of volunteers are conducted cross-sectionally after volunteers have begun the work. Important exceptions are M. Brewster Smith's longitudinal study of Peace Corps volunteers (M.B. Smith, 1966)

and Sills's study of volunteers in the Foundation for Infantile Paralysis (Sills, 1957).

Research on AIDS volunteers

Several studies have been conducted which begin to give us an understanding of why AIDS volunteers do what they do. First, the research efforts of Kayal (1991, 1993) and Chambré (1991a, 1991b) are reviewed briefly. Second, the on-going research of Omoto and Snyder and colleagues, which was more rigorous and is being published in mainstream psychology journals, is reviewed more extensively. Finally, the research of Ouellette and colleagues is described -- it is the Ouellette data set that is used for this study.

Kayal and Chambré. These two researchers, apparently working independently of one another, came to very similar conclusions about AIDS volunteers in New York City in 1986 and 1988. They both conclude that one of the most important aspects of AIDS volunteerism -- not only a motive but also an outcome -- is that volunteering is a political and personal act of "bearing witness" and also a way to cope with the epidemic (Chambré, 1991b, p. 531; Kayal, 1993, pp. 8-10). In doing so, both researchers describe AIDS volunteers at that time as being mostly gay men.

Kayal, based on data collected in various ways during late 1986 or early 1987, described GMHC volunteers as homogeneously white, gay, and male; indeed, he often uses the phrase "gay male volunteerism" (e.g., p. 137) in referring to AIDS volunteers. Kayal surveyed active volunteers and asked them to report retrospectively about their reasons for volunteering. Analyzing his reasons scale by cross-tabulating

individual items, Kayal used a variety of decision rules to categorize volunteers. Unfortunately, his categories were not mutually exclusive (the percentages of volunteers in his categories add up to 162.2%; see Kayal, 1993, pp. 138-147).

Chambré (1991b) interviewed key informants in New York City in 1988 and examined publications of volunteer organizations for their statements on the meaning of volunteerism. She highlights the idea that people volunteer in order to cope with the uncertainty of the disease and the epidemic, and through their response, bear witness to others.

Omoto and Snyder. Omoto and Snyder and their colleagues (Omoto, Snyder, & Berghuis, 1993; Omoto & Snyder, 1993; Omoto & Snyder, 1995; Snyder & Omoto, 1992) have conducted several studies of volunteers in general, and AIDS volunteers in particular. Drawing on their prospective study of new AIDS volunteers, they conducted analyses of their 25-item motivations scale and described five "motivational functions" for AIDS volunteers (Omoto & Snyder, 1993, p. 164):

Community Concern (e.g., "Because of my sense of obligation to certain communities");

Values (e.g., "Because of my humanitarian obligation to help others");

Understanding (e.g., "To learn more about how to prevent AIDS");

Personal Development (e.g., "To get to know other people who are similar to myself");

Esteem Enhancement (e.g., "To make my life more stable").

The Omoto and Snyder research is important for its descriptions of AIDS volunteers

in organizations across the nation, its development of a scale of motivational antecedents, and its breadth. However, it is also problematic in three ways. First, the research is embedded in a rubric of *functional attitudes* without any indication that this conceptual basis is useful or justified by the data. Second, their scale (Omoto & Snyder, 1993, p. 164) pushes gay and AIDS-specific issues away from the participants. The only mention of the word "gay" comes in parenthetical examples at the end of items; one such item from their scale reads, "Because of my concern and worry about certain communities (for example, the gay community)". Only one item makes reference to volunteer's personal concerns about AIDS as something that affects them. The third problem is that their analyses of these reasons remains at a dimensional level, and no analyses are presented that indicate how volunteers' motivations exist in terms of patterns. Although their participants had scores on each dimension of their scale, and thus each volunteer would have a particular pattern of motives, all analyses are presented one dimension at a time. Note also that some of their data were from retrospective assessments made some time after participants began volunteering (Omoto & Snyder, 1995), a dubious proposition at best.

The Ouellette GMHC study. Beginning in 1988 and continuing through 1991, Ouellette put together the most comprehensive data set on AIDS volunteers. Funded by the NIMH, and conducted entirely at Gay Men's Health Crisis (GMHC) in New York City, this research was based on a model of stress and stress-resilience. The focus on GMHC is a crucial strength of this data set. GMHC was the first group founded specifically to fight AIDS, in 1982. The organization has served as a model

for scores of others around the nation and the world. Today, GMHC is made up of 300 paid staff members, about 2500 volunteers, and hundreds of thousands of donors and contributors; it provides a plethora of non-medical services to over 5300 people with HIV/AIDS each year. GMHC's educational efforts reach all parts of New York and across the nation, and its advocacy work on behalf of thousands of New Yorkers with AIDS takes place at all levels of municipal, state, and federal government.

In this study, the Ouellette research is being used as secondary data. The analyses were conducted entirely with these data; no new information was collected from volunteers. Although based in a stress model, this prospective, longitudinal study also produced sufficient data to begin to answer critical questions about the reasons why AIDS volunteers do what they do.

Three research questions

Why?

The central and initial question that needs to be answered is why these people come to GMHC to be AIDS volunteers. The data for answering this question bear some resemblance to those collected by Omoto and Snyder, but my conceptualization and method of analysis differ significantly from theirs. My approach is based on a framework known as reason analysis.

Reason analysis (Kadushin, 1968; Zeisel, 1985) is a collection of methods intended to determine why people do what they do. It can take the form of in-depth interviews or a more closed-ended survey approach. In contrast to some forms of research, a key component to reason analysis is literally asking the subjects why they

did a particular action. This framework is necessary for studying real-world helping behavior in the natural context of a community-based voluntary organization: "If one wants to know how an action came to be -- what steps were taken and what the key choices were; what the actor thought he was doing and how he felt about it; what influences were present and what triggered the action; and, finally, what outcomes the actor expected -- then no technique other than reason analysis can be used." (Kadushin, 1968, p. 338).

Reasons exist in combinations -- one does not engage in long-term helping behavior, for example, because of one reason alone. Therefore, it is necessary as part of reason analysis to provide the subjects with a sample of possible reasons that may be applicable to them, and have them indicate the relevance of each reason. This method relies on subjects' ability to engage in such a task, and is limited to assessing reasons that one could expect subjects to be conscious of; unconscious reasons, unless somehow brought out in an interview, would remain untapped. It also assumes that the reasons that subjects are aware of and will respond to on a checklist are important and meaningful. I am making these assumptions in this research and rely upon this framework for the entire study.

Reason analysis can take several specific forms. One such form is termed a morphological analysis and "consists of using a factor or combination of factors to create *types* of actors...." (Kadushin, 1968, p. 341, italics in original). This is the form used in this study; I am assessing multiple factors and combining subjects into discrete, distinct types of helpers based on their particular patterns of reasons. This

follows the formulation suggested by Sills[1] in his study of volunteers in the Foundation for Infantile Paralysis (Sills, 1957; see also Revenson & Cassel, 1991; Williams & Ortega, 1986).

The creation of a typology of volunteers, based on their reasons for volunteering, would accomplish several tasks. First, it would provide community-based organizations such as GMHC with information in a form that is easily understood by the staff and volunteers. Lay people in such organizations think more in terms of people and types of people than in terms of variables, concepts, and factors -- they know how to recruit and train persons, not variables. Second, creating a typology makes persons the unit of analysis. Harking back to personologists such as Allport, who were primarily concerned with studying and understanding people, this is a purposeful effort on my part to use nomothetic data in way that provides a portrait of persons.

A third accomplishment possible through the use of these methods is the identification of altruists. Based on the premise that altruism is best studied as a relativistic concept (D.H. Smith, 1981), my goal is to identify people whose pattern of reasons for helping could be used as an operational definition of altruistic motivation. My hypothesis is that a large minority, or even the majority, of volunteers will match this pattern of reasons. The consensus among helping behavior researchers is that altruistic behavior is prosocial behavior that is self-sacrificing,

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[1] Sills, in turn, cited the work of Lazarsfeld, who defined reason analysis as a method.

intentional and voluntary, and engaged in more for the sake of the recipient than the actor (see Bar-Tal, 1985/86; Eisenberg, 1991; Hoffman, 1991; Krebs, 1982, 1991). Note that this definition reflects an inclusion of other-focused motivation; being an altruist does not require an absolute exclusion of egoistic motivations.

Another type of volunteer that might be evident from this kind of analysis is one who has a monotonic endorsement of reasons -- all reasons are equally important or unimportant. I do not assume that all who come to be volunteers are motivated by some reasons more than others. What I would hypothesize about such a group, if it does indeed exist, is that such volunteers are those who are least familiar with the kind of volunteer work they are seeking to do. In the specific case of AIDS volunteers, I am predicting that those who have the least experience with HIV/AIDS prior to joining would be the most undifferentiated in their profile of reasons.

Because this study employs data collected only from those people who volunteered, it cannot answer questions about the differences between those who volunteer and those who do not. The question of "why" is answered in this study in terms of the different kinds of "why" among those who do volunteer.

Does *why* change over time?

The second question to be answered with this research is, do reasons for volunteering change over time? As far as I can tell, no previous research on helpers has been conducted with a prospective, longitudinal design and with multiple measurements of helpers' reasons for helping. M. Brewster Smith did raise this issue in his ground-breaking longitudinal study of Peace Corps volunteers, indicating that

their "effective motivation was emergent: a response to opportunities and difficulties as challenges to be met...." (M.B. Smith, 1966, p. 566). There is no reason to assume that reasons for helping remain stable over time (see Sills, 1957). Given the unique characteristics of AIDS volunteering, and the potential stress, sorrow, and perhaps even joy that may result, one might expect there to be significant changes in reasons for doing this kind of work as one engages in it.

Taking seriously the possibility that reasons for volunteering may change considerably over time, I will examine a number of variables as predictors of change. Some of these variables (e.g., demographic characteristics and previous experience with HIV/AIDS) are focused on exogenous to the volunteer work. Other variables will be drawn from volunteers' reports of the experiences they have doing the volunteer work. Because of the focus of the Ouellette data set, most of these variables are related to stressful aspects of the work.

Regarding the *types* of volunteers I hope to find in the first part of the analysis, if there is a group of people whose reasons are mostly undifferentiated at first, I would expect them to demonstrate a great deal of change in their reasons as they experience the work. As indicated before, my premise is that such a group would be least familiar with AIDS prior to volunteering, and as they gain experience in this domain, they would demonstrate the most change in reasons for volunteering.

Does *why* matter?

One of the most interesting questions about reasons for helping came from Hoffman (1991) who noted, in something of an aside, that in some of Batson's

experiments on altruism there are plenty of non-altruistic helpers who aid the victim. While Batson was attempting to demonstrate that at least some people do help out of altruistic motivations, Hoffman seems to be asking the question, what does altruism add? A broader version of this -- does it make any difference if one person becomes a volunteer for one set of reasons, while someone else volunteers for a very different set -- is the third research question of this study.

There are many outcomes with which one could examine the predictive utility of reasons. For AIDS organizations, the most important outcomes might be volunteer retention and volunteers' effectiveness as helpers. Given the amount of training and supervision that volunteers receive for most roles, replacing veteran volunteers with new recruits can be costly for AIDS organizations. Thus it is critical that good volunteers be retained in their roles as long as possible. The question of how effective volunteers are in their roles as caregivers and educators is also important. Unfortunately, neither of these issues can be addressed with the data at hand.

Instead, several outcomes were measured that have to do with the volunteers' feelings and reactions to their work. Data include positive and negative feelings about the volunteer work, positive and negative consequences experienced as a result of volunteering, and perceptions of the organizational environment. Although these outcomes may be less crucial to the organization, they are certainly important to the volunteers. Also, these variables are all psychological reactions and thus may be more likely to be related to reasons for volunteering than volunteers' behavior or effectiveness would be. In this way, the data will provide at least some test of the

predictive utility of reasons.

What do AIDS volunteers do?

Before concluding these introductory comments, it is necessary to make sure that the reader understands the kind of work that GMHC volunteers do. All GMHC volunteers in on-going roles (this excludes the seasonal fund-raising volunteers) were accepted as participants in the study. The four major categories of volunteer roles are described here.

Client Programs volunteers. There are two kinds of client programs volunteers. Some volunteers work with many clients for a short period of time. These include volunteers who do advocacy and assistance with clients in the Legal and Client Advocacy departments, assisting clients in getting their entitlements, legal help, and resolving insurance problems; volunteers who work in Recreation and the Meals Program, leading clients in arts and crafts, providing acupuncture and chiropractic services, and preparing and serving meals; and volunteers who work in the Intake unit conducting the initial interviews with new clients. For the most part, these volunteers will see many clients over the course of a year, working briefly with them individually and in congregate settings.

Other volunteers in the Client Programs area work with fewer clients more intensively for longer periods of time. These volunteers include Buddies, who provide assistance and/or emotional support to an individual client for months or years; and support group facilitators, who will work with a group of clients in on-going groups that meet weekly.

HIV Education / Prevention volunteers. These volunteers work alongside staff members to bring educational materials to the general public (mostly focused at safer sex messages for gay men) and to provide education and counseling on an individual basis on the GMHC Hotline and in one-on-one peer counseling sessions. The latter are more similar to client program volunteers where individual contact with a recipient is the norm. Because these activities are geared toward educating and counseling people about HIV and HIV-risk reduction, a form of help to other individuals is clearly being provided, even if some of the interaction is not on an individual or personal level. Educational counseling and training are helping roles just as therapeutic counseling or assistance with household tasks are. The recipients are people who have sought GMHC's wealth of information about HIV, AIDS, testing, accessing treatments, and reducing their risk of infection.

Office support volunteers. These volunteers are least visible to people outside of the organization, yet are crucial to the functioning of GMHC. They assist staff throughout the agency in preparing materials to be mailed to clients, donors, and the general community; they facilitate internal research projects as interviewers and by entering data into computers; they help individual staff members by assisting at reception desks, working with secretaries, and packaging condoms and lubricants; and assisting in contacting clients for specific services.

Method

Procedures

The data for this study came from a prospective, longitudinal survey of all GMHC volunteers who came to the organization between December 1988 and February 1990. In collaboration with the organization, researchers attended each of the 42 consecutive New Volunteer Orientations between December 1988 and February 1990. At these meetings, prospective volunteers were greeted by a GMHC Volunteer Department staff member or volunteer representative, and were asked by them to participate in what was described as a research study of AIDS volunteers that was important to both GMHC and AIDS researchers elsewhere. Note that the recruitment of subjects was presented to the prospective volunteers by the GMHC representative, before the recruits listened to the presentation that described the organization and the volunteer roles. This was done to ensure that the volunteers completed the measure of their reasons before they heard information from GMHC.

The Volunteer Department representative introduced the members of the research team. The researchers explained the purpose of the study, and handed out a written description of the study and consent form, as well as a brief questionnaire that contained the Reasons for Volunteering scale and questions on demographic characteristics. The rights of the potential participants were carefully explained, with an emphasis on the distinction between GMHC and the university researchers, to assure the prospective volunteers that their participation in the study would have no effect on their volunteer opportunities at GMHC. Prospective volunteers who elected

to not participate either held on to their packets without returning them, or returned them without completing the consent form or brief questionnaire. Attendance at the New Volunteer Orientations ranged from approximately 15 to 35, and an average of two persons per Orientation refused to participate in the study. In all, 872 volunteers completed the initial measure (which took about 20 minutes) during the Orientations.

When they completed this initial measure, the researchers gave participants a longer instrument that contained baseline measures of demoralization, stressful events, and other variables, and a franked envelope in which to mail their completed forms back to the researchers at CUNY. They were asked to take those packets with them. If participants did not return their full baseline instrument within three weeks, they were sent another packet. If they still did not return the instrument, they were called (at least four attempts were made to reach them by phone). The full baseline assessment measures (T1) were completed by 587 participants.

Between four and twelve months after their baseline assessments were received, participants were sent the first of three follow-up questionnaires (T2). These instruments included questions about the nature and consequences of volunteering. If participants did not respond within three weeks, another packet was sent to them; if there was still no response, up to four phone calls were made to the participant. Four hundred twenty-four participants completed the first follow-up. However, some sections of this questionnaire were completed only by the 269 people who were actively volunteering at the time.

The next follow-up questionnaire (T3) was administered using similar

procedures, and was completed by 317 people. Some sections were completed only by the 188 people who had actively volunteered in the prior four months, and only 170 of these had also completed the T2 assessment of reasons for continuing to volunteer.

Subjects

The sample size in these analyses changed from 587 at T1, to 269 at T2, to 170 at T3. The mean number of weeks that passed between T1 and T2 was 26.8 (sd=9.5), and ranged from 7 to 69 weeks. Between T2 and T3, the mean number of weeks that passed was 25.6 (sd=5.2), and ranged from 17 to 52 weeks[2]. Not only did the researchers change the T1 - T2 delay time in the middle of the study (starting at 6 months and decreasing to 4 months); there were also administrative errors that resulted in nine questionnaires being sent to participants less than 4 months after T1.

Demographic Characteristics at T1

The 587 participants who completed all baseline measures answered a number of questions about their socio-demographic characteristics; their responses are summarized in Table 1. Most participants (62%) were gay men. Straight women were the next largest group at 28.4%, and there were small numbers of both straight men (5.2%) and lesbian women (4.3%). The age of volunteers ranged from 17 to 79 years with a mean age of 35.7 (sd = 11.7). The majority (91.4%) of the sample was

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[2] The amount of time between assessments was not used as a variable in further analyses because it correlated highly with other time-related variables that were more important (e.g., time volunteering). The timing of the assessments is described here only to illustrate how the survey questionnaires were administered.

Caucasian with only 3.6% identifying as Black and 5% identifying as Hispanic.

There was a wide income spread, from less than $10,000 through more than $70,000, with a median income between $30,000 and $39,000. Almost one quarter of new volunteers (24.3%) had incomes of $50,000 or more. The median level of educational accomplishment was a college degree, with 39% of the group having completed at least some graduate school. These findings indicate that, similar to other volunteer associations that have been studied, GMHC volunteers have college degrees and substantial incomes. Concerning their work status, 56.7% of the group were working full-time, 8% worked part-time and 15.2% were self-employed; 11% were unemployed or retired; and 5.6% were students.

Sixty-seven (11.4%) of the participants reported they had tested positive for HIV and/or had been diagnosed with AIDS.

HIV/AIDS-related experiences at T1

These variables are summarized in Table 2. Three hundred and seventeen participants (54%) knew at least one person whom they considered close to them who was HIV positive. Three hundred and sixteen (53.8%) had at least one person close to them die of AIDS-related causes. With regard to prior association with GMHC, slightly more than a quarter of the group were part of the GMHC network before their orientation. One hundred and sixty-four (27.9%) reported knowing someone who was volunteering at GMHC, while only 16.4% of the group knew someone who was a paid staff member.

Thirteen items concerning HIV/AIDS experiences were included in a stressful

life events measure in which participants indicated which events had occurred in the previous 12 months. Almost half of the group (42.5%) reported they had experienced at least one negative HIV/AIDS event in the 12 months before their GMHC Volunteer Orientation. The event reported most frequently was "close friend was informed of HIV positive status"; 140 volunteers (23.9%) said this had happened to them. (These 13 events were listed again at T3, and participants were asked to indicate which of them had occurred in the previous 4 months; at that time, 33.5% reported they had experienced one or more of these events.) See Appendix for the text of these 13 items.

Changes in the sample over time

As noted above, the number of participants drops from T1 to T2 to T3. The demographic characteristics of the sample at each assessment are shown in Table 1. The profile of participants remains mostly stable over time in terms of these characteristics, although it does become a little older and decreases somewhat in the percentage who have HIV/AIDS. These changes may be a natural occurrence unrelated to volunteering or participation -- that is, people get older and people with HIV/AIDS die. Respondents and non-respondents do not differ in terms of their reasons for volunteering (this is discussed in more detail in the Findings).

We do not know what happened to all of those subjects who stopped participating in the study. Some continued volunteering but ended their involvement in the study, and others ended both. It cannot be assumed that those who ceased their participation in the study stopped volunteering at GMHC. Because of the limited

amount of information about this issue, this data set cannot be analyzed in terms of turnover or retention of volunteers at the organization.

Measures

At the first measurement (T1), participants completed measures on their demographic characteristics, HIV/AIDS-related experiences, and reasons for becoming AIDS volunteers. At the second measurement (T2), participants again completed the Reasons for Volunteering scale, this time concerning their reasons for continuing to volunteer. In addition, they completed measures on their experiences in their volunteer roles. At the third measurement (T3), the participants again related their experiences and feelings about the volunteer work.

For each of the major scales that assessed some underlying, latent construct, I used the following series of analyses. First, exploratory factor analyses were conducted, which often resulted in the removal of poorly fitting items. Once a plausible factor structure was established, it was confirmed using confirmatory factor analysis (CFA). Most major scales (e.g., the Reasons for Volunteering scale) were given to participants at two points in this longitudinal study, and for the second assessment, the confirmatory analyses were repeated. Finally, unweighted scale scores were constructed from the items indicated in the factor analyses, and reliability analyses were conducted to assess the internal reliability of the items within each scale. For each scale assessed in this fashion, tables are provided that show descriptive statistics for individual items, and the pattern matrix of their loadings on the underlying factors. Descriptive statistics, reliability scores, and correlation

coefficients are also given for the resulting variables that were created.

Reasons for Volunteering

Scale development. The content of the Reasons for Volunteering scale used in the study of GMHC volunteers was only slightly influenced by the content of previously published scales of volunteer motivations (e.g., Anderson & Moore, 1978; Miller, 1985; Phillips, 1982; Qureshi, Davies, & Challis, 1979). The researchers regarded them as too generic for use with a sample of AIDS volunteers. These published scales assess such reasons as gaining career-related experiences, making friends, to do something good for others, etc. Rather, the content of the Reasons for Volunteering scale was based mostly on textual data garnered in an exploratory fashion from GMHC volunteers (see Ouellette, Cassel, Maslanka, & Wong, 1995). In 1987, 540 new volunteer recruits came to GMHC and as part of their application process, responded to this question: "In your own words, why have you chosen the Gay Men's Health Crisis (GMHC) as the place you want to volunteer?". Their responses were analyzed to develop the reasons scale.

The first iteration of the instrument had 41 items. Each item was rated by participants using a 7-point Likert-like scale ranging from "extremely unimportant" through "doesn't matter one way or the other" to "extremely important." This scale was pilot-tested with 18 people who attended a New Volunteer Orientation session for prospective volunteers in December 1988. After reviewing their responses, the wording of several items was altered and one item was dropped. The revised 40-item scale was administered to the 355 prospective volunteers who attended the next 18

Orientation sessions from January to June 14, 1989.

GMHC Volunteer Department staff indicated to the researchers that the data collection procedures were taking too much time during the Orientations for new volunteers. The researchers shortened the scale significantly in response. Factor and reliability analyses indicated that 14 of the 40 items were ambiguous, irrelevant, and/or redundant, and these were removed from the scale. The final version of the 26-item instrument (see Ouellette et al., 1995) was completed by 499 participants at the next 23 GMHC New Volunteer Orientations from June 21, 1989 through February 28, 1990. In all, the 26-item scale was completed by 872 participants at the 42 consecutive GMHC Orientations from December 1988 to February 1990, and 587 of these participants completed the full complement of baseline measures.

Factor analyses. In order to reduce the 26 reasons into scores representing latent variables, a series of exploratory and confirmatory factor analyses and reliability analyses were conducted. The early factor analyses had indicated that the factors were interrelated, so all exploratory analyses were conducted using an oblique rotation of the extracted factors. For the same reason, principal axis, principal components, and alpha factoring extraction techniques were not utilized, because they assume that extracted factors are orthogonal (Tabachnick & Fidell, 1989, p. 624). Instead, maximum likelihood (ML) extraction was the primary technique used, although the results were also compared to solutions derived from unweighted least squares (ULS) and image factoring (IF) extractions.

Using an eigenvalue of 1.0 as the criterion, these three extraction techniques

indicated that there were six factors underlying the 26 items. The factors were obliquely rotated (using the *direct oblimin* technique in SPSS). The pattern matrix of the 26 items on the 6 factors was very similar across the three extraction techniques, with the ML and ULS solutions having exactly the same items on each factor. With the ML extraction, the first factor extracted accounted for 19.3% of the variance, and the six factors together accounted for 44.8% of the variance among the items.

It is crucial in scale development that each set of items measure one and only one latent construct. Five items (items 1, 4, 8, 15, and 23) had significant loadings across multiple factors or loaded primarily on a factor in a way that invalidated the meaning of the underlying construct. In order to improve the unidimensionality of each factor, these 5 items were dropped from all further analyses.

The remaining 21 items were re-analyzed with the same exploratory factor analysis techniques. Again, the results of the three extraction techniques converged, indicating six factors with eigenvalues of 1.0 or greater. The pattern matrix from the obliquely-rotated ML solution is shown in Table 3. In this solution, there were no items that had a coefficient of greater magnitude than $\pm.3000$ on more than one factor; and only one item had a smaller coefficient than $\pm.3000$ on any factor (item 24, "To stop feeling guilty about not doing something", which loaded .27953 on its major factor). Each factor had at least two items that loaded .50 or better. Most important, the loadings of the items on the six factors were easily interpreted and made sense.

Confirmatory factor analysis (CFA), using the LISREL package (Jöreskog &

Sörbom, 1989), was used to further examine the measurement quality of the scale (Byrne, 1989; Long, 1983). The hypothesized measurement model was based on the 6-factor model indicated by the previous analyses. The matrix of item loadings from the CFA is shown in Table 4. Note that the factor loading of the leading item in the 6th factor is almost .70 in the CFA, appreciably better than the loading of that item in the exploratory analysis.

In order to assess the overall fit of the data to the 6-factor model, another CFA was conducted. In this CFA, means of pairs of items were used as the indicators, rather than the single items themselves; this serves to enhance the stability of the covariance matrix (see Marsh, 1987, p. 24). This analysis indicated that the data fit this model adequately; the relevant statistics representing the degree of fit are presented in the first column of Table 5 (T1 sample, n=587). While the chi-square was significant, this statistic is particularly sensitive to the number of cases; the other measures of overall fit shown in the table are less sensitive to the sample size (Loehlin, 1987, pp. 67-71). The chi-square and chi-square/df ratio are not indicative of a good fit of the model to the data, but the GFI, AGFI, and RMSR statistics do indicate a good fit.

Interpretation of factors. In Table 6, the 21 items are grouped according to their factor loadings and identified by labels designed to capture the meaning of the six factors. The factors are ordered in terms of their order of extraction in the exploratory factor analyses, and within each factor the items are in descending order of their loading on their factor. Descriptive statistics from the T1 data for each item

are also provided in the table.

The factors identified in these analyses can be described in two dimensions. One dimension involves a self/other focus; four of the six factors appear to be self-focused, or egoistic. The other dimension involves an AIDS/not AIDS distinction; three factors are AIDS-related. The AIDS-related factors represent participants' desire to respond to the epidemic, and these are discussed here at some length.

In the first of these AIDS-related factors, which was labeled Joining the AIDS Cause, the items reflect an ideological call to arms, with an emphasis on one's responsibility to join the fight against AIDS. It was this factor that was, on average, most strongly endorsed by the participants. The average endorsement of the leading item of this factor ("To make some response to the AIDS crisis") approached "extremely important."

The second AIDS-related factor was labeled Helping the Gay Family. In these items, participants were not simply responding to a social cause or to "others" on an abstract level, but rather to their friends and to the community organization that provides care for those friends. This is the most gay-centered of the six factors.

In the Coping with AIDS factor, the items reflect a more personal struggle with AIDS. The items in this factor represent volunteers' desire to protect themselves from the various aspects of the epidemic -- to do more than worry, to feel in control, to prepare themselves, to reduce a sense of guilt. It is this factor that intersects self-interest and AIDS.

The participants' endorsement of these latter two factors was about equal. The

typical participant says that these are not salient reasons; they fall between "slightly unimportant" and "doesn't matter one way or the other." Note, however, that there are some who say that these are "extremely important" reasons for volunteering.

As Table 6 makes clear, the other three 3 factors in the scale represented the desire for volunteering to enhance one's life; whether by bettering one's social contacts, improving one's career, or enhancing one's psychological well-being. Broadly speaking, these are the kinds of motives that one might expect to mobilize people to volunteer at any organization, and indeed are the kinds of motives for volunteering that are represented in published scales. The reasons having to do with Personal Growth were endorsed almost as strongly as the Joining the AIDS Cause factor. Participants reported that increasing one's sense of purpose and gaining new satisfaction were, on average, "slightly important" as motives. Closer to "doesn't matter one way or the other" were items having to do with increasing and improving one's involvement with others, which was labeled Social Contact. Finally, the third non-AIDS factor had to do with Career Enhancement. The items in this factor received the lowest average endorsement; the average endorsement was between "slightly unimportant" and "doesn't matter one way or the other".

Measuring reasons at T2. At the second measurement, participants who were actively volunteering were asked to complete a second iteration of the Reasons for Volunteering scale. This time, participants were asked to complete the scale in terms of "why you continue to volunteer". The same 26-item version was used, with exactly the same wording and with the same 7-point response scale. This was

completed by 269 participants (the other 155 people who completed the T2 questionnaire were still waiting to be assigned a volunteer role, or had already ended their volunteer work at GMHC, at the time they completed the T2 questionnaire and thus did not complete the scale).

Having established the factor structure at T1, CFA analyses of the T2 data were conducted to determine whether the structure was maintained at T2. For comparison purposes, the T1 data were re-analyzed using only those 269 people who completed the Reasons for Volunteering scale at both T1 and T2. The results indicated that the 6-factor model fit the data at T2. These results are shown alongside the results for the original CFA, using 587 respondents, in Table 5. Although one's reasons for becoming a volunteer may change into different reasons for continuing to volunteer, it is critical that the factor structure remains constant over time so that one can assess change. As the information in Table 5 indicates, the factor structure established at T1 remained a tenable model when tested with the T2 data.

Creation of scores. Descriptive statistics, correlations, and reliability coefficients for the six reasons scores -- at both T1 and T2 -- are presented in Table 7. The alpha coefficient for one factor, Personal Growth, was only .49 at T1 but increased to .66 at T2.[3] Because the factor structure for these items was confirmed

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[3] One possible reason for the low internal reliability at T1 is that one of the two items referred to the issue of work satisfaction. When reliability analyses were conducted separately for those participants who were working (n=467), and those who were not working (n=120) at T1, the alpha coefficient for the working participants was .54 and .36 for the non-workers. (Similarly, the correlation between these two items was .39 for working participants and only .24 for those who were not working).

at both T1 and T2, and because the reliability increased to a more satisfactory level at T2, the Personal Growth scale was retained for utilization in further analyses in spite of the low internal reliability at T1.

As shown in Table 7, most correlations among the factors were significant. Using Fisher's *Z*-transformations of the correlation coefficients at T1, one finds stronger associations within the three AIDS-related reasons (mean $Z=.42$) and within the three non-AIDS reasons (mean $Z=.35$) than between these two kinds of reasons (mean $Z=.19$). The same pattern was evident in correlations between T1 and T2 scores (excluding the same-factor correlations): the mean *Z* among T1 and T2 AIDS-related reasons was .246; the mean *Z* among T1 and T2 non-AIDS reasons was .277; and the mean *Z* between AIDS-related and non-AIDS reasons was .112. The within-factor correlations over time (between T1 and T2 scores) ranged from $r=.395$ for the Joining the AIDS Cause factor to $r=.625$ for the Career Enhancement factor.

Type and nature of volunteer experience

At T2, participants were asked several questions concerning their roles and experiences as volunteers. All of these questions were quantitative and continuous (e.g., participants were asked to indicate how often other volunteers or staff were diagnosed or became seriously ill), with the exception of the one question in which participants were asked to indicate the type of volunteer role they had accepted. The descriptive statistics for these variables are provided in Table 8.

Volunteer Role. At T2 and T3, in response to an open-ended question, each participant indicated to which role they had been assigned. Only a few participants'

reports of their roles changed from T2 to T3. The four kinds of volunteer roles were recoded into three dummy variables for the purposes of the regression analyses that were conducted. (Table 8 also includes the responses of participants from T1 regarding the role they desired or thought they would be assigned, for comparison purposes. The assignment of volunteers to their roles does not always match what they wanted, based on availability of various roles and the agency's needs at any one time; also, some volunteers are deemed by staff supervisors to be inappropriate for the role they requested and assigned elsewhere.)

Waiting Time. At T2 participants were asked to indicate when they actually started their volunteer work. After attending the New Volunteer Orientation (where participants were recruited for this study), new volunteers may go through several screening and training steps before beginning their work. This variable was computed to represent the length of time, in weeks, that passed between participants' attendance at an Orientation and when they reportedly started their volunteer work.

Volunteering Time. The second time-related variable represented the length of time participants had actually been doing volunteer work when they completed the T2 and T3 measures. This variable was computed based on participants' reports of when they started volunteering, and the date the researchers recorded the return of the questionnaires.

Hours. Participants indicated the amount of time they spent doing their GMHC volunteer work in an average week.

Sickness/Death in volunteering. Five questions were asked at T2, and seven at

T3, regarding participants' experience of other GMHC people becoming sick and/or dying. These questions included references to clients, other volunteers, and staff. An example item is, "Death of other volunteer(s) you worked with." At T2, participants indicated the number of occurrences of such stressors "since [they] began volunteering". At T3, they indicated the number of occurrences "each event [had] happened in the last four months". Variables were computed as the sum of the number of events.

Other Volunteering Stressors. In the same manner, participants were asked 12 questions at T2 and 34 questions at T3 concerning other events that may have occurred during volunteering that could be perceived as stressful. Some of these items were role-specific; at T3, there were 4 items that pertained specifically to education or prevention work, and over a dozen that concerned clients. This variable was computed as the sum of the number of events.

Feelings about Volunteering

An instrument was used at T2 and T3 to assess a variety of feelings about volunteering. Many of these items were derived from the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1986) and other items were derived from exploratory research at GMHC. These items were randomly ordered and used the MBI's 7-point response scale, on which three points were labeled: 0, "Not at all"; 1, "Very mild, barely noticeable"; and 6, "Major, very strong". Assessing the content of the items that were asked at both T2 and T3, I judged eleven of them to represent feelings about the volunteer experience itself. (Other items I judged to represent consequences

about volunteering; these are discussed separately, below). The following is a description of the analyses that reduced these 11 items to a few variables to be used as dependent variables in later analyses.

Exploratory factor analysis of the 11 items was conducted, with ML extraction and oblique rotation, using the data from the 269 T2 participants. This analysis revealed that a 3-factor model was tenable (3 factors had eigenvalues of at least 1.0), but indicated that one item loaded ambiguously. This item was discarded and the remaining 10 items were re-analyzed. In this iteration, each factor had two or more items that loaded at least .50 on it, and no item loaded more than $\pm$.20 on an additional factor.

In order to get further information about the factor structure, and to determine whether the same factor structure fit the T3 data, confirmatory factor analyses were conducted of both the T2 and T3 data sets. As with the CFAs conducted on the reasons data, these CFAs were conducted using means of item pairs where possible, in order to increase the likelihood of the data fitting the model. These analyses indicated a very good fit of the data to the three-factor model; as shown in Table 9, the chi-squares were non-significant at T2 and T3, and the GFIs were greater than .985 for both data sets. Although the RMSR is somewhat high at T2, it is reduced at T3; this may be due to the reduced skewness of the scale scores at T3.

The pattern matrix from the final exploratory analysis is presented in Table 10. The first factor I labeled Gratification (representing pride and accomplishment). The second factor, obviously representing negative feelings about volunteering, I labeled

Burnout (representing feeling drained or used up); these were the items that loaded on the Burnout factor in the original conceptualization of the MBI. The third factor I labeled Disengagement (representing pulling away from a commitment to the role). As indicated in Table 10, the participants gave the strongest endorsement to the Gratification items.

Three mean scores were computed based on the factor analysis. Reliability analyses were conducted and indicated adequate internal reliability for each scale; Cronbach alphas, descriptive statistics, and correlations of these scales at T2 and T3 are given in Table 11. As indicated there, positive feelings (Gratification) were given twice or three times as much endorsement as negative feelings towards volunteering (Burnout and Disengagement). At T2 and T3, Burnout and Disengagement were positively correlated, and Gratification and Disengagement were moderately negatively correlated. At T2, Burnout and Gratification were correlated positively, but were not at T3.

Dissatisfaction with volunteering

Another scale that was included in the T3 questionnaire was intended to assess participants' satisfaction with certain characteristics of their volunteer work. This was adapted from a scale used in other work and volunteer research (Miller, 1985). This 17-item scale included items such as "The opportunity to do work that challenges you"; "A role in making decisions at the agency which affect what you do or how you do it"; and "Appreciation from the recipient(s) of your volunteering." See Appendix for complete scale. All items were phrased in positive terms. Participants

were instructed to respond to each question *twice*: they were first prompted to rate the item on how much they had in their work ("How much is there now?") and second, to rate how much they wanted ("How much would you like there to be?"). Both responses were made on a 7-point scale (1="very little"; 4="moderate amount"; 7 "very much").

Participants were given one point for each item on which they had indicated they were experiencing less than they wanted; scores could potentially have ranged from 0 (completely satisfied) to 17 (completely dissatisfied). Interestingly, participants in this study expressed very little dissatisfaction: two thirds of the 170 participants at T3 (n=114; 67.1%) had scores of zero, and the highest dissatisfaction score was 5. Given this highly skewed score, the variable was recomputed as a dichotomous variable representing any degree of dissatisfaction. It is possible that there were GMHC volunteers who were more dissatisfied, who decided to drop out of the study -- or out of GMHC altogether -- because of their dissatisfaction.

(Negative) Perceptions of the work environment

At T3 participants completed a 15-item scale about their "attitudes and feelings ... about the organization and the people in it." This scale was developed by the researchers from the responses participants gave at T2 to an open-ended question about the work environment. Those responses were content analyzed and formed the basis for most of the items. Examples of the items in the scale include "Staff members are quick to respond to the needs and requests of clients"; GMHC has lost the sense of mission it had when it was founded"; "All of the important decisions at

GMHC are made by a small, elite group of people"; "There is a lot of political infighting at GMHC"; and "Volunteers are often overlooked -- they don't have a voice in the organization." See Appendix for complete scale. The response format included a "No Opinion" choice and a 6-point scale from "Disagree Strongly (1)" to "Agree Strongly" (6). Participants used the "No Opinion" choice somewhat frequently, making it difficult to conduct factor analyses of this scale (if I had used the conservative approach to the analysis of missing data, only 42 cases would have remained). Instead, items were recoded as necessary so that higher ratings indicated negative perceptions of the work environment, and a single mean score was computed from all 15 items. This variable had an approximately normal distribution, with a mean of 2.90 (sd=0.90). A reliability analysis conducted with the 42 participants who were not missing any data produced a Cronbach alpha of 0.92, indicating adequate internal reliability.

Consequences of volunteering

Another set of dependent variables was computed from items at T2 and T3. As mentioned above, I re-evaluated the content of all items that were originally described by the researchers as concerning participants' "volunteer-related feelings" (as labeled in the protocol). I judged that while most items in the scale did indeed address how volunteers felt about the volunteer work itself, there were 11 items that measured the *consequences* of volunteering, or ways in which volunteering at GMHC had affected volunteers' lives. For instance, the item "My volunteer work makes me re-think how I view my career" is not a statement about whether one is enjoying

volunteering; rather, it is a statement of the broader impact of volunteering on one's life.

Factor analysis was again used as a data reduction technique. Exploratory analysis of the T2 data indicated that a two-factor structure adequately explained the covariation among these 11 items. No items needed to be discarded due to poor performance in the exploratory analysis; at least two items per factor loaded .50 or greater, and no item loaded more than $\pm$.20 on an additional factor. Together these two factors explained 38.5% of the variance in the 11 items. CFAs were conducted to better measure the fit of the 11 items to this hypothesized 2-factor model. At both T2 and T3 the fit was at least adequate, although the RMSR for the T3 data was not as low as one would like. The relevant statistics are shown in Table 12.

The item texts, descriptive statistics, and item loadings are shown in Table 13. The items in the first factor received much greater endorsement from the participants than those in the second factor. The first factor I labeled New Perspective, as it seems to represent changes that involve a re-evaluation of one's values, goals, and social linkages. The second factor I labeled Consumed, as in finding one's life and emotions being *consumed* by the volunteer role.

Scale scores were created from the unweighted means of these items. Descriptive statistics, correlations, and Cronbach alpha coefficients for these New Perspective and Consumed scales are provided in Table 14. The reliability coefficients of the 4-item Consumed scale at T2 and T3 were lower than those of the other scale. It is unclear why the reliability of the Consumed score dropped from .62

at T2 to .40 at T3. The correlations among these two scales at T2 and T3 are all positive (though not uniformly significant). This indicates that the participants who are experiencing positive consequences of volunteering are the same people who, relatively speaking, are experiencing negative consequences.

Overview of Analyses

The six motivation scores at T1 were subjected to a cluster analysis in order to define distinct groups of subjects who were motivated in similar ways. All further analyses were based on this initial cluster analysis. For that reason, and because cluster analysis is not widely used or understood, the logic of it is described here.

The purpose of cluster analysis is to determine whether there are subgroups of research participants within the full group who have similar profiles of scores and to explore how distinct these subgroups might be from one another (Aldenderfer & Blashfield, 1984; Anderberg, 1973; Kaufman & Rousseeuw, 1990; Rapkin & Luke, 1993). Cluster analysis holds significant potential for elucidating important and interesting patterns of responses to any set of items or scales. Despite this promise, there are several characteristics of cluster analysis which cause some researchers to hold a low opinion of it.

One reason for that low opinion is that compared to other multivariate statistical procedures, cluster analysis does not provide clear statistical criteria for measuring the validity or utility of the outcome (whereas factor analysis has eigenvalues, MANOVA has the *F* test, and regression provides ANOVA-like *F* tests

and R-squared values)[4]. Instead, clustering is a highly subjective and interpretive procedure, which may result in non-replicable findings. As in any other aspect of research, findings that are idiosyncratic and that cannot be replicated by others lack validity. It is therefore important for researchers who are relying on cluster analysis to take steps to validate their cluster solutions and to describe their methods in such a way that others could produce the same results with the same data. Finally, clustering techniques with large data sets are intensive in a computational sense, and it has only been in the last 20 years or so that researchers have had wide access to computers and programs that can handle the clustering of large data sets. For this reason, cluster analysis does not have the long history in psychology that the hypothesis-testing techniques have.

Cluster analysis was used to define a typology of volunteers based on their reasons for volunteering. This T1 typology was then entered into analyses as a dependent variable, and the T1 demographics and HIV/AIDS-related experiences variables were entered as predictors.

Next, the T1 and T2 data concerning reasons for volunteering were analyzed in several ways to examine changes in motives over time.

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[4] Even ardent advocates of this statistical approach can make serious mistakes. For instance, in a recent "how-to" article, Rapkin and Luke (1993) said that their choice of a particular cluster solution as based on "maximum between-cluster ANOVAs across the variables...." (p. 251). However, Aldenderfer and Blashfield (1984) previously stated strong objections to this approach: "Intuitively, the use of MANOVA to perform significance tests on the clusters is plausible.... However *the use of discriminant analysis (or MANOVA or multiple ANOVAs) in this fashion is inappropriate statistically."* (p. 64, italics in original).

Reasons for volunteering were used as predictors in analyses in which T2 and T3 feelings about volunteering, dissatisfaction, perceptions of the work environment, and consequences of volunteering were used as dependent variables. In these analyses, the T1 demographics and HIV/AIDS-related experiences, and T2 and T3 volunteering-related experiences, were used mostly as covariates.

Findings

Cluster Analysis of Reasons for Volunteering

While there are several different major clustering approaches, and many more permutations, all clustering techniques have the same heuristic goal: to reduce many cases into a few intelligible groups. There are two major kinds of cluster procedures, hierarchical and iterative. Each method has disadvantages, although in some ways the mathematical procedures for iterative methods are somewhat more sensible (because it makes multiple passes through the data set -- iterations -- and moves cases back and forth between various clusters to maximize distinct clusters). I used three kinds of hierarchical methods and one iterative method to discern patterns in the data. The four approaches were evaluated relative to one another in a subjective way.

How the cluster analyses were conducted

The six Reasons for Volunteering scores were used in the cluster analysis. Prior to entry into the cluster analysis, each participant's factor scores were standardized based on the full sample's means and standard deviations. The use of standardized scores is recommended for cluster analysis so that any differences in variance across variables are minimized (Aldenderfer & Blashfield, 1984; Norusis,

1990). This is useful even in cases where the same response scale was used for all variables, because one variable may have a different variance than another. Standardization also produces clusters that are based not on a subject's raw score, but ***his/her score relative to the sample mean.*** This is an important point to remember when examining the cluster solution described below. In terms of this particular data set, in which subjects tended to give higher scores to Joining the AIDS Cause, and lower scores to Career Enhancement, the effect of using standardized scores was to equalize all scores around the sample *Z*-score mean of zero. Thus, the clusters were formed from an analysis of the patterns of relative, not raw, scores.

Cluster analysis is primarily a data-reduction tool. If one takes an idiographic approach to data collection and analysis, one develops individual stories and profiles. In this data set, where I am examining the motives of 587 new AIDS volunteers, it could be said that there are 587 profiles of reasons for joining. At the other extreme, one could look at the average of the scores of these individuals and say that overall, AIDS volunteers are more moved by Joining the AIDS Cause than by Career Enhancement considerations. Cluster analysis fits somewhere between these extremes of idiographic versus nomothetic approaches. The crucial decision point is where one must decide how many clusters are useful. Smaller clusters, with as few as two or three members, will represent profiles with relatively extreme scores. As such, they seem more striking and interesting than large clusters which may resemble the full-sample profile. However, this distinctiveness must be balanced with the nomothetic goals of being able to relate latent variables one to another, to assess change over

time, and to assess correlations with other variables. Many small, interesting clusters will not be useful to the researcher if the number of clusters prevents comprehension, or the size (number of participants in each) is too small for further statistical analyses.

The K-means iterative clustering procedure in SPSS was the technique that was relied upon primarily. This produced several interesting and useful solutions. These solutions were examined and compared with the solutions from the hierarchical cluster analyses that were also conducted. My choice of the solution was based on finding the maximum number of clusters that made sense and that were not too numerous to serve the purpose of data reduction. I decided on an 8-cluster solution, which is shown in Figure 1.

As seen in Figure 1, the last cluster contained only 7 people, who on average gave extremely low endorsement of Joining the AIDS Cause. It is useful to note that there are GMHC volunteers who rate this factor so low relative to other volunteers, but the cluster is so small that it has no practical usefulness. More to the point, the purpose of the cluster analysis was to define distinct types of volunteers, but there are two clusters in this solution that, although differing from each other in terms of *degree*, do represent the same pattern of motives: Cluster 8 with seven people, and Cluster 5, with 52 people. Because the seven participants in the 8th cluster represented the same *type* of volunteer as the 52 participants in the 5th cluster, I chose to combine them into one subgroup of 59 participants representing one type of volunteer. Figure 2 provides a comparison of the 7-person cluster, the 52-person cluster, and the resulting 59-person cluster that was created when the two were

combined. Clearly, the addition of the 7-person cluster makes the average Z-score on Joining the AIDS Cause a little bit more extremely negative, but because the cluster was so small, the impact of adding it to the larger cluster was modest.

In the revised version, the cluster sizes ranged from 59 people (10.1% of the sample) to 118 people (20.2%). I defined and labeled these clusters using both the *intra-cluster* ranking of the six reasons (e.g., what was relatively important or unimportant to a cluster's members) and the *inter-cluster* differences (e.g., if a cluster's endorsement of a particular reason was highest or lowest across all clusters).

Table 15 and Figure 3 show the revised cluster solution, including the labels for each cluster. In a sense, the cluster analysis placed the 585 data points into a six-dimensional space. Clusters are formed or identified by cases that are close to one another; the closer a cluster's *cases* are to each other in the six-dimensional space, the more homogeneous that cluster is, by definition. While these "clumps" of cases should be as closely packed together as possible, the "clumps" themselves should be distant from one another (so that the researcher can see that they represent distinct types of cases).

Cluster Descriptions

The first cluster, **Personal Search**, was comprised of 82 people (14.0% of the sample). The mean score on Personal Growth within this cluster was at least one standard deviation above most of the other reason scores for this cluster. This cluster's lowest-rated scale was Career Enhancement, and their Social Contact endorsement was roughly equal to their endorsement of the AIDS-specific factors.

These volunteers are making a clear distinction between these various reasons that are self-rewarding, indicating that psychological growth is important but that gaining particular skills is not. Their ratings of Personal Growth and Career Enhancement were among the highest and lowest, respectively, of all clusters. They were one of only two clusters for which all three AIDS-specific reasons were rated, on average, below the sample mean.

The second cluster, **Copers**, had 118 people (20.2%) who endorsed all reasons strongly, making little differentiation among the six factors. This cluster made little or no distinction between the AIDS-specific and self-rewarding factors, and endorsed all reasons as important. Because the Coping with AIDS factor received the highest rating, and the more general Joining the AIDS Cause factor received one of their lowest ratings, it appears that the people in this cluster were not just responding to AIDS in an ideological sense, but on a more personal level. I have highlighted this distinction by labeling them according to their high rating on the Coping with AIDS factor.

The 86 people (14.7%) in the third cluster, **Getters**, gave relatively higher ratings to the three non-AIDS factors referring to personal benefit: Social Contact, Career Enhancement (their highest), and Personal Growth. Their average rating of the Helping the Gay Family factor was over 1.5 standard deviations lower than their average rating of the Career Enhancement factor. These people apparently became volunteers to enhance their careers, meet new people, and enhance the purpose and focus in their lives relative to other reasons. Note that relative to the sample mean,

their Joining the AIDS Cause endorsements were about average, whereas their ratings of the other two AIDS-specific reasons were markedly lower.

The fourth cluster, **Self-Sacrificers,** rated Personal Growth extremely low relative to their endorsement of other reasons, especially the AIDS-specific ones; their Personal Growth rating is by far the lowest in the sample, between "somewhat" and "very unimportant". These 83 people (14.1% of the sample) gave a mean rating to Joining the AIDS Cause that was comparable to the sample mean, but was their most strongly endorsed reason. This cluster was defined more by their relative rejection of the importance of the self-rewarding factors -- including Coping with AIDS -- than they were by their endorsement of the AIDS-specific factors. It was the only cluster with ratings of all four self-focused factors that were below the sample mean.

The fifth cluster, **Only A Job**, was comprised of 59 participants (10.1%) who gave relatively high ratings to the Career Enhancement and Personal Growth factors. (It is this cluster to which the eighth cluster of seven participants was added; they had the same pattern of relative endorsement, but much lower scores on the Joining the AIDS Cause factor). Similar to the fourth cluster, this cluster was defined most clearly by their *rejection* of certain reasons. This was the only cluster to reject, relative to other reasons, the Joining the AIDS Cause factor, which they rated over 1.5 standard deviations lower than Career Enhancement. Their average ratings of all three AIDS-specific factors were at least one standard deviation below the sample mean. Although these individuals, like all the others in this study, decided to volunteer at Gay Men's Health Crisis, the pattern of their relative endorsements of

reasons for joining the organization lead me to portray these individuals as not being there because of AIDS.

The next cluster was comprised of 84 people (14.4%) who, similar to the **Copers,** did not differentiate among the six factors; I labeled this cluster **Undifferentiated.** There was not one reason that they endorsed significantly more or less than other reasons. Unlike the second cluster, this cluster's scores fell quite close to the sample mean. Looking at their average raw scores in Table 2, one can see that several of their scores were close to the middle response category of "doesn't matter one way or the other." These participants gave their highest average ratings to Career Enhancement and Helping the Gay Family, and their lowest rating to Personal Growth.

The final cluster, **AIDS Responders,** was comprised of 73 participants (12.5%) who gave relatively high scores to the AIDS-related factors of Joining the AIDS Cause, Helping the Gay Family, and Coping with AIDS, and these three ratings were very similar. They clearly rejected Career Enhancement as a reason, rating it about 1.5 standard deviations lower than the AIDS-specific factors. Thus, this cluster has approximately the opposite pattern of endorsements as the **Getters** and **Only A Job** clusters. This cluster was one of only two for which all three AIDS-specific factors were rated above the sample mean.

Cluster differences on demographic and HIV-related experience variables.

The relationships between cluster membership and 11 other variables were analyzed in a series of ANOVAs and chi-square analyses. Five of the variables

showed no relationship with cluster membership: race/ethnicity, number of GMHC volunteers or staff known, belief in God, and previous volunteering experience. The results for the six significant analyses are shown in Table 16. (There was also no relationship between the kind of volunteer role one chose at GMHC and the cluster membership.)

Age, education, and gender/sexual orientation were significantly related to cluster membership. **Getters** were the youngest in the sample, with an average age of 32.4 years. The **AIDS Responders** volunteers, who clearly rejected Career Enhancement but strongly endorsed the AIDS-specific factors, were the oldest, had the most members who had not achieved a college degree, and had the highest percentage of gay men. The **Personal Search** volunteers are similar to the **AIDS Responders** in terms of age, but differed significantly in terms of educational attainment: 37% of the **AIDS Responders** had not attained a college degree, contrasted with only 11% of the **Personal Search** volunteers.

Three clusters had a smaller percentage of gay male members than the sample average of 62.2%: **Getters** (32.6%), **Only A Job** (45.8%), and **Self-Sacrificers** (54.2%). In contrast to these clusters, three others had approximately three quarters of their membership as gay men: **AIDS Responders** (78.1%), **Copers** (74.6%), and the **Undifferentiated** cluster (73.8%).

Similar patterns emerged from the analyses with HIV-related experiences. Almost 22% of the **AIDS Responders** and 16% of the **Copers** had HIV/AIDS themselves, significantly more than the **Getters**, only 3.5% of whom had HIV/AIDS.

The **Getters** and **Only A Job** clusters consistently had the fewest HIV-related experiences prior to volunteering. Almost one in three of the **Only A Job** individuals had no prior HIV-related experience, in contrast to the one in ten of the **Copers**.

While they had mostly similar relative rankings of the reasons for volunteering, the **AIDS Responders** and the **Copers** differed from each other in some significant ways. **AIDS Responders** were somewhat older than **Copers** and also had more AIDS-related stressful events in the prior 12 months (2.1 versus 1.3 events), and are made up of a slightly larger percentage of people with HIV/AIDS themselves (21.9% versus 16.1%).

Finally, the examination of these inter-cluster differences does not reveal much about the **Undifferentiated** group. Relative to the other six clusters, they are about average on these demographic and HIV-related experience variables. For instance, they are average in terms of age (35.7 years) and education level (21.4% without college degree), the number of AIDS-related stressful events they experienced in the last 12 months (1.0) and the percentage who had HIV/AIDS themselves (10.7%).

Changes Over Time in Reasons for Volunteering

In this section, I report a variety of analyses that were used to explore how participants' initial reasons changed as they began to do their volunteer work. As indicated in the Method section, 269 participants were actively volunteering and completed the Reasons for Volunteering Scale a second time, and the average amount of time that passed between the T1 and T2 assessments was just about six months.

See Table 8 for characteristics of the participants' volunteering experiences at T2.

Group *t*-tests were conducted and revealed no significant differences in the 6 reasons between those 269 people who did both measures, and the 318 people who only did T1. This indicates that the information summarized in the first section of the results, concerning all 587 people, is still factual for these 269 participants. All further analyses in this section were conducted with those 269 people who completed both T1 and T2 measures.

There was only one reason factor to which participants gave a significantly different average endorsement at T2: Helping the Gay Family decreased from 3.77 to 3.60 ($t(268)=2.03$; $p<.05$). Although this change is statistically significant, at 0.17 units of change (on a 7-point scale) it is of no practical significance.

Within-cluster *t*-tests

Paired t-tests were conducted within each T1 cluster, and the results are shown in Table 17. Because the within-cluster sample sizes vary from 24 to 48 at T2, differences of similar magnitude are statistically significant for some groups and not for others. In the smallest group **(Only A Job)**, a T1 to T2 change of 0.70 was not significant, and a difference of 1.04 was significant at $p < .05$. It appears that the smallest detectable T1-T2 difference across the seven groups was roughly 1.0 on a 7-point Likert-type scale.

The analyses involved the comparison of 42 pairs of means. Twenty of these comparisons were significant, as shown in Table 17. All of the significant comparisons conform to one pattern: extremely high or low scores at T1 become

more average at T2. In every significant pair (and most insignificant ones as well), all of the clusters that had a significant increase in endorsement were those that had the lowest level of endorsement at T1; the inverse pattern is seen for clusters in which there was a significant decrease in endorsement.

The import of this finding is that the clusters that were defined by particularly low or high levels of endorsement of specific reasons at T1 generally showed a slight drift toward the sample average in their endorsement of those reasons at T2. For instance, the **Self-Sacrificers** who completed both T1 and T2 measures showed an increase in their Personal Growth score from 2.38 to 3.55 ($t(36)=-3.79$, $p<.001$). Similarly, the **Only A Job** subjects showed an increase in their Joining the AIDS Cause score from 4.09 to 5.13 (($t(23)=-2.59$, $p<.05$). And the **AIDS Responders** subjects showed significant decreases in all three of their AIDS-related reasons.

In addition to these analyses, difference scores in each factor were computed for each participant. The frequency distributions for these six difference scores are shown in Figure 4. They clearly indicate a significant amount of change over time for each kind of reason. However, the within-cluster *t*-tests revealed no interesting relationship between participants' original reason patterns and how their reasons changed over time. In order to further investigate the nature of the change that occurred over time, as shown in Figure 4, I examined the data in two additional ways, seeking *multivariate patterns* of changes.

Cluster analysis of T2 data

First, I used cluster analysis to reclassify subjects based on their T2 Reasons

for Volunteering data; this is a somewhat different use of cluster analysis than what was described earlier (Norusis, 1990). The purpose of this analysis was not to *define* patterns, but to *reclassify* the cases using the T2 data, based on the patterns established with the T1 data. As in the original cluster analysis, standardized scores were entered, and a K-means iterative clustering approach was utilized. The final cluster centers from the T1 7-cluster solution were entered as the initial cluster centers for the analysis of the T2 data. Participants' T2 reason scores were clustered to determine whether individuals remained in the same clusters. This is an accepted procedure for exploring whether a cluster solution derived from one sample is tenable in another (Aldenderfer & Blashfield, 1984; Norusis, 1990). Because the analysis is iterative, and cases are moved in and out of various clusters with each iteration, there is no guarantee that the within-cluster means in the final solution will be the same as the initial ones.

The standardized and raw mean within-cluster scores on the six factors are provided in Table 18, and the standardized scores are depicted graphically in Figure 5 in comparison to the T1 patterns. Because the T1 cluster centers served as the "seeds" for the T2 clusters, the patterns match, in general. Importantly, the percentage of cases for these T2 clusters is quite similar to those from T1. The T2 patterns are in most cases somewhat less extreme than those from T1. For example, the **Personal Search** cluster at T1 was defined by a rejection of Career Enhancement and an endorsement of Personal Growth. This is also true at T2, but at T2 their average scores on those two factors were closer to the sample mean.

Movement of individuals between clusters over time

Are the people who were in a given cluster at T1 in that same cluster at T2? The contingency table of the two categorical variables representing the cluster memberships at T1 and T2 reveals a mixed answer to this question: see Table 19. On the one hand, within each T1 cluster, the cluster with the largest membership at T2 was always the one that matched the T2 pattern (along the diagonal in the table). For instance, there were 37 individuals from the T1 **Self-Sacrificers** who also completed the T2 measure: twelve of them were in the matching cluster at T2, and the remaining 25 were spread across the other T2 clusters in smaller numbers. On the other hand, the number of people who matched in the T1 and T2 clusters was never greater than the 47.9% achieved in the **Copers** cluster (23 of the 48 T1 **Copers** who also did T2). Thus, the largest number of people in each T2 cluster had been in the same cluster at T1, but this number was always less than 50%. The T1 clusters with the smallest percentage of participants who ended up in their matching T2 clusters were **Personal Search** (29.8%) and **Getters** (31.0%). The T1 clusters with the largest percentages in the matching T2 clusters were **Copers** (47.9%) and **Undifferentiated** (47.6%).

Altogether, there were 100 participants (37.2% of the 269 who did T2) whose T2 cluster matched their T1 cluster; the majority did not match. In order to further investigate who was moving from one type to another over time, additional data from the cluster analyses were utilized. For any cluster analysis, each cluster has a center; in this data set, the center is simply the average standardized score on all six reasons. Each case has a (Euclidean) distance from that center point which is a function of

how different each of the case's six scores are from the cluster's average. Ideally, every case in a cluster would be very close to its cluster center; the closer the cases are to the center, the more homogeneous the cluster would be (see Norusis, 1990, pp. B177-B180).

Given that one third of the cases did not move from their T1 clusters, I sought to determine whether these cases were the ones that were closest to their cluster centers at T1. Participants' T1 distance scores were saved, and I identified which cases were in the lower one-third of the frequency distributions within each cluster. For example, there were 46 T1 **Personal Search** participants remaining at T2, and I identified the 15 of them who had the smallest distance scores at T1. I then determined whether these cases remained in that cluster over time, or not. Across all seven clusters, the percentage of these prototypical cases that remained in their cluster averaged only 37.4%. This matches the overall percentage of people who moved from one cluster to another; the prototypical cases were just as likely to shift as cases that were distant from the T1 cluster centers.

Person characteristics that predict T2 clusters

Given that the majority of individuals changed from one pattern to another between the T1 and T2 assessments, a new research question needed to be answered: what predicts the shift in reasons? I hypothesized that the variables representing the volunteer work itself would be significant predictors of the T2 clusters, in addition to the T1 demographic and HIV-related experiences that predicted the T1 clusters. Chi-square analyses and ANOVAs were conducted to test this hypothesis. The baseline

variables of age, income, gender/sexual orientation, and HIV status were significantly related to the T2 typology. These variables are not exactly the same ones identified to be related to the T1 typology; see Table 20 for a comparison. The T2 cluster differences on these four variables are shown in Table 21[5].

To test the hypothesis that the volunteer work led to the shifts between the T1 clusters and T2 clusters, I used these four baseline variables as covariates. However, the MANCOVA failed to find any relationship between the T2 clusters and weeks volunteering, hours volunteering per week, and volunteer-related stressful events ($F(24,1028)=0.62$, ns); univariate *F*s also did not approach significance. A separate chi-square analysis found no relationship between one's volunteer role and the T2 typology ($\chi^2(df=18)=8.00$, ns).

Changes in Relative Altruism

In a second approach to the analysis of patterns of changes in reasons, I focused on one specific pattern of change: towards or away from being an altruist.[6] I was interested in the type of volunteer who rejected the Social Contact, Career Enhancement, Personal Growth, and Coping with AIDS reasons, but endorsed the

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5 The T2 clusters have some interesting differences from the T1 clusters. For example, the **Personal Search** and **Only A Job** clusters at T2 had no people with HIV/AIDS, compared to being made up of 9.8% and 8.5% people with HIV/AIDS, respectively, at T1.

6 I had initially volunteers with an undifferentiated pattern of reasons would be those people with the least amount of prior experience about HIV/AIDS, and that these people would show the most change in reasons as they engaged in their volunteer work. However, the **Undifferentiated** participants were among those with the most AIDS experience prior to volunteering. This nullified my reason for looking at this particular cluster of people over time.

other two reasons, Joining the AIDS Cause and Helping the Gay Family. Assuming that this is a reasonable characterization of an altruist, I was curious whether there were participants whose patterns became more like this over time, or less like this. Thus, an increase in altruism would be an increase in the importance of Joining the AIDS Cause and Helping the Gay Family accompanied by a simultaneous decrease (or no change) in the importance of the other four motives. The remainder of this section concerns the identification of such participants and analyses that are intended to provide a model of how/why such change occurred.

Using this conceptualization, 47 participants (17.5%) increased in altruism, another 47 (17.5%) decreased, and the remainder (n=175, 65.1%) did not fit either pattern.

There was a marginally significant relationship between these altruism categories and the categories of the T1 typology ($x^2(12)=23.54$, $p=.023$). Of the 47 people who decreased in altruism, the largest number (13) came from the **Self-Sacrificers** cluster, only two came from the **Only A Job** cluster, and only three came from the **Getters** cluster. The largest number (11) of the 47 who increased in altruism were from the **Copers** cluster at T1, and the fewest came from the **AIDS Responders** (2) and **Self-Sacrificers** (2) clusters. This pattern matches that found earlier, of a generally shift from extreme scores at T1 to less extreme scores at T2.

Treating this change-in-altruism as an outcome variable, regression analyses was conducted to determine what predicted whether volunteers became more or less altruistic. Again, the hypothesis was that volunteering-related experiences that were

measured at T2 would predict this outcome. T1 demographic characteristics, T1 HIV/AIDS experiences, and T2 volunteering-related experiences were entered in stepwise fashion. Only two variables, both from T1, were significant, and were re-analyzed by themselves; the hypothesis was not supported. The resulting equation was significant (F=4.313, p<.01) and the R^2 was .0314. Being male and having more AIDS-related stressors (prior to volunteering) were related to an increase in altruism over time (betas were -.15 and -.14, respectively). The amount of variance explained, 3.14%, is quite small.

Do Reasons Predict Anything?

Do reasons predict anything that the volunteers experience over time? Here, reasons are employed as predictors of volunteers' positive and negative feelings about volunteering, satisfaction with their role characteristics, perceptions of the organizational environment, and volunteering changed them. These outcomes were all measured at T2 and/or T3.

The analysis approach began with regression analyses to determine whether any of the T1, T2, or T3 variables (besides T1 and T2 reasons) predicted the outcomes. Those that were significant were then utilized as covariates in ANCOVAs to determine whether reasons predicted the outcomes. Note that for outcomes at T2, the T1 typology was used, and for the outcomes at T3, only the T2 typology were

used[7]. Table 22 summarizes the covariates that were used in each ANCOVA, and whether reasons predicted the outcome. Table 23 summarizes the cluster differences for those ANCOVAs that were significant.

Feelings: Gratification, Burnout, and Disengagement scales

These three variables represent positive and negative feelings participants had about their volunteer work. Regression analyses indicated that greater T2 Gratification was related to having HIV/AIDS, working in a volunteer role other than office support, and hours volunteered per week; T3 Gratification was predicted by the volunteer role only. ANCOVAs were conducted with these as covariates. The ANCOVAs indicated that the T1 typology was unrelated to Gratification at T2. However, the T2 typology was a significant predictor of the T3 Gratification variable; see Table 23. The participants who were in the T2 typology's **Self-Sacrificers** cluster had the lowest T3 Gratification score; the T2 cluster with the highest T3 Gratification score was the **Copers** cluster -- their score was higher than **Self-Sacrificers, Only A Job**, and **Undifferentiated** clusters' scores.

Regression analyses indicated that greater T2 Burnout was related to being younger, and that greater T3 Burnout was related to being younger and experiencing a longer amount of time from when one came to GMHC to when one actually started volunteering. ANCOVAs conducted with these variables as covariates revealed that

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[7] Analyses of seven T3 outcomes using the T1 typology as the predictor variable revealed only one significant relationship, with the New Perspective variable. The analysis of this variable using the T2 typology produced a more robust finding.

the T1 typology did not predict the T2 Burnout scores, but the T2 typology was significant as a predictor. As shown in Table 23, the **Getters'** T3 Burnout score was higher than most other clusters, and was about 2.5 times that of the **Self-Sacrificers.**

According to regression analyses, greater T2 Disengagement was related to being younger and volunteering fewer hours per week, while greater T3 Disengagement was related to being younger, volunteering fewer hours per week, and reporting more general volunteer-related stressful events at T2. ANCOVAs indicated that the T1 typology was unrelated to this outcome at T2, and the T2 typology was unrelated to T3 Disengagement.

Dissatisfaction with role

As indicated in the Methods section, this was a dichotomous variable representing whether the participant felt any dissatisfaction with certain characteristics of their work or volunteer role. This was assessed at T3 only. A chi-square analysis indicated that there was no relationship between the T2 typology and this variable.

(Negative) perceptions of the organizational environment

This continuous variable had an approximately normal distribution, and was coded such that higher scores represented negative perceptions about GMHC. This was assessed at T3 only. Regression analyses indicated that having reported more general volunteering stressors at T2 and T3 were significant predictors of greater T3 negative perceptions. An ANCOVA was conducted, using the two stressor variables as covariates. The main effect for the T2 typology was not significant.

Consequences: New Perspective and Consumed scales

Regression analyses indicated that greater T2 New Perspective scores were predicted by being a person of color and having HIV/AIDS. Greater T3 scores on New Perspective were related to *not* working in a volunteer role in which one worked with a few clients over a long period of time. ANCOVAs using the T1 typology as the predictor, were significant with the New Perspective scores at T2. **Getters, Copers,** and **AIDS Responders** had the highest scores on this outcome, while **Self-Sacrificers** and **Only A Job** participants had the lowest. Using the T2 typology yielded similar, though more robust, results for the T3 New Perspective score: **Self-Sacrificers** and **Only A Job** were lowest, but in contrast to the previous finding, the **Copers'** score was higher than all others' at T3. See Table 23 for details.

Greater T2 Consumed scores were related to knowing more volunteers/staff prior to volunteering, and having more general volunteering-related stressful events. Greater T3 Consumed scores were related to being younger, knowing more people who had HIV/AIDS, being in a volunteer role in which one worked with many clients for short periods of time, volunteering for a longer time by T3, volunteering more hours per week, reporting *fewer* sickness/death-related volunteer stressors at T2, and reporting *more* general volunteering stressors at T2. Using these variables as covariates, the ANCOVAs indicated that the T2 Consumed score was not predicted by the T1 typology, and the T3 Consumed score was not related to the T2 typology.

In summary, the T1 typology only predicted 1 of the 5 T2 outcome variables that were analyzed. It significantly predicted the T2 New Perspective scores. The T2

typology predicted 3 of the 7 T3 outcomes: Gratification, Burnout, and New Perspective. Comparing the two analyses of T2 and T3 New Perspective, one sees that in both, the **Self-Sacrificers** and **Only A Job** participants reported the lowest scores on this positive outcome variable. A similar pattern was found with the analysis of T3 Gratification; **Self-Sacrificers** and **Only A Job** volunteers had the least amount of this outcome, and the **Copers** reported the most. **Self-Sacrificers** also reported the least amount of Burnout at T3, with **Getters** and **Undifferentiated** clusters reporting the most.

Discussion

This section begins with a summary of the major findings of this research -- the typology of reasons for joining, how reasons change over time, and the relationship of reasons to outcomes. Next, ways in which this research was limited are reviewed, including reasons for volunteering that were not measured in the 21-item scale. Consideration is given to additional research that could be conducted on this topic and how it would be improved given the limitations inherent in this data set. Finally, implications of this research are described in terms of theoretical, methodological, and practical issues.

Summary of Findings

What types of volunteers come to GMHC?

One way of analyzing reasons is to use individuals' scores on dimensions of reasons to define types (see Kadushin, 1968, p. 341). The tool I used to accomplish

this was cluster analysis. The cluster analysis clearly disaggregated the sample according to individuals' reasons for volunteering, allowing for the identification of seven distinct types of AIDS volunteers. Each type is interesting and important to understand; each is examined individually here. In addition to reviews of the data presented earlier, each cluster is further portrayed with some open-ended data collected in the T1 assessment.

By examining Figure 3, one can see that the **Personal Search** volunteer values the opportunity to increase the purpose and focus in his/her life, but is definitely not looking for career enhancement. This volunteer's pattern of reasons is quite clear. In his/her own words, this volunteer came to GMHC because:

> "My need to accomplish something meaningful in life coincides with the needs of people with AIDS for emotional support."
>
> "With my free time, being in good shape, I want to do something meaningful."
>
> "I feel it would make me a more satisfied, accomplished person."
>
> "I'm a person with AIDS with free time and in relatively good health. I want to do something meaningful with the rest of my life."

This kind of volunteer often gave written comments attesting to a completed degree or a recently stabilized career situation, which matches the low endorsement of the Career Enhancement reason. Relative to other types of volunteers, at T1 this volunteer is older and more educated. This volunteer's mixture of reasons makes it clear that the self-focused reasons are not interchangeable for all volunteers.

A volunteer who is a **Coper** does not make a great deal of distinction among the various reasons for volunteering. It is interesting to note that this is the only type

of volunteer to have similar average *z*-scores on Career Enhancement and Joining the AIDS Cause, the two factors that were rated most differently by most volunteers. This volunteer rates the Coping with AIDS reason as more important than other volunteers; at T1, this was the only type of volunteer to give that reason an average rating of more than "moderately important". With this unique pattern, this volunteer is demonstrating that AIDS volunteering is perceived by some people to potentially help them cope with the AIDS-related anxiety, stress, and grief that are a part of life in New York City for many people. In his/her open-ended comments, this volunteer wrote such things as:

> "I was diagnosed with AIDS in September. For past year I've been busy regaining my strength, returning to work full time, and putting affairs in order... been thinking of volunteer work for some time, but suddenly realized I better get moving because I don't know how much time is left."
>
> "I have done volunteer work for GMHC in the past, and feel it was a great experience in dealing with my own fear of AIDS."
>
> "After losing one friend and having another with AIDS, I feel the need and sense the urgency in knowing more about the disease and helping those with it."
>
> "My lover is HIV+. I'm not dealing well with the situation, get extremely upset when talking about it. Felt this would help me deal with my emotions while helping others."

At T1, this volunteer is likely to be a relatively young gay man with significant prior experience with HIV/AIDS. At T1 this was the most common type of volunteer.

At the opposite end of the spectrum is the **Getter**, who, relative to other volunteers, is there because he/she is seeking affiliation, experience, and personal growth. In terms of their raw score, this volunteer said that Joining the AIDS Cause

is "moderately important", but because the subgroups were defined by standardized scores, this volunteer is less motivated by this reason in a relative sense. On average, this volunteer indicated that the other two AIDS-related reasons were unimportant. Whether in terms of raw or standardized scores, this volunteer does not make much distinction between the three non-AIDS reasons. Examples of statements that define this type of volunteer are:

> "Left my position in advertising to return to school for MA in Public Administration and thought that volunteering for a non-profit organization would provide good experience."
>
> "To gain experience and knowledge and sensitivity about the AIDS crisis. Decided to volunteer now because I'll be applying to graduate school in January for clinical psychology and wanted to gain experience working with various populations, see if I enjoy it."
>
> "Friend of mine volunteered at GMHC a few months ago and talked about how rewarding it is. I needed a fieldwork in order to finish my MA requirements and decided to volunteer at GMHC."

The **Getter** volunteer is least likely to be a gay man, is relatively young, and has had the least amount of previous experience with HIV/AIDS.

The **Self-Sacrificer** is an interesting contrast to the **Getter**. While these two volunteers give similar average standardized ratings to the AIDS-related factors, the **Self-Sacrificer** rejects the self-focused reasons. Looking at this volunteer's raw scores, one sees that this volunteer rated only one reason as important, Joining the AIDS Cause. In terms of open-ended comments, this volunteer explained his/her reasons with statements such as:

> "I feel people in the 1980's have become too self-oriented, and AIDS and the people who are sick need people to become more aware and understanding."

> "To contribute any help I can to the gay community."
>
> "Use my training and professional skills to help with a problem which is socially, medically, politically overwhelming."
>
> "I want to do anything possible that I can to help this crisis in any way I can be utilized."

Demographically, this volunteer is not very distinct from others, although at T2 he/she is significantly older than others.

Only one type of volunteer is unmotivated by a desire for Joining the AIDS Cause: the **Only A Job** volunteer. With a standardized score over two units below average on that motive, and a raw score that is close to "doesn't matter", this volunteer is quite distinct. This volunteer is not seeking affiliation in particular, but does seem to be seeking career and psychological enhancement, relative to other reasons.

> "I want to volunteer to gain valuable experience in an effort to develop my career choice."
>
> "Going to school -- using my volunteer work as an internship."
>
> "I have been journeying toward a spiritual crossroads, I was either going to experience service in its true form, or sort of shrivel up. It was time to test the courage to build character and looking at what I'm afraid of."

This volunteer is not typically a gay man and does not have much previous experience with HIV/AIDS. At both T1 and T2, this volunteer is the least common.

The **Undifferentiated** volunteer does not make a distinction among the various reasons for volunteering, and other than being likely to be a gay man, is not demographically distinct either. I had hypothesized that this volunteer would be likely

to have had little or no previous HIV/AIDS-related experience, but it was the median cluster on those variables. Their open-ended responses run the gamut of all types, and are not instructive.

Finally, the cluster analysis identified a type of volunteer who gave equal endorsement to the three AIDS-related reasons, rejected Career Enhancement as a reason, and gave average endorsement to the other two non-AIDS reasons: the **AIDS Responder**. This volunteer gave open-ended statements such as:

> "Too many friends I know have become HIV+ or are symptomatic. I feel I need to do something or at very best learn as much as possible about this disease."
>
> "To be right in the middle of the AIDS problem."
>
> "I needed to do something about AIDS. I promised a friend who died of AIDS that I was going to do something about it."

This volunteer is oldest, least likely to have a college education, most likely to be a gay man and to have HIV/AIDS, and with the most previous HIV/AIDS experience.

It is important to note that while all participants were volunteering at an AIDS organization, three types of volunteers indicated that, relatively speaking, they were volunteering for reasons other than AIDS. These three types, **Personal Search, Getters**, and **Only A Job**, are also distinct from one another, as indicated in Figure 3. The two types of volunteers who are volunteering specifically because of AIDS- and gay-specific reasons, **Copers** and **AIDS Responders**, are also distinct from each other, with the latter type rejecting the non-AIDS reasons for volunteering in a way that the **Copers** did not. Another type of volunteer made a distinction between the self-rewarding and AIDS-specific reasons, the **Self-Sacrificers**: this type of volunteer

rejected the self-rewarding reasons, including Coping with AIDS, more than any other type of volunteer. Finally, the analysis identified one cluster of volunteers that did not make a distinction among the reasons for volunteering, which I labeled **Undifferentiated.**

Both Chambré (1991b) and Kayal (1993) examined GMHC volunteers previously, but their efforts are not really similar to the research approach described here. These researchers described a GMHC whose volunteers are more homogeneously white, gay, and male (although it is unclear whether their samples were representative of GMHC volunteers at the time). Both Chambré and Kayal describe volunteers' participation at GMHC as a political and personal act of "bearing witness" and a way to cope with the epidemic in their midst (Chambré, 1991b, p. 531; Kayal, 1993, pp. 8-10). Clearly, the research described here presents new GMHC volunteers from 1989 to 1991 as more diverse than these previous studies, both in terms of their demographic characteristics and their reasons for becoming volunteers.

Other significant research concerning AIDS volunteers' reasons comes from Omoto and Snyder (1995). Their data is most comparable in terms of the way reasons were measured. In path analyses relating each of their five dimensions of "motivations" to duration of service, the two factors that represented understanding AIDS and seeking personal development both were related positively to duration of volunteering, and the other three motives they measured were not. Their treatment of each motive as a separate variable, without regard to volunteers' scores on the other

motives concurrently, makes it very difficult to interpret this finding.

Evidence of altruism

As demonstrated, I conceptualized altruism as that pattern of reasons where the self-centered ones are rejected as unimportant and the others are relatively endorsed. While this approach is subject to the criticisms of all self-report data -- including the "demand characteristics" of the research project itself -- it does offer a method for moving the assessment of altruism from the laboratory into the field. This conceptualization draws support from some writers in the field of altruism and egoism (e.g., Sober, 1989). D.H. Smith, for example, writes:

> "For a start, there is literally no evidence to justify a belief in some 'absolute' form of human altruism, in which the motivation for an action is utterly without some form of selfishness. Psychological research and adequate self-reflection show that significant degrees of selfishness are present even in the most apparently altruistic actions. No matter how altruistic an act appears, there is invariably, so far as is known, some important degree of psychic reward or intrinsic satisfaction derived for one's self from the performance or anticipated performance of the act.... Given that there is no absolute altruism, no absolute lack of concern for self in the net motivation for any act, there can only be relative altruism." (D.H. Smith, 1981, pp. 23-24, emphasis in original).

If there is one subgroup that is more altruistic than others in the sample, it is the **Self-Sacrificers** cluster. Contrary to my expectation, this kind of volunteer was by no means the most common in the sample. At 14.1% of the sample, this cluster had almost exactly one-seventh of the participants.

Diversity within Types of Volunteers

While a few variables were unrelated to the typology of reasons, including race/ethnicity and previous volunteer experience, there were significant relationships between type of volunteer and age, education, gender/sexual orientation, and degree of previous experience with HIV/AIDS. Not surprisingly, the volunteers who were in

the clusters with high endorsement of the AIDS-related reasons were more likely to be gay men with significant previous experiences with HIV/AIDS.

However, each cluster is more heterogeneous than one might have expected. Each cluster had significant numbers of volunteers who were women or heterosexual men; each cluster had at least some HIV+ volunteers; and each cluster had some portion of volunteers who had no experience with HIV prior to coming to GMHC. Although the entire sample was certainly diverse in terms of these demographic characteristics and HIV/AIDS-related experiences, I was frankly surprised to find that each cluster was so heterogeneous in terms of such variables. Of course, the clusters were determined solely by the individuals' scores on the reasons for volunteering, and their definition did not rely at all on these other variables. Nonetheless, it is clear from these analyses that one's reasons for volunteering at GMHC do not derive *entirely* from one's background or personal experiences. One can also see that there were large numbers of (heterosexual) women volunteers who are otherwise indistinguishable from gay male volunteers in terms of their prior HIV-related experiences and their reasons for volunteering at GMHC.

How volunteers' reasons for volunteering changed over time

Research on altruism and other motivational patterns of helpers has been conducted in a variety of ways. Experimental research has been conducted with very brief aid provision between strangers used as the form of helping behavior. Indeed, in many of these experiments, the helper-subject does not actually help another person, but only indicates a willingness to help. For some researchers, these kinds of helping behaviors are important opportunities for the expression and investigation of altruism. However, the behavior in those studies bears little resemblance to the long-term helping of volunteers in AIDS organizations. Some non-experimental research has also been conducted on real-world helpers, such as people who aided Jews during the Holocaust, and this has captured the long-term nature of such helping (see Baron, 1985/86; Oliner & Oliner, 1988). But most of these studies have been retrospective, and have failed to convincingly capture how people's motives might change over time.

Unlike most studies of volunteers, this research was not only prospective but also included a second measure of volunteers' reasons, between 2 and 13 months after they completed the first measure. Two findings indicate that a significant amount of change is occurring over time. First, Figure 4 shows that the T2-T1 difference scores were spread out over a somewhat normal distribution for most of the six reasons.

Second, the pattern of significant within-cluster paired t-tests indicated that extreme responses to each of the six reasons became less extreme over time; the lowest scores increased slightly and the highest scores decreased. This indicates that new recruits come to GMHC with definite ideas about what their reasons for volunteering are, and some of them make polarized responses to the scale. After volunteering for some time, they seem to discover that their volunteer experiences provide *some* basis -- but not an extreme amount of support -- for each of the six reasons, and their reasons shift to match that experience. Thus, people who rejected Social Contact as a reason for becoming a volunteer realize when they have volunteered that feeling close to others and making new friends is a part of their volunteer experience; by the T2 assessment, they begin to value this experience as a reason for continuing to volunteer.

Through this analysis, we begin to get some idea of the interactions between volunteers' reasons and their experiences. People have certain characteristics and experiences that lead them to volunteer for particular patterns of reasons. Over time, as they interact with the organization and do their volunteer work, their reasons for continuing to volunteer apparently alter, quite subtly, to reflect what they experience. These conclusions, while going beyond the evidence at hand, provide fertile ground for further research on this topic.

Third, a reclassification analysis using the T2 data revealed multivariate change within persons: only about one-third (37.2%) of participants stayed within their T1 clusters. Even though the seven T1 patterns were used as a template for the T2 cluster analysis, membership in those clusters was not constant for the majority of participants. The fact that two thirds of the participants changed from one "type" to another has implications for our understanding of reasons for engaging in sustained

helping behavior. Volunteers' initial reasons apparently tend to change over time, even those volunteers who were at the centers of their T1 clusters.

Additional analyses were conducted to determine whether participants' patterns of reasons became more altruist-like, or less so. The results of these analyses do not indicate as *much* change as in the previous analyses (the majority did not change), but the *nature* of the change is more interesting. Equal numbers of participants increased in altruism and decreased (47). Being male and having more AIDS-related stressors -- variables that represent what the volunteers brought with them to volunteering -- were related to an increase in altruism over time (note that almost all men in the sample were gay). Surprisingly, none of the variables representing participants' volunteer experiences (role, amount of volunteering, and stressful events) were predictive of changes in reasons. I used the variables that were available in this data set; perhaps other measures would have been more predictive. One possible interpretation of these findings is that there are some volunteers for whom AIDS has significantly touched their lives -- gay men with previous AIDS-related stressors -- and regardless of the actual experiences they have in the volunteer role, being an AIDS volunteer means something different to them than it does to other volunteers. As they engage in this form of helping, their previous experiences -- who they are, in a sense -- affects how they perceive the purpose of their helping and why they do it. In terms of their reasons for continuing to volunteer, these volunteers are becoming more focused on the recipients of their work and the AIDS cause in general, and less concerned about what volunteering does for them.

The evidence that volunteers' patterns of reasons shift substantially over time is problematic for Omoto and Snyder's conceptualization that volunteers join associations and organizations as a way of serving different psychological functions. In their view, the motives measured in their scale represent different psychological needs (e.g., intellectual curiosity, desire to make friends) that underlie volunteers' behavior. Their writings do not indicate any theoretical reason for predicting that volunteers' psychological needs or values would change substantially over time. In contrast, the study reported here does not assume that deeper psychological needs

underlie volunteers' responses to the Reasons for Volunteering scale. The degree of change that is evident in this data set indicates that volunteers' reasons for volunteering are more akin to malleable attitudes than to personality traits, or deep-seated needs.

To what extent do reasons matter?

Most research on volunteering does not address this question. Most studies of prosocial personality characteristics and altruism are concerned with predicting who decides to help. In contrast, there was a significant amount of data available from this longitudinal study that provides at least the beginning of an answer to this question. The data were analyzed using the typologies of reasons at T1 and T2.

The only data available in this study concerning volunteers' behaviors were the data about choice of volunteer role, hours worked per week, and weeks volunteered. None of these behavioral measures were related to T1 or T2 reasons for volunteering.

When reviewing the following findings, it is important to recall that participants' responses on several of the outcome scales were not distributed normally. In fact, at T3 there was so little Dissatisfaction that a dichotomous variable was used to represent *any* degree of dissatisfaction expressed across the 17 items in the scale. As shown in Table 14, the Consumed and New Perspective (consequences) scores could range from 0 to 6; while the New Perspective responses were approximately normally distributed with a mean of about 3, the Consumed scores were very skewed with means of less than 1 at both T2 and T3. Similarly, the Gratification scores ranged from 3.7 to just over 4.0 at T2 and T3, but the Burnout and Disengagement scores were about 1.6 or less at T2 and T3. The variable representing (negative) perceptions of the work environment was approximately normally distributed.

The typologies were significant predictors of the positive outcomes, Gratification and New Perspective. The **Self-Sacrificers** and **Only A Job** volunteers reported the lowest amounts of these positive outcomes, while the **Copers** had the most at T3. Of course, this analysis took into account the baseline characteristics of the participants as well as their volunteer-related experiences. The **Copers'** high

scores on these outcomes may be explained by their being motivated not just by AIDS-related reasons, but also by the three non-AIDS related reasons. Whatever they experience, they can be satisfied in some way.

The one negative outcome that was significantly predicted by reasons, while controlling for covariates, was T3 Burnout. On this outcome, the T2 **Getters'** score was about *2.5* times that of the T2 **Self-Sacrificers**. These two types of volunteers are not very different on their standardized scores for the AIDS-related reasons, but differ dramatically on their ratings of the three other reasons. **Getters**, who are distinctive in their desire for Social Contact, Career Enhancement, and Personal Growth, are the volunteers most likely to say that volunteering makes them feel "emotionally drained" and "used up". **Self-Sacrificers**, who give low endorsement of those reasons, are least likely to report such feelings about volunteering. Note that these subgroups of participants did not differ in terms of their volunteer-related experiences such as stressful events, length of volunteer work, or hours volunteered per week, variables that logically would predict feeling "used up" or "emotionally drained".

Thus, it appears that reasons for volunteering do make a limited amount of difference. Altruists are least likely to feel "burned out" by long-term helping -- and they also reported they least amount of positive outcomes. In contrast, the **Getters** were most likely to experience burnout. Even more intriguing is the fact that these types of volunteers showed no differences at all in their volunteer-related experiences (at least not the ones assessed in this study), indicating that the **Getters** and **Self-Sacrificers** and **Copers** were predisposed to (not) have certain emotional responses to the volunteer work.

One writer summarized modern definitions of altruism as "disinterested concern for the welfare of others" (Heal, 1991, p. 159). This definition implies some degree of emotional distance, and that is exactly what we see in the **Self-Sacrificers**. Not only do they give relatively low ratings to most reasons at T1, but they also indicate the least amount of both positive and negative feelings about and

consequences of volunteering. They are not behaviorally disengaged from the volunteer work, but they do seem to be emotionally uninvolved in it. This could be an adaptive function, given the grief and horror that some might experience as they become actively engaged in the epidemic.

Limitations, caveats, and problems

Before considering the implications of this research, it is necessary to review its limitations.

The joys and sorrows of secondary data

As others have previously pointed out (e.g., Kiecolt & Nathan, 1985), having access to secondary data makes the researcher's job only half as difficult and time-consuming as it would be otherwise. In addition to being advantageous in this regard to the researcher, analyzing secondary data also provides a boon for the original researcher by providing a more complete and thorough analysis than would have been done. Given the participants' time and effort in completing the several questionnaires in a longitudinal study, it is also an ethically appropriate approach to research.

However, being limited to the available data curtailed the current investigation in several ways. First, in-depth interviews with participants would have enabled me not only to gather additional information from participants concerning their reasons for volunteering, but also allowed me to present the analysis to the participants and ask them whether their assignment to their clusters made sense to them. Second, the Reasons for Volunteering Scale was created to document volunteers' reasons, but no attempt was made to create an instrument that would enable one to find "altruists". It is possible that is that had been the purpose, different wording of the items or the addition of more dimensions would have provided a different picture of who was altruistic and who was not. Third, it is clear that the changes in patterns of reasons between T1 and T2 were not related to the variables that were assessed regarding volunteers' experiences. If the data had been collected primarily to investigate how volunteers' reasons changed over time, additional aspects of the volunteer experience could have been assessed. Fourth, additional outcomes could have been measured; outcomes that would be of great interest for researchers and AIDS CBOs alike would

be volunteers' work performance and effectiveness, and their tenure as volunteers. These outcomes would require the participation of the volunteers' supervisors, and perhaps the recipients of their work as well. Would their supervisors or recipients of their volunteer work rate **Self-Sacrificers** and **Getters** similarly?

There are several other shortcomings to this data set. First, the data analyzed in this study were entirely self-reported. There was no attempt to corroborate participants' reports of their feelings and behaviors with the reports of others. This may be particularly important for volunteers' reports of their volunteer behaviors and experiences, and outcomes such as Disengagement from the work.

A second problem was that the cohort reduced in size over time from 587 participants at T1, to 269 with complete data at T2, to 170 with complete data at T3. Note that the data set included many more respondents at these latter points in time than were analyzed in this study, because of the need to discard people who were not volunteering at T2 (but who may have been by the time of the T3 assessment).

One of the strengths of this data set is also a potential weakness: the data were all collected from Gay Men's Health Crisis. GMHC is unique as an AIDS organization in three ways. The first unique aspect is its history and importance as the first organization founded to fight the epidemic, and the leadership it has maintained over the last 14 years. The second unique aspect is the value GMHC places on voluntarism. Volunteers are indispensable within the organization and provide GMHC with much of its vibrant character, efficacy, and success (Kayal, 1993; Ouellette Kobasa, 1990). Third, there is the extent to which GMHC has become a leading social institution in the New York City gay community (Altman, 1994; Kayal, 1993; Ouellette Kobasa, 1990; Shilts, 1987). GMHC's efforts are reported steadily in local media; GMHC's spokespersons respond to AIDS- and gay-related news events; and GMHC is one of the largest gay-identified employers in the city. With over 5200 clients, hundreds of part-time and full-time staff, and thousands of contributors, GMHC's sheer size makes its gay roots and gay identity even more important. Because of these unique characteristics, GMHC may not be very comparable to the less gay-identified, mid-western AIDS CBOs studied by Omoto and

Snyder and their colleagues in small cities where HIV is not endemic. Thus, the findings of this study may not be replicable to other settings. It may even be the case that some of the more AIDS-centric types of volunteers identified in this study would not be found in other settings. However, I would still expect other researchers to be able to identify a type of volunteer who is relatively altruistic, and other types who are seeking things for themselves from their volunteer work. And the relationship between such types and important outcomes such as burnout and positive consequences should also be evident. The four kinds of roles available to GMHC volunteers can also be found in other AIDS CBOs, and the GMHC model of service provision has been copied around the world (Altman, 1994).

What was not measured in the reasons scale

To be more specific about what else could have been assessed in the Reasons for Volunteering scale, I analyzed the brief statements participants wrote in response to an open-ended question about their reasons for volunteering. In addition to many sentiments that were akin to items presented in the scale, there were at least two ideas that were not: anger about AIDS and about others' lack of response to AIDS, and reasons related to one's sense of spirituality, Christianity, religious obligation, or related concepts[8]. These are reviewed here in an effort to explore the value of these concepts for inclusion in future scale-based assessments of volunteers' reasons.

Anger. Examples of anger-related reasons for volunteering are easily found in participants' open-ended responses:

> "I want to volunteer because I'm so angry that a disease like this can hurt so many people, and that others' reactions can hurt even more." "Channel anger about AIDS into constructive action." "Because I am outraged at the lack of attention that the AIDS crisis is given and I want to be involved and help out." "Anger at not being able to help

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[8] The original (40-item) version of the Reasons for Volunteering scale had one item related to this latter issue: "To feel that you are doing something of a spiritual or religious nature". In the initial factor analyses conducted with these 40 items, this item loaded weakly on the factor that was eventually labeled Coping with AIDS, and due to its weak loading, was dropped in later versions of the scale.

> friends." "I was angered by what I saw on TV about what the government was spending money on, and prejudice against minorities and gays."

How does anger fit into our conceptualization of why people help others? Most scales of volunteers' motivations, and most conceptualizations of why people engage in any kind of helping behavior, do not include any kind of anger-related dimension. Other emotion-related variables, such as negative moods and sympathy, have often been studied as predictors of brief stints of aid provision, but anger has not apparently been included in the conceptualization of why people help. The reason for this, I believe, is that so much social psychological research on helping behavior is focused on the narrow picture of two actors: the helper and the recipient. In such a limited conceptualization, it is not surprising that there is no room for an emotion that would be aimed at someone off-stage. The one exception may be Lerner's discussion of the relationship between the desire for justice and helping behavior (e.g., Lerner, 1970). From the data they have provided in this study, it would seem that these AIDS volunteers see injustice in how PWAs are shunned and victimized by the general public; this angers them and motivates them to respond to the injustices of AIDS.

Religion. The other motive that several volunteers expressed, which was not measured in the scale, involved religious feelings and thoughts. The following are some examples from the data set:

> "To follow the Christian call of the Gospel to love one another." "It's a Christian obligation to help your fellow man." "I feel fortunate with my life and health, and in return for what God has blessed me with, I must help those who are in need and less fortunate than I." "As a result of my belief in humanism and Christian ethics, volunteering help for an important cause is a privilege." "God told me to help."

Many volunteers in this study indicated that they engaged in organized religion and individual prayer, and the examples given above demonstrate that their beliefs played a role in their coming to GMHC. From the time that Jesus related the parable of the Good Samaritan, social critics have pointed out that pious or observant individuals can not be assumed to be compassionate and expected to help the needy. Organized religion has been criticized along with the other major social institutions for its slow response to the AIDS epidemic (see Jonsen & Stryker, 1993). My point here is that at a more personal level, religion can be a motivator for some to join an organization such as GMHC.

Implications for Method, Theory, and Practice

Methodological implications

Helping Behavior Research. In contrast to most psychological research on the question of why people help, this field study was conducted with several hundred real people seeking to engage in long-term helping behavior with strangers. The research was prospective and longitudinal, providing a wealth of data concerning these volunteers, and setting new standards for conducting sophisticated research in this area. Most important, this research used participants' self-reported reasons for volunteering as the basis for defining who was an altruist and who was not. This is in contrast to laboratory-based research in which experimental conditions are used to manipulate whether helpers are focused on themselves or not. Furthermore, the design of this research allowed for new questions to be asked about volunteers: how reasons change over time and whether helpers' motivations matter or not. Most

research conducted in the laboratory concerns helping behavior that is of such limited duration, and is so inconsequential for the helper, that such questions can not be asked.

In discussing the shortcomings of research previously conducted on helping behavior (or other prosocial behaviors such as cooperation and sharing), I want to make a clear distinction between people engaging in real, actual helping behavior in their real social worlds, and people in engaging in artificial settings that are made to appear natural (or behaviors that are stripped of their value because the investigator has constructed the need for them). Studying real helping behaviors in natural settings -- like volunteering in a community-based AIDS organization -- is a messy endeavor. In some "naturalistic" studies of helping behavior, artificial victims engage in acting distressed at a particular time and place, and the researcher/observer knows exactly when the potential helper/subject observes this stimulus, and how they behave. In the case of AIDS and these volunteers, it is unclear how long the volunteers/subjects had been aware of the distressed victims (people with AIDS and the gay community), the potential victims (e.g., people who have sex or inject drugs), and the presence of a social structure (the CBO) through which they could lend a helping hand. As measured in this study, some of these people had come to the agency with no prior participation in AIDS-related helping, while others had at least some experience.

I believe that in these ways, this research has implications for how research is conducted concerning helping behavior. Given the importance of volunteerism in

America -- especially for AIDS -- and the lack of congruence between long-term volunteering and laboratory-based research, the successful application of these field methods and statistical techniques is potentially of great use for the field. The unique characteristics of this research were its focus on real helpers, its prospective, longitudinal design, and the multiple assessments of reasons for helping.

Cluster Analysis. This study included the extensive use of cluster analysis. This approach has significant descriptive value, regardless of the predictive utility of the typology. I chose to analyze the data in this way because I wanted to understand the people, not just the variables or constructs. Also, I wanted this research to be meaningful to the staff and volunteers at GMHC. Lay people do not think in terms of dimensions or variables, they think in terms of people. It would be useless to them to be presented with an analysis that is limited to descriptive statistics and correlations of volunteers' reasons, and correlations between these reasons and other characteristics and behaviors of the participants. And as discussed in the introduction, clustering the participants' reasons for volunteering data was not just an interesting way of approaching the data; it was a *necessary* part of the reason analysis.

Psychologists -- especially personality psychologists -- often use scales with multiple factors. Cluster analysis of such data brings the researcher closer to the persons in the data, and I believe that this is important for personality psychologists to consider. It is time for personality psychologists to reconsider the value of classifying individuals, a practice that is not currently favored by most psychological researchers. We prefer to speak in terms of variables, concepts, traits, dimensions -- not

individuals or types.

Why are we so willing to discard the individual and embrace the variable? Perhaps one reason for this is that we are trained to recruit random participants in our research, and understanding *them* is not usually the point. Rather, the research is conducted to prove or disprove hypotheses -- to find significant or non-significant relationships among variables. The research psychologist is not interested in who the subjects are, or understanding them as individuals in any sense (Carlson, 1971, 1984; Lamiell, 1981). In experiments, subjects are randomly selected and randomly assigned to conditions so that on average, they are indistinguishable from one another; the goal is to remove individual characteristics (Billig, 1994). Furthermore, psychologists rarely study real people doing interesting things -- even when it comes to helping behavior, college students are the subjects of choice.

A perusal of *JPSP*, *PSPB*, and other leading journals in the field indicates that it is uncommon for contemporary psychologists to define *types* of people, to look at the person as the unit of analysis (in addition to variables or constructs or dimensions). This unfortunate state of affairs represents the professional dominance of people I will call "dimensionalists" over personologists. Some researchers are so concerned about variables that they fail (or forget) to learn anything about persons. In the last ten years, journals have filled up more and more with articles from which we learn a great deal about factor space and the explanation of variance, but from which we learn nothing about how these dimensions are distributed in persons.

What I am offering is a description of how one can further understand people

by taking the nomothetically derived dimensions of personality (or other constructs), and discovering what types of people exist, as defined by their naturally-occurring clusterings in multidimensional space. As Allport indicated, everyone has some score on each common trait. Early in his book *Pattern and Growth in Personality*, Allport (1966) gives two very crucial examples of how psychologists can use individuals' scores on common traits to combine idiographic and nomothetic approaches. One example is of an individual profile analysis in regard to group norms -- this is exactly what cluster analysis provides for an entire sample. His second example is a brief discussion of the utility and limitations of typologies.

Perhaps pretentiously, I believe that my approach -- clustering people based on multiple dimensions -- provides a bridge between the dimensional and personological traditions. As shown in this study, one need not gather data using idiographic methods in order to be able to "find the person" in a data set. I would think that any of the huge data sets that the dimensionalists collect from their students year after year would be appropriate for re-analysis, in which one seeks more than just sets of correlations.[9]

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[9] This issue is perhaps *most* important for those who have defined constructs that rely on the assessment of component measures. Multifaceted constructs such as hardiness (Kobasa, 1979) are assessed by creating scores on the components. Scores on each component could fall anywhere in the measure's response scale, and thus any number of possible patterns of responses across the components would be evident in a sample's scores. However, it is only a particular pattern of responses that will match the researcher's definition of the target person. In the case of hardiness, only a person with high scores on all three component variables (control, commitment, and challenge) would be labeled "hardy".

Theoretical Implications

What is this thing called altruism? The main theoretical implication of this research involves the concept of altruism. Altruism is not a concept that can be measured on a scale. Some define it in behavioral terms -- self-sacrificial acts. Others define it in terms of reasons; the extreme definition of altruism is one in which absolutely no thought of oneself can exist in the act of helping. If the concept is to be a useful one, we must be able to find it in natural helping activities engaged in by real people. So in this study, altruism was defined in relativistic terms: an altruist is one who, relative to his or her peers, is little motivated by the possible rewards of helping. I believe that defined in this way, one can take altruism out of the laboratory and study it in real helping behavior.

The altruism literature is mostly moot on the issue of long-term helping; most experimental studies are conducted with very brief stints of aiding someone in need of help. In this study, I explored the possibility that people could become more or less altruistic over time. One may begin to help another with some degree of thought towards personal gain, and then become more selfless over time; on the other hand, the very opposite could occur as well, where someone who is at first an altruist becomes less selfless. Again, these issues have not been previously addressed in prospective research, and the findings of this study may provoke more of this kind of work in this area.

An intriguing finding was that being male and having AIDS-related experiences prior to volunteering were related to becoming more altruist-like over

time. It is unclear to me why these people were more likely to change in this way than others, or what this has to say about the concept of altruism.

Practical Implications

As a staff member at GMHC for the last four years, it is important to me that this research benefit the organization; it should not benefit only me. Fortunately, there are a number of interesting practical implications to be drawn from these findings.

It may be important for AIDS organizations to be sensitive to the reasons that bring their volunteers to help, both for recruitment and retention purposes. The majority of the volunteers who participated in this study indicated that, relatively speaking, self-centered reasons were important to them. Furthermore, AIDS organizations may not only need to be sensitive to volunteers' initial reasons for volunteering for purposes of recruitment and early retention, but also may need to stay attuned as those reasons change over time. Because there was no apparent cause of systematic change over time, individual supervisors would need to be aware of the ways their individual volunteers may change.

It is especially important for such organizations to understand that one reason why some people volunteer is their desire to find a way to cope with the anxiety and loss of control that AIDS has brought to their lives. In this way, the voluntary association model also includes aspects of the mutual-help model.

This typology, identifying seven distinct kinds of volunteers, may present a picture of AIDS volunteers that is more varied than that assumed by some at GMHC

or other AIDS organizations. In 1994, a consultant was hired by the Volunteer Department at GMHC to conduct mandatory training sessions for GMHC staff concerning volunteer issues. The consultant told staff attending the trainings that volunteers were motivated by three common needs: need for achievement, need for power, and need for affiliation. Finding seven types of volunteers may be good news for organizations such as GMHC. It would seem that a tremendously varied group of people can all find in GMHC what they are looking for -- skills, opportunities to help others, personal growth, etc. In terms of attracting people to GMHC, the task does not seem to be too difficult.

That said, it is important to note once again that this data set was limited to people who applied to GMHC to become a volunteer, attended a New Volunteer Orientation, consented to join the research project, and completed not only the brief questionnaire during their Orientation but also another questionnaire that they returned in the mail. No data are available concerning the people who may have tried to become volunteers, or taken one or two steps, but for some reason did not become volunteers. In 1989/1990, I counted the number of people who had called GMHC inquiring about volunteering, to whom GMHC had sent an application for becoming a volunteer, and estimated that only half of these people eventually came to a New Volunteer Orientation. Volunteer Department staff indicated they had come to the same estimate. During the period of this study, approximately 950 people attended an Orientation, from which we can estimate that another 900 to 1000 individuals were motivated to call GMHC for an application but did not actually come to the

organization during that time period. If GMHC or similar organizations are not able to recruit sufficient numbers of volunteers (which has not been a problem for GMHC for some time), it would be critical to understand why so many people *almost* become volunteers.

The findings concerning the relationship between one's pattern of reasons and one's later feelings about the volunteer work are also important for AIDS CBOs to consider. The main concern for them may not be to find altruists, but to avoid placing **Getters** in roles in which those particular volunteers' negative emotional responses to the work would be detrimental to themselves or to their recipients. Another issue may be to explore whether **Self-Sacrificers** do as well at their work as other volunteers who are more open to emotional involvement in the work.

This data set is not appropriate for examining turnover among the volunteers, nor their performance and effectiveness. However, burnout has been tied to negative work performance and increased turnover in other fields, indicating that this variable may serve as a surrogate for these later outcomes. Thus, this finding indicates that an altruistic pattern of motivations may be an important predictor of helpers' emotional responses to the work, and eventually may be tied to longevity and effectiveness of the helpers.

Further Research

Because of the interesting findings, and the limitations of the secondary data analysis, a number of research projects could follow on this one to expand and improve on what was done here.

Beyond AIDS volunteers, would one find a cluster of altruists in other voluntary work? This is basically a question of replicating one of the main findings of this study with a different sample, and raises the issue of external validity. This question could be answered with data from other prospective, longitudinal studies of volunteers, perhaps in a variety of settings and doing different kinds of work.

A number of modifications could be made to the Reasons for Volunteering scale. The reliability coefficient for the Personal Growth factor was low, and that and the Career Enhancement factor had only two items each. Also, other dimensions involving anger and religious values could be measured in a new version of the scale. If these improvements were made, the cluster analysis could reveal entirely different groupings. However, I would predict that the patterns most different from each other -- for instance, **Getters** and **Self-Sacrificers** -- would still be found in the data.

It was frustrating to be unable to find volunteering-related antecedents to the changes in reasons over time. Further research could include measures of additional variables to help explain why reasons change over time. In addition to exploring for other antecedents of changes in reasons, future research could also be extended over a longer period of time. In this study, an average of 6 months had passed between the T1 and T2 assessments of participants' reasons for volunteering. The average amount of time that participants had actually been volunteering was about five months. It is quite plausible that the second assessment of reasons in this study took place in the early or middle stages of a longer process of change or adjustment for the volunteers. Multiple assessments over a longer period of time would be necessary to determine at

what point the volunteers' reasons stabilize (assuming that they do).

In his research on polio foundation volunteers, Sills moved from the creation of his typology to case studies of volunteers who exemplified each type. These case studies provided a richer description of these volunteers and how the types differed from one another. It would be interesting to conduct similar interview-based case studies of AIDS volunteers. In fact, it would be possible to go back to the same volunteers who completed questionnaires for the Ouellette data set and interview those who continue to volunteer at GMHC at this time.

Table 1
Demographic characteristics of participants at each assessment

	T1 (n=587)		T2 (n=269)		T3 (n=170)	
Variable	M	SD.	M	SD.	M	SD.
Age	35.7	11.7	37.0	11.9	38.6	12.0
Variable	*n*	%	*n*	%	*n*	%
Gender						
Male	396	67.5	189	70.3	119	70.0
Female	191	32.5	80	29.7	51	30.0
Gender by sexual orientation						
Gay men	358	62.0	169	63.5	104	62.3
Heterosexual women	164	28.4	70	26.3	43	25.7
Heterosexual men	30	5.2	17	6.4	12	7.2
Lesbian women	25	4.3	10	3.7	8	4.8
HIV Positive / AIDS diagnosed	67	11.4	21	7.8	13	7.6
Income						
Below $10,000	48	8.7	15	5.6	5	2.9
$10,000 - 19,999	73	13.2	32	11.9	20	11.8
$20,000 - 29,999	130	23.6	56	20.8	38	22.4
$30,000 - 39,999	98	17.8	60	22.3	33	19.4
$40,000 - 49,999	69	12.5	33	12.3	25	14.7
$50,000 - 59,999	36	6.5	18	6.7	12	7.1
$60,000 - 69,999	27	4.9	15	5.6	10	5.9
Above $70,000	71	12.9	40	14.9	27	15.9

Table 1, continued

Variable	T1 (n=587)		T2 (n=269)		T3 (n=170)	
	n	%	*n*	%	*n*	%
Education						
Less than high school degree	5	0.9	1	0.4	--	
High school degree	32	6.3	8	3.0	4	2.4
Some college attendance	106	18.1	36	13.4	19	11.2
Associate degree	29	4.9	11	4.1	6	3.5
College degree	185	31.6	89	33.1	58	34.1
Some graduate school	68	11.6	36	13.4	23	13.5
Graduate degree	161	27.4	88	32.7	60	35.3
Race/Ethnicity						
White	488	83.7	226	84.0	143	84.1
Hispanic	29	5.0	11	4.1	7	4.1
Black	21	3.6	9	3.3	6	3.5
Native American	17	2.9	9	3.3	6	3.5
Asian or other	16	2.7	14	5.2	8	4.8

Note. Valid *n* may vary from item to item described above; percentages are based on valid *n* within each item.

Table 2
Exposure to HIV/AIDS prior to volunteering

Variable	Mean	S.D.	Median	Range
Number known who tested positive for HIV	2.04	4.36	1.00	0 - 70
Number known who died with HIV/AIDS	2.23	5.97	1.00	0 - 98
Summed AIDS-related stressors in previous 12 months	1.00	1.53	0.00	0 - 9
GMHC volunteers known	0.62	1.46	0.00	0 - 12
GMHC staff known	0.37	1.22	0.00	0 - 12

Note. $n = 587$.

Table 3
Reasons for Volunteering scale at T1: pattern matrix

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Item 5	**.69030**	.05357	.12555	-.00755	-.02703	.17847
Item 6	**.57907**	-.16344	.06357	-.04482	-.00361	.00116
Item 25	**.52029**	-.00436	-.11373	-.01261	.15603	.10120
Item 12	**.48569**	-.21231	-.13647	.12626	.07257	.11314
Item 13	-.03114	**-.88839**	-.02729	-.00567	-.05420	.06516
Item 14	.01646	**-.82881**	.04933	-.04879	.00092	-.03363
Item 3	-.06960	.03717	**.76857**	-.11544	.04359	.08132
Item 7	-.00823	-.00519	**.70234**	.07645	-.03247	.09916
Item 9	.06756	-.12220	**.45655**	.19525	.08232	-.14055
Item 26	.29630	.03388	**.36891**	.06306	-.08460	-.06344
Item 20	.01472	-.00895	**.34490**	.06214	.17703	.02244
Item 10	.02830	.02633	.19388	**.76096**	-.10227	-.08017
Item 17	-.04993	.02455	-.00201	**.62107**	-.01850	.07173
Item 11	.00361	-.04150	-.14305	**.52872**	.08755	.00076
Item 19	.00775	.01347	.02609	**.43353**	.14757	.06028
Item 22	.07772	.03771	-.02415	.01057	**.81671**	-.01421
Item 21	.07678	.00145	.25656	.14569	**.52346**	-.17461
Item 16	.23110	-.09751	-.12028	.15379	**.45828**	.00025
Item 24	-.07185	-.02002	.06880	.03554	**.27953**	.12723
Item 18	.15123	-.05929	.10041	.03791	-.00420	**.54683**
Item 2	.05762	-.01941	.00570	.03110	.00112	**.51903**

Note. Matrix is based on exploratory factor analysis using a maximum likelihood extraction with an oblique rotation. $n = 587$.

Table 4
CFA of Reasons for Volunteering scale: Standardized *lambda* matrix

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Item 5	.662					
Item 6	.631					
Item 25	.558					
Item 12	.687					
Item 13		.815				
Item 14		.780				
Item 3			.467			
Item 7			.594			
Item 9			.590			
Item 26			.422			
Item 20			.425			
Item 10				.719		
Item 17				.445		
Item 11				.538		
Item 19				.516		
Item 22					.677	
Item 21					.611	
Item 16					.661	
Item 24					.298	
Item 18						.697
Item 2						.426

Note. $n = 587$. Using *t*-values, all of these coefficients are significant (all $ts > \pm 2.0$).

Table 5
CFA of 6-factor model of Reasons for Volunteering Scale

	T1: n=587	T1: n=269	T2: n=269
Root Mean Square Residual	0.03	0.04	0.05
Chi-square (df=39)	115.8 ($p<.001$)	69.75 ($p=.002$)	99.42 ($p<.001$)
Goodness of Fit	0.97	0.96	0.94
Adjusted Goodness of Fit	0.94	0.92	0.89
Chi-square/df ratio	2.97	1.79	2.55

Note. CFA conducted using means of item-pairs for factors with more than 2 items. Second column represents analysis conducted with T1 data of the 269 people who also completed the scale at T2. Third column represents T2 data.

Table 6
Six reasons for volunteering: factor labels and text of items

Factor Label	Mean	SD	Item
Social Contact	5.27	1.48	To feel close to others
	4.21	1.80	To learn about other people's life styles and values
	4.22	1.77	To make new friends
	3.70	1.97	To learn how to relate to people
Career Enhancement	3.28	2.09	To enhance your career exploration and development
	3.84	2.12	To gain a valuable work experience
Joining the AIDS Cause	6.63	0.85	To make some response to the AIDS crisis
	6.37	1.08	To feel you are supporting a cause you believe in
	5.28	1.74	To do something to protest the mistreatment of PWAs
	5.91	1.68	To help someone who is ill
	5.47	1.48	Because you feel every person must do his/her share to help
Helping the Gay Family	5.15	1.92	To help gay friends do something about AIDS
	3.53	2.14	To respond to the death of a friend from AIDS
	2.71	2.31	To repay help or services which you, your family or friends received from GMHC
	3.95	2.24	To show gay pride
Coping with AIDS	3.15	2.16	To do something besides worry about getting sick
	4.74	1.98	To feel more in control in the face of AIDS
	3.52	1.90	To prepare yourself in case you develop a serious illness
	3.59	2.07	To stop feeling guilty about not doing something
Personal Growth	5.42	1.59	To increase the purpose and focus in your life
	4.50	2.17	To provide a kind of satisfaction you no longer feel in your paid work

Note. $n = 587$. Categorization based on factor analyses; items within each factor are in descending order of their loading on the factor. Factor names were based on interpretation of items within each factor.

Table 7
Reasons for volunteering at T1 and T2: Descriptive statistics, reliability coefficients, and correlations

	T1 Measures (n=587)						T2 Measures (n=269)					
	Social Contact	Career Enhance-ment	Joining AIDS Cause	Helping Gay Family	Coping with AIDS	Personal Growth	Social Contact	Career Enhance-ment	Joining AIDS Cause	Helping Gay Family	Coping with AIDS	Personal Growth
T1 Social	1.000											
T1 Career	.400**	1.000										
T1 Joining	.249**	.060	1.000									
T1 Helping	.246**	.091	.346**	1.000								
T1 Coping	.359**	.162**	.344**	.488**	1.000							
T1 Growth	.389**	.211**	.135**	.147**	.197**	1.000						
T2 Social	.544**	.304**	.003	.106	.233**	.140**	1.000					
T2 Career	.328**	.625**	.039	.130	.223**	.207**	.472**	1.000				
T2 Joining	.083	.091	.395**	.119**	.075**	.108	.178**	.167**	1.000			
T2 Helping	.086	.059	.223**	.605**	.278**	.051	.288**	.304**	.438**	1.000		
T2 Coping	.185**	.080	.165*	.328**	.524**	.055	.444**	.306**	.309**	.533**	1.000	
T2 Growth	.319**	.153*	.084	.182*	.158*	.403**	.425**	.349**	.325**	.327**	.337**	1.000
mean	4.35	3.55	5.93	3.85	3.75	4.97	4.11	3.42	5.84	3.60	3.71	4.91
s.d.	1.32	1.97	0.91	1.55	1.44	1.56	1.42	2.04	0.90	1.48	1.58	1.60
alpha	0.73	0.84	0.67	0.69	0.68	0.49	0.76	0.88	0.58	0.64	0.77	0.66

Note. * $p <= .01$ ** $p <= .001$. $n=587$ for T1 scores; $n=269$ for T2 scores and T1-T2 intercorrelations.

Table 8
Volunteer experience variables

	T1 (n=587)		T2 (n=269)		T3 (n=170)	
Role *(choice at T1, assignment at T2 and T3)*	N	valid %	N	%	N	%
Few long-term clients	285	50.7	136	50.6	88	51.8
Office support	130	23.1	51	19.0	21	12.4
Education / Prevention	83	14.8	38	14.1	25	14.7
Many short-term clients	64	11.4	44	16.4	36	21.2
(none)	25					

Waiting Time *(in weeks)*	Mean	SD
	5.93	5.58

Volunteering Time *(in weeks)*	Mean	SD	Mean	SD
	22.18	13.08	47.13	14.34

Hours *(per week)*	Mean	SD	Mean	SD
	4.93	3.33	5.82	5.49

Sickness/Death in volunteering *(summed occurrences)*	Mdn	Mean	SD	Mdn	Mean	SD
	0.00	1.35	2.84	1.00	2.03	2.45

Other stressful events in volunteering *(summed occurrences)*	Mdn	Mean	SD	Mdn	Mean	SD
	1.00	2.30	4.00	5.00	6.90	6.43

Table 9
CFA of 3-factor model of feelings about volunteering: *Gratification*, *Burnout*, and *Disengagement*

	T2 (n = 269)	T3 (n = 170)
Root Mean Square Residual	0.06	0.03
Chi-square (df = 6)	10.34 (ns)	7.30 (ns)
Goodness of Fit	0.99	0.99
Adjusted Goodness of Fit	0.96	0.95
Chi-square/df ratio	1.72	1.22

Note. CFA conducted using means of pairs of items as the indicators, where possible.

Table 10
Feelings about volunteering at T2: Pattern matrix and text of items

Factor Loadings					
Gratification	Burnout	Disengagement	Mean	Std. Dev.	Item
.90956	-.08555	.01783	3.91	1.83	I get a great sense of pride from my volunteer work
.80841	.01696	-.04956	3.91	1.87	Working with people on such intimate levels has been rewarding
.79449	.09233	-.00309	3.23	1.86	I have accomplished many worthwhile things through volunteering
.73021	.03289	.02021	3.62	1.85	I feel I'm positively influencing other people's lives through my volunteer work
.00810	**.94211**	-.05294	1.51	1.49	I feel emotionally drained from my volunteer work
.04128	**.59243**	.07068	1.18	1.45	I feel used up after a stint of volunteering
-.07005	.04410	**.76179**	0.86	1.35	I find myself wanting to do less and less volunteer work
.00635	-.09855	**.57431**	0.79	1.41	I find myself showing up a little late for volunteer appointments or agreed-upon work schedules
.11603	.05925	**.56449**	1.21	1.56	More and more, I feel less generous with my time
-.17021	.15622	**.56423**	1.07	1.54	I feel frustrated by my volunteer job

Note. Factor analysis conducted using ML extraction and oblique factor rotation. $n = 269$. Response scale ranged from 0 to 6.

Table 11
Feelings about volunteering at T2 and T3: Descriptive statistics, reliability coefficients, and correlations

	T2 measures			T3 measures		
	Gratification	Burnout	Disengagement	Gratification	Burnout	Disengagement
T2 Gratification	1.00					
T2 Burnout	.24**	1.00				
T2 Disengagement	-.14*	.32**	1.00			
T3 Gratification	.66**	.16*	-.11	1.00		
T3 Burnout	.09	.41**	.25**	.07	1.00	
T3 Disengagement	.01	.32**	.47**	-.28**	.44**	1.00
mean	3.66	1.35	0.98	4.03	1.59	1.15
s.d.	1.60	1.31	1.09	1.43	1.40	1.24
alpha	0.88	0.74	0.72	0.86	0.78	0.75

Note. * $p<.05$; ** $p<.001$. $n=269$ for T2 scores; $n=170$ for T3 scores and T2-T3 intercorrelations. Response scale was 0 ("Not at all); 1 ("Very mild, barely noticeable"); to 6 ("Major, very strong").

Table 12
CFA of 2-factor model of consequences of volunteering: *New Perspective* and *Consumed*

	T2 (n = 269)	T3 (n = 170)
Root Mean Square Residual	0.06	0.07
Chi-square (df = 4)	9.84*	9.79*
Goodness of Fit	0.99	0.98
Adjusted Goodness of Fit	0.95	0.92
Chi-square/df ratio	2.46	2.45

Note. * $p < .05$.

Table 13
Consequences of volunteering at T2: pattern matrix and text of items

Factor Loadings				
New Perspective	Consumed	Mean	SD	Item
.77057	.08639	3.51	1.90	I have gained a new and better perspective on life through my volunteer work
.66508	.01671	3.16	1.82	I feel more and more that I can do something to change the situation
.63574	-.00996	2.83	1.95	My volunteer work gives me a sense of community that I didn't feel before
.62467	-.07734	3.35	2.05	I find new pride and dignity in the gay community through GMHC
.55982	.05230	2.95	1.94	These days I have more focus on my personal goals
.48459	.09839	2.39	2.08	My volunteer work makes me re-think how I view my career
.42532	-.06453	1.68	1.80	I have a whole new group of friends at GMHC
-.10825	**.82603**	0.50	1.05	I worry that my volunteer work is hardening me emotionally
-.11168	**.76494**	0.25	0.75	I've become more callous toward people since I started volunteering
.19008	**.42279**	1.14	1.49	More and more of my time for relaxing or socializing is being taken up by volunteering
.09165	**.35267**	0.73	1.21	I find it harder and harder to relate to people who are not involved with AIDS

Note. Factor analysis conducted with ML extraction and oblique rotation of factors. $n = 269$. Response scale ranged from 0 to 6.

Table 14

Consequences of volunteering at T2 and T3: descriptive statistics, reliability coefficients, and correlations

	T2 measures		T3 measures	
	New Perspective	Consumed	New Perspective	Consumed
T2 New Perspective	1.00			
T2 Consumed	.27***	1.00		
T3 New Perspective	.59***	.24**	1.00	
T3 Consumed	.15	.43***	.19*	1.00
mean	2.84	0.66	3.08	0.88
s.d.	1.29	0.80	1.22	0.76
alpha	0.79	0.62	0.74	0.40

Note. * $p<.05$; ** $p<.01$; *** $p<.001$. $n=269$ for T2 scores; $n=170$ for T3 scores and T2-T3 intercorrelations. Response scale was 0 ("Not at all); 1 ("Very mild, barely noticeable"); to 6 ("Major, very strong").

Table 15
Reasons for volunteering: Mean standardized and raw scores within T1 clusters

	Personal Search (n = 82)	Copers (n = 118)	Getters (n = 86)	Self-Sacrificers (n = 83)	Only A Job (n = 59)	Undifferentiated (n = 84)	AIDS Responders (n = 73)
Standardized scores							
Social Contact	-0.50	0.92	0.63	-0.94	-0.62	-0.15	0.08
Career Enhancement	-1.14	0.78	0.98	-0.69	0.18	0.41	-0.97
Joining the AIDS Cause	-0.19	0.64	0.18	0.11	-1.90	-0.15	0.58
Helping the Gay Family	-0.57	0.93	-0.67	-0.37	-1.04	0.39	0.77
Coping with AIDS	-0.58	1.06	-0.42	-0.59	-0.89	0.15	0.66
Personal Growth	0.56	0.61	0.53	-1.63	-0.23	-0.27	0.09
Raw scores							
Social Contact	3.69	5.56	5.19	3.11	3.53	4.15	4.46
Career Enhancement	1.31	5.08	5.48	2.20	3.90	4.36	1.64
Joining the AIDS Cause	5.76	6.52	6.10	6.03	4.19	5.79	6.46
Helping the Gay Family	2.96	5.30	2.80	3.26	2.22	4.45	5.05
Coping with AIDS	2.91	5.27	3.14	2.92	2.46	3.96	4.70
Personal Growth	5.85	5.92	5.80	2.42	4.61	4.55	5.11

Note. $n = 585$.

Table 16
T1 cluster differences on demographic and HIV-experience variables

Age: F (6,578) = 3.81, p < .001.

		G	C	O	U	S	P	A
Getters	32.40							
Copers	33.50							
Only A Job	35.22							
Undifferentiated	35.69							
Self-Sacrificers	36.76	*						
Personal Search	38.46	*	*					
AIDS Responders	39.01	*	*					

Education Level: F (6,578) = 3.42, p < .001.

		C	A	G	U	S	O	P
Copers	4.65							
AIDS Responders	4.79							
Getters	5.07							
Undifferentiated	5.18	*						
Self-Sacrificers	5.37	*	*					
Only A Job	5.46	*	*					
Personal Search	5.50	*	*					

Percentage who are gay men: x^2 (df = 6) = 85.08, p < .0001.

Getters	32.6%
Only A Job	45.8%
Self-Sacrificers	54.2%
Personal Search	62.2%
Undifferentiated	73.8%
Copers	74.6%
AIDS Responders	78.1%

Percentage who have HIV/AIDS: x^2 (df = 6) = 17.32, p < .01.

Getters	3.5%
Self-Sacrificers	8.4%
Only A Job	8.5%
Personal Search	9.8%
Undifferentiated	10.7%
Copers	16.1%
AIDS Responders	21.9%

Table 16, continued

Number of AIDS stressors in previous 12 months: $F(6,578) = 12.13$, $p < .0001$.

		G	O	P	S	U	C	A
Getters	0.38							
Only A Job	0.53							
Personal Search	0.74							
Self-Sacrificers	0.82							
Undifferentiated	1.02	*						
Copers	1.29	*	*	*	*			
AIDS Responders	2.11	*	*	*	*	*	*	

Number known who died of AIDS: $F(6,578) = 2.78$, $p < .01$.

		G	O	P	S	U	C	A
Getters	0.67							
Only A Job	1.07							
Personal Search	1.77							
Self-Sacrificers	2.16							
Undifferentiated	2.66							
Copers	3.31	*	*					
AIDS Responders	3.58	*	*					

Note. $n = 585$. ANOVAs conducted using Duncan post-hoc tests.

Table 17
Within-cluster comparison of T1 and T2 reasons

	Cluster means						
	Personal Search (n=47)	Copers (n=48)	Getters (n=42)	Self-Sacrificers (n=37)	Only A Job (n=24)	Undifferentiated (n=42)	AIDS Responders (n=29)
Factor							
Social Contact							
T1	3.50	5.41	5.24	3.04	3.65	3.95	4.53
T2	3.79	5.17	4.72 **	3.06	4.10	3.70	3.90 *
Career Enhancement							
T1	1.31	5.11	5.39	1.97	3.79	4.52	1.53
T2	2.36 ***	4.64 *	4.29 ***	2.50	3.31	4.05 *	2.26 *
Joining the AIDS Cause							
T1	5.68	6.47	6.21	5.97	4.09	5.80	6.43
T2	5.82	6.18 **	5.83	5.77	5.13 *	5.75	6.15 *
Helping the Gay Family							
T1	3.22	5.08	2.99	2.92	2.25	4.52	4.84
T2	3.34	4.53 **	3.10	2.93	2.68	4.14 *	4.09 ***
Coping with AIDS							
T1	2.79	5.21	3.19	2.84	2.57	3.95	4.66
T2	3.22 *	4.73 *	3.69	2.80	3.27	3.98	4.03 *
Personal Growth							
T1	5.81	5.98	5.56	2.38	4.58	4.77	5.34
T2	5.17 *	5.36 ***	5.69	3.55 ***	4.81	4.75	4.62 **

Note. $n=269$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 18
Reasons for volunteering: Mean standardized and raw scores within reclassified T2 clusters

	Personal Search (n=46)	Copers (n=48)	Getters (n=39)	Self-Sacrificers (n=32)	Only A Job (n=19)	Undifferentiated (n=48)	AIDS Responders (n=37)
Standardized scores							
Social Contact	-0.47	0.95	0.75	-1.23	-0.31	-0.14	-0.03
Career Enhancement	-0.94	0.96	0.97	-0.95	-0.00	0.49	-0.91
Joining the AIDS Cause	0.06	0.81	0.15	-0.41	-2.11	-0.22	0.43
Helping the Gay Family	-0.63	1.16	-0.42	-0.58	-1.24	0.25	0.52
Coping with AIDS	-0.79	1.15	-0.34	-0.84	-0.69	0.25	0.59
Personal Growth	0.36	0.87	0.32	-1.82	-0.79	-0.05	0.13
Raw scores							
Social Contact	3.44	5.45	5.18	2.36	3.67	3.91	4.06
Career Enhancement	1.51	5.40	5.40	1.49	3.42	4.42	1.55
Joining the AIDS Cause	5.90	6.57	5.97	5.47	3.95	5.64	5.23
Helping the Gay Family	2.68	5.32	2.99	2.75	1.78	3.98	4.37
Coping with AIDS	2.46	5.54	3.18	2.39	2.62	4.11	4.65
Personal Growth	5.49	6.30	5.42	1.98	3.63	4.83	5.11

Note. $n=269$.

Table 19
Changes in cluster membership from T1 typology to T2 typology

	T2 Personal Search	T2 Copers	T2 Getters	T2 Self-Sacrificers	T2 Only A Job	T2 Undifferentiated	T2 AIDS Responders	T1 total
T1 Personal Search	14	3	9	6	1	4	10	47
T1 Copers	3	23	6	1	1	12	2	48
T1 Getters	8	9	13	1	3	4	4	42
T1 Self-Sacrificers	7	--	5	12	4	5	4	37
T1 Only A Job	5	4	2	2	8	1	2	24
T1 Undiff.	2	6	2	5	2	20	5	42
T1 AIDS Responders	7	3	2	5	--	2	10	29
T2 total	46	48	39	32	19	48	37	269

Table 20
T1 (baseline) variables related to T1 and T2 typologies

variable	T1 typology	T2 typology
Age	■	■
Education level	■	
Percentage who are gay men	■	■
Percentage with HIV/AIDS	■	■
Income level		■
Previous AIDS stressors	■	
People known who died of AIDS	■	

Table 21
T2 cluster differences on baseline characteristics

Age: F (6,262) = 5.39, p < .0001.

		G	U	C	O	P	A	S
Getters	33.08							
Undifferentiated	33.29							
Copers	34.44							
Only A Job	35.74							
Personal Search	39.22	*	*					
AIDS Responders	39.98	*	*	*				
Self-Sacrificers	44.94	*	*	*	*	*		

Income level: F (6,262) = 3.35, p < .001.

		O	G	C	U	S	A	P
Only A Job	3.79							
Getters	3.88							
Copers	3.92							
Undifferentiated	4.17							
Self-Sacrificers	4.70							
AIDS Responders	4.98		*	*				
Personal Search	5.28	*	*	*	*			

Percentage who are gay men: x^2 (df = 6) = 25.58, p < .0001.

Getters	47.1%
Only A Job	56.3%
Personal Search	61.0%
Self-Sacrificers	67.9%
Undifferentiated	74.4%
Copers	83.7%
AIDS Responders	94.1%

Percentage who have HIV/AIDS: x^2 (df = 6) = 16.14, p < .001.

Only A Job	0.0%
Personal Search	0.0%
Getters	2.6%
Undifferentiated	6.3%
Self-Sacrificers	9.4%
AIDS Responders	16.2%
Copers	16.7%

Note. n = 269. ANOVAs conducted with Duncan post-hoc tests.

Table 22
Summary of analyses used to determine whether reasons predict outcomes

Outcome	Covariate	Reasons Predictive?
T2 Gratification	having HIV/AIDS not office support hours volunteered	T1: No
T3 Gratification	not office support	T2: Yes
T2 Burnout	being younger	T1: No
T3 Burnout	being younger delay in starting	T2: Yes
T2 Disengagement	being younger fewer hours volunteering	T1: No
T3 Disengagement	being younger fewer hours volunteering general vol. stress at T2	T2: No
T3 Dissatisfaction		T2: No
T3 Negative Perceptions	general vol. stress at T2 general vol. stress at T3	T2: No
T2 New Perspective	being Black, Latin, or Asian having HIV/AIDS	T1: Yes
T3 New Perspective	not working with few clients for a long period of time	T2: Yes
T2 Consumed	knowing GMHC people at T1 general vol. stress at T2	T1: No
T3 Consumed	being younger knowing people with HIV/AIDS working with many clients time volunteering hours volunteered less sickness/death at T2 more general vol. stress at T2	T2: No

Table 23
T1 and T2 reasons for volunteering as predictors of T2 and T3 outcomes

T2 New Perspective by T1 Reasons: $F(6,248) = 2.38$, $p < .05$.

		S	O	P	U	A	C	G
Self-Sacrificers	2.38							
Only A Job	2.42							
Personal Search	2.73							
Undifferentiated	2.84							
AIDS Responders	3.00	*						
Copers	3.06	*	*					
Getters	3.22	*	*					

T3 Gratification by T2 Reasons: $F(6,158) = 3.59$, $p < .01$.

		S	O	U	G	A	P	C
Self-Sacrificers	3.03							
Only A Job	3.24							
Undifferentiated	3.79							
Getters	4.04	*						
AIDS Responders	4.15	*						
Personal Search	4.26	*	*					
Copers	4.68	*	*	*				

T3 Burnout by T2 Reasons: $F(6,157) = 2.25$, $p < .05$.

		S	O	P	C	A	U	G
Self-Sacrificers	0.89							
Only A Job	1.34							
Personal Search	1.53							
Copers	1.68							
AIDS Responders	1.84							
Undifferentiated	1.86	*						
Getters	2.32	*	*	*		*		

T3 New Perspective by T2 Reasons: $F(6,152) = 7.52$, $p < .001$.

		S	O	P	G	A	U	C
Self-Sacrificers	2.07							
Only A Job	2.17							
Personal Search	2.82	*						
Getters	3.06	*	*					
AIDS Responders	3.22	*	*					
Undifferentiated	3.29	*	*					
Copers	3.91	*	*	*	*	*	*	

Note. Adjusted means are reported from ANCOVAs with corrected post-hoc tests.

Figure 1: Eight-cluster solution of iterative cluster analysis

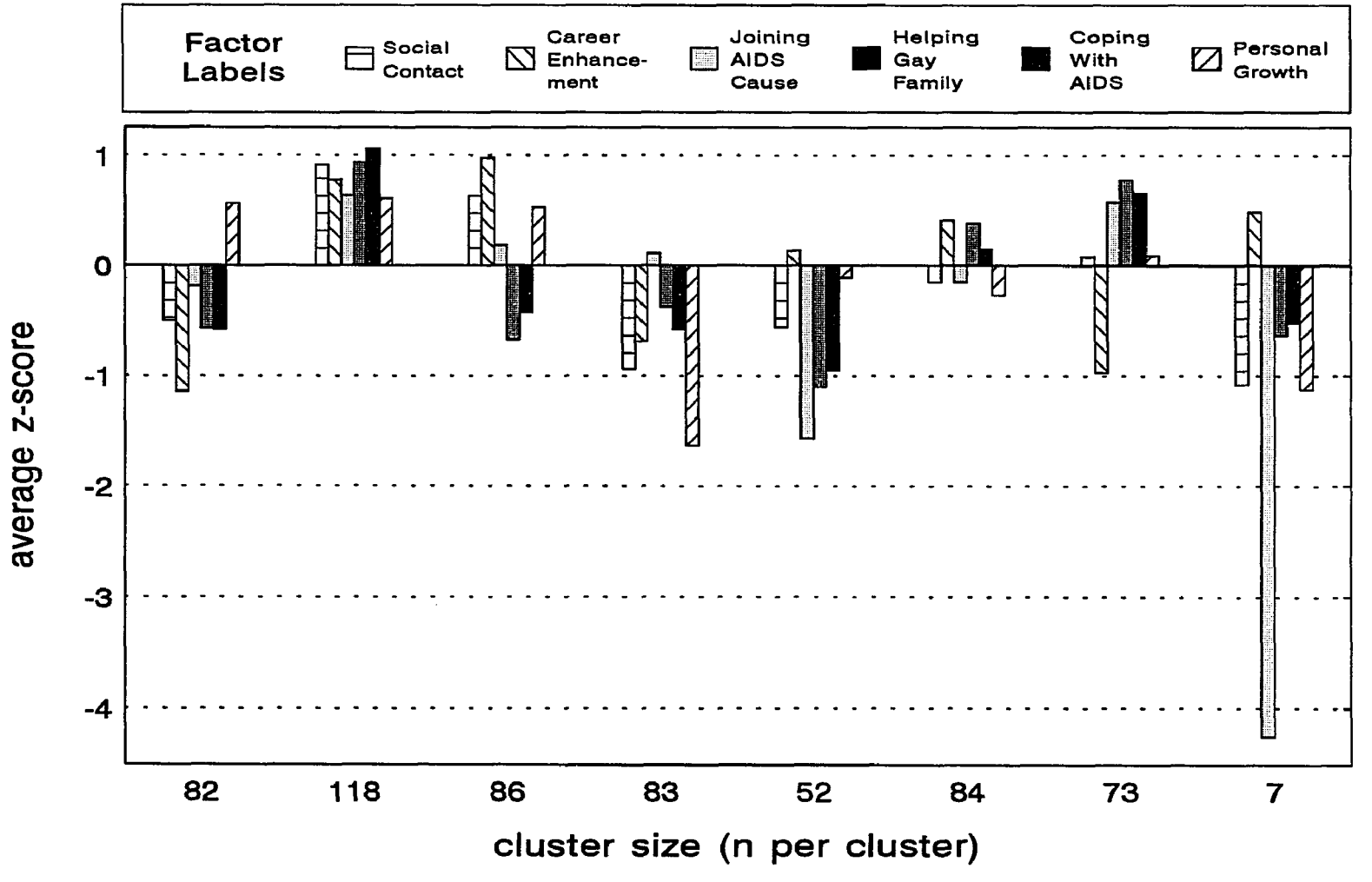


Figure 2. Comparison of 59-person cluster with 2 original clusters that were combined

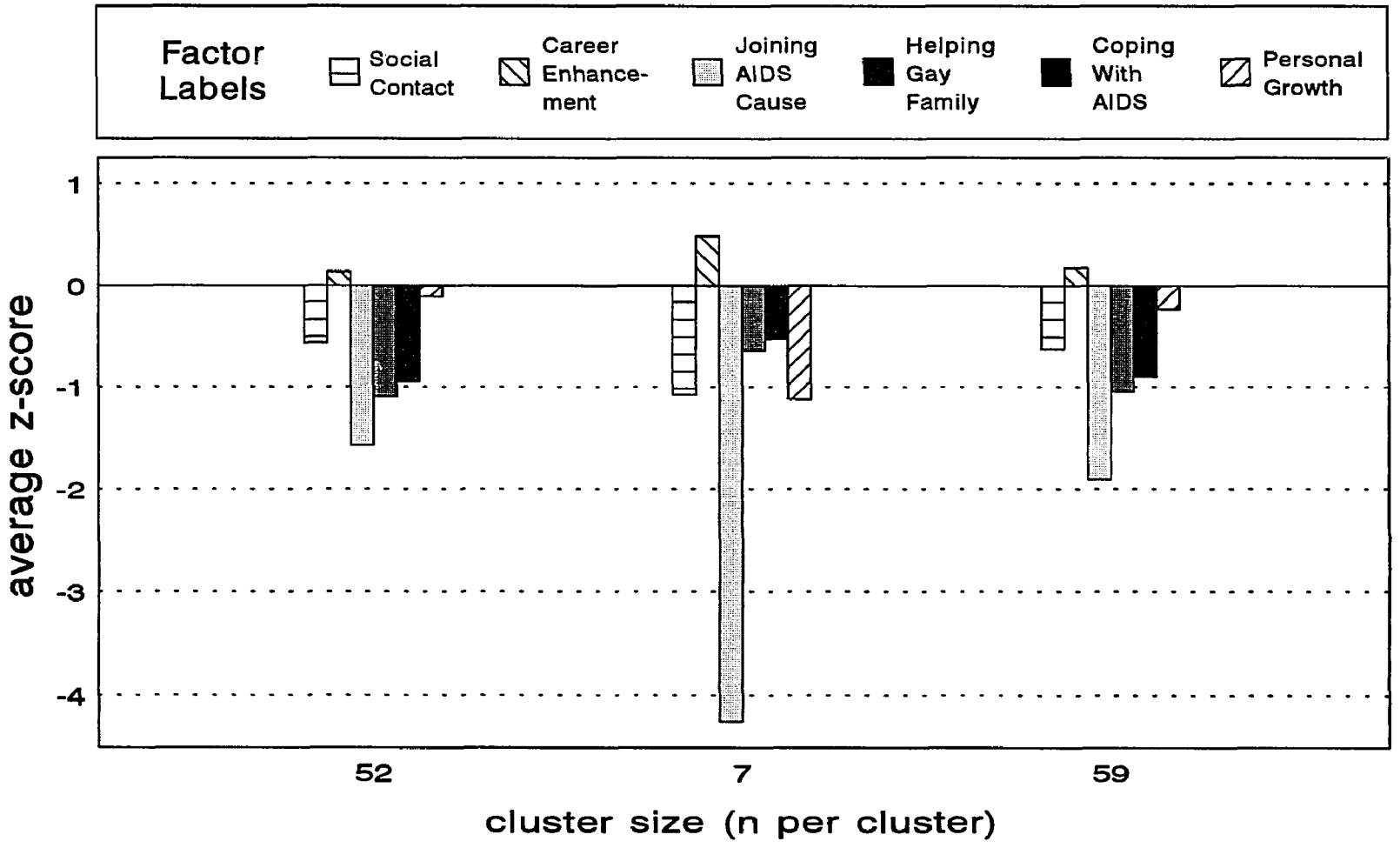


Figure 3: Typology of volunteers at T1

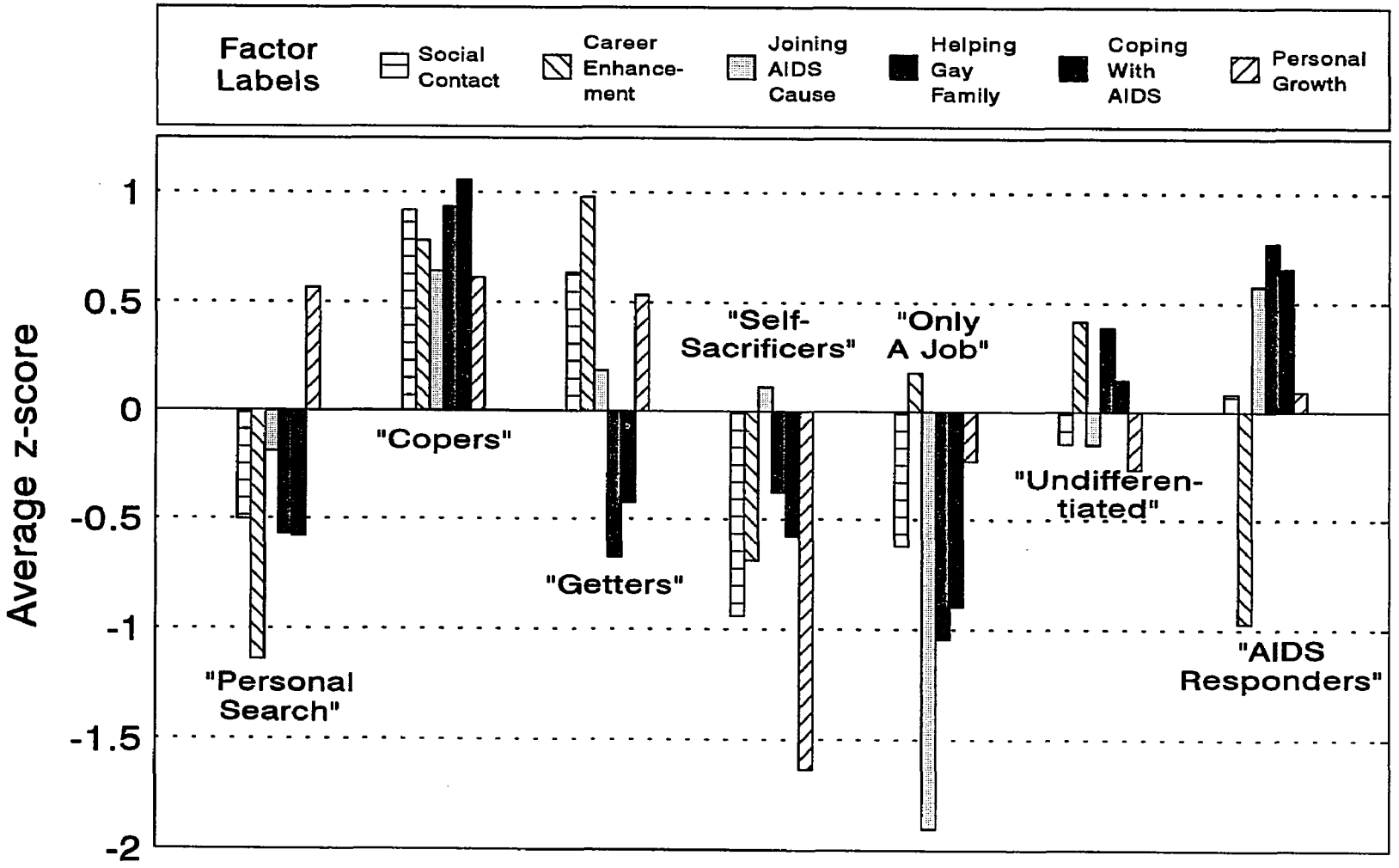


Figure 4: Distributions of Difference Scores in Reasons from T1 to T2

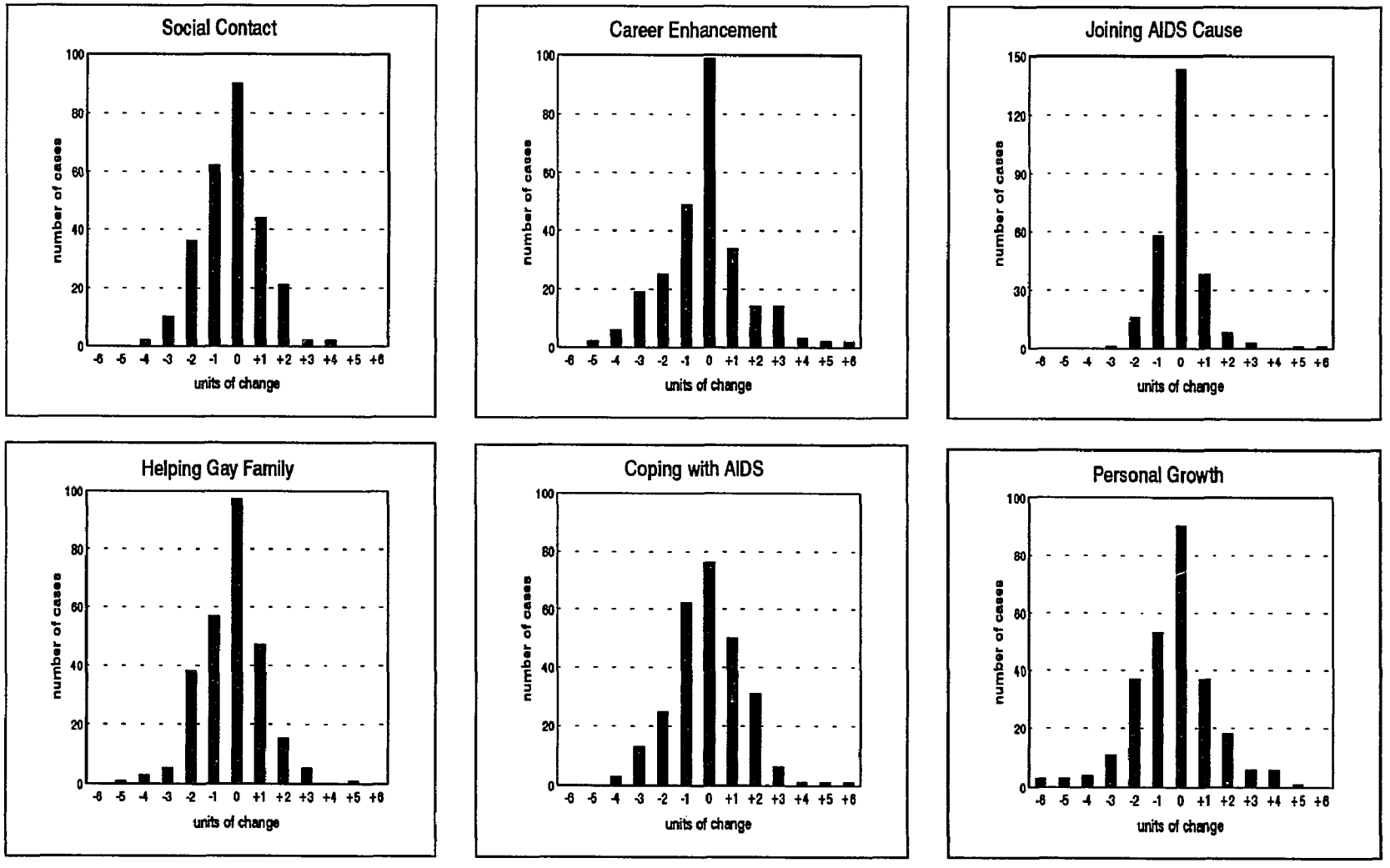
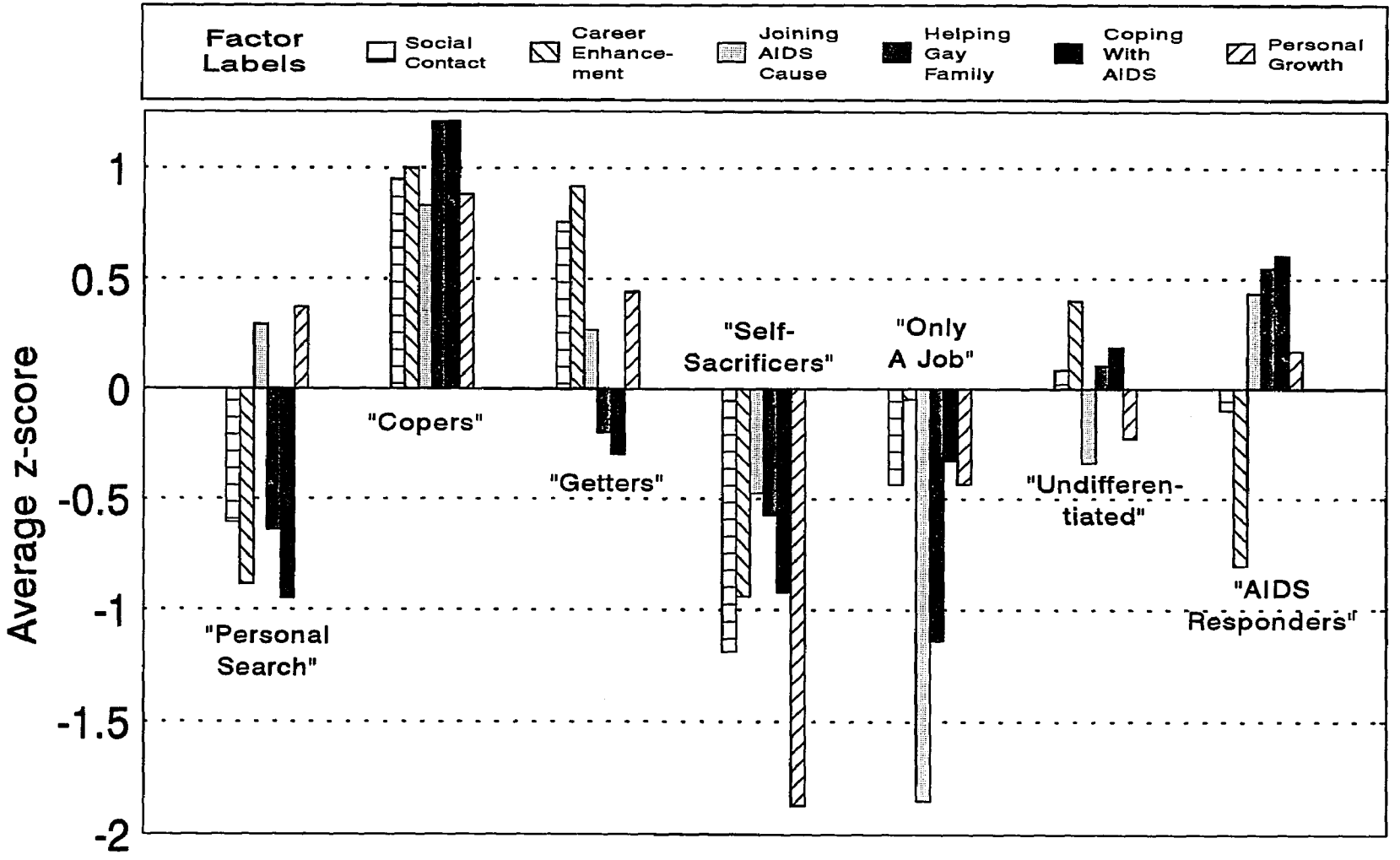


Figure 5: Reclassification of cases using T2 data



Appendix

A. HIV/AIDS-related stressful events

1. Close friend was informed of HIV infection.
2. Close friend was told he or she has an AIDS-related condition.
3. Close friend was told he or she had AIDS.
4. Close friend died with AIDS.
5. Parent or sibling developed AIDS.
6. Death of parent or sibling with AIDS.
7. Other close relative developed AIDS.
8. Death of other close relative with AIDS.
9. Partner informed of HIV infection.
10. Partner was told he or she had an AIDS-related condition.
11. Partner was told he or she had AIDS.
12. Partner died with AIDS.
13. You find out a person with whom you had a sexual encounter or relationship (other than your current partner) has the AIDS virus.

B. Satisfaction scale

1. The opportunity to perform a variety of tasks.
2. The responsibility to make decisions.
3. The opportunity to use your skills and knowledge.
4. The feeling you know exactly what is expected of you.
5. The feeling that you have had enough training.
6. The opportunity to develop new skills.
7. A sense of being in close contact with the staff.
8. A role in making decisions at the agency which affect what you do or how you do it.
9. Appreciation from the recipient(s) of your volunteering.
10. Freedom to work as a volunteer without close supervision.
11. Help and support from the agency staff.
12. The opportunity to meet people with similar interests.
13. Appreciation from the staff for your work.
14. The knowledge that you are making a difference for someone who is ill.
15. The feeling that you would know how to handle an emergency while volunteering.
16. A sense that you are doing enough.
17. The opportunity to do work that challenges you.

C. (Negative) Perceptions of the work environment

1. GMHC is successful in addressing the needs of people other than middle class, white, gay men.

2. At GMHC, there is too much emphasis on formal structure and rules.

3. From what I see when I'm at GMHC, staff members are dedicated and committed to a common goal.

4. GMHC effectively monitors and criticizes the government's actions and response to AIDS.

5. I sense that GMHC is turning away prospective clients.

6. Staff members are quick to respond to the needs and requests of clients.

7. GMHC has lost the sense of mission it had when it was founded.

8. I sense that GMHC makes new volunteers feel welcome.

9. GMHC has become too compartmentalized -- there is no sense of a united organization.

10. All of the important decisions at GMHC are made by a small, elite group of people.

11. GMHC makes good use of all its resources.

12. GMHC staff members don't have what it takes to do the work that needs to get done.

13. GMHC is a really democratic organization -- everybody has a say.

14. There is a lot of political infighting at GMHC.

15. Volunteers are often overlooked -- they don't have a voice in the organization.

References

Aldenderfer, M.S., & Blashfield, R.K. (1984). Cluster Analysis. Beverly Hills: Sage Publications.

Allport, G.W. (1966) Pattern and Growth in Personality. New York: Holt, Rinehart, and Winston.

Altman, D. (1994). Power and Community: Organizational and Cultural Responses to AIDS. London: Taylor & Francis.

Anderberg, M.R. (1973). Cluster Analysis for Applications. New York: Academic Press.

Anderson, J.C., & Moore, L.F. (1978). The motivation to volunteer. Journal of Voluntary Action Research, 7, 120-129.

Arno, P.S. (1986). The nonprofit sector's response to the AIDS epidemic: Community-based services in San Francisco. American Journal of Public Health, 76, 1325-1330.

Arno, P.S. (1988). The future of voluntarism and the AIDS epidemic. In D. Rogers & E. Ginzberg (Eds.), The AIDS Patient: An Action Agenda (pp. 56-70). Boulder: Westview.

Baron, L. (1985/86). The Holocaust and human decency: A review of research on the rescue of Jews in Nazi occupied Europe. Humboldt Journal of Social Relations, 13 (1-2), 237-251.

Bar-Tal, D. (1985-1986). Altruistic motivation to help: Definition, utility, and operationalization. Humboldt Journal of Social Relations, 13 (1-2), 3-14.

Batson, C.D., Bolen, M.H., Cross, J.A., & Neuringer-Benefiel, H.E. (1986). Where is the altruism in the altruistic personality? Journal of Personality and Social Psychology, 50 (1), 212-220.

Batson, C.D. (1987). Prosocial motivation: Is it ever truly altruistic? Advances in Experimental Social Psychology, 20, 65-122.

Batson, C.D., & Shaw, L.L. (1991). Evidence for altruism: Toward a pluralism of prosocial motives. Psychological Inquiry, 2 (2), 107-122.

Billig, M. (1994). Repopulating the depopulated pages of social psychology. Theory & Psychology, 4, 307-335.

Byrne, B.M. (1989). A Primer of LISREL: Basic Applications and Programming for Confirmatory Factor Analytic Models. New York: Springer-Verlag.

Carlson, R. (1971). Where is the person in personality research? Psychological Bulletin, 75, 203-219.

Carlson, R. (1984). What's social and social psychology? Where's the person in personality research? Journal of Personality and Social Psychology, 47, 1304-1309.

Chambré, S.M. (1991). The volunteer response to the AIDS epidemic in New York City: Implications for research on voluntarism. Nonprofit and Voluntary Sector Quarterly, 20 (3), 267-287.

Chambré, S.M. (1991). Volunteers as witnesses: The mobilization of AIDS volunteers in New York City, 1981-1988. Social Service Review, 65, 531-547.

Cialdini, R.B., Kenrick, D.T., & Baumann, D.J. (1982). Effects of mood on prosocial behavior in children and adults. In N. Eisenberg (Ed.): Development of Prosocial Behavior (pp. 339-356). New York: Academic Press.

Cialdini, R.B., Schaller, M., Houlihan, D., Arps, K., Fultz, J., & Beaman, A.L. (1987). Empathy-based helping: Is it selflessly or selfishly motivated? Journal of Personality and Social Psychology, 52 (4), 749-758.

Darley, J.M. & Batson, C.D. (1973). "From Jerusalem to Jericho": A study of situational and dispositional variables in helping behavior. Journal of Personality and Social Psychology, 27 (1), 100-108.

Dovidio, J.F. (1984). Helping behavior and altruism: An empirical and conceptual overview. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology (Vol. 17, pp. 361-427). New York: Academic Press.

Eagly, A.H. & Crowley, M. (1986). Gender and helping behavior: A meta-analytic review of the social psychological literature. Psychological Bulletin, 100 (3) 283-308.

Eisenberg, N. (1991). Values, sympathy, and individual differences: Toward a pluralism of factors influencing altruism and empathy. Psychological Inquiry, 2, 128-131.

Frisch, M.B., & Gerrard, M. (1981). Natural helping systems: A survey of Red Cross volunteers. American Journal of Community Psychology, 9 (5), 567-579.

Heal, J. (1991). Altruism. In R.A. Hinde & J. Groebel (Eds.), Cooperation and Prosocial Behavior (pp. 159-172). Cambridge: Cambridge University Press.

Hoffman, M.L. (1991). Is empathy altruistic? Psychological Inquiry, 2, 131-133.

Jonsen, A.R., & Stryker, J. (1993). The Social Impact of AIDS in the United States. Washington, D.C.: National Academy Press.

Jöreskog, K.G. & Sörbom, D. (1989). LISREL 7: A Guide to the Program and Applications. Chicago: SPSS Inc.

Kadushin, C. (1968). Reason analysis. In D. Sills (Ed.), International Encyclopedia of the Social Sciences (pp. 338-343). New York: Crowell Collier and Macmillan, Inc.

Katoff, L., & Ince, S. (1991). Supporting people with AIDS: The GMHC model. In N.F. McKenzie (Ed.), The AIDS Reader: Social, Political, Ethical Issues (pp. 543-576). New York: Meridian.

Kaufman, L., & Rousseeuw, P.J. (1990). Finding Groups in Data: An Introduction to Cluster Analysis. New York: Wiley.

Kayal, P.M. (1991). Gay AIDS voluntarism as political activity. Nonprofit and Voluntary Sector Quarterly, 20 (3), 289-311.

Kayal, P.M. (1993). Bearing Witness. Gay Men's Health Crisis and the Politics of AIDS. Boulder, Colorado: Westview Press.

Kiecolt, K.J., & Nathan, L.E. (1985). Secondary Analysis of Survey Data. Beverly Hills: Sage.

Kobasa, S.C. (1979). Stressful life events, personality, and health: An inquiry into hardiness. Journal of Personality and Social Psychology, 37, 1-11.

Krebs, D.L. (1982). Psychological approaches to altruism: An evaluation. Ethics, 92, 447-458.

Krebs, D.L. (1991). Altruism and egoism: A false dichotomy? Psychological Inquiry, 2, 137-139.

Lamiell, J.T. (1981). Toward an idiothetic psychology of personality. American Psychologist, 36, 276-289.

Latané, B. & Darley, J.M. (1970). Social determinants of bystander intervention in emergencies. In J. Macaulay & L. Berkowitz (Eds.), Altruism and Helping Behavior: Social Psychological Studies of Some Antecedents and Consequences (pp. 13-27). New York: Academic Press.

Latané, B. & Nida, S. (1981). Ten years of research on group size and helping. Psychological Bulletin, 89 (2), 308-324.

Lerner, M.L. (1970). The desire for justice and reactions to victims. In J. Macaulay & L. Berkowitz (Eds.), Altruism and Helping Behavior: Social Psychological Studies of Some Antecedents and Consequences (pp. 205-229). New York: Academic Press.

Loehlin, J.C. (1987). Latent Variable Models: An Introduction to Factor, Path, and Structural Analysis. Hillsdale, NJ: Lawrence Erlbaum Associates.

Long, J.S. (1983). Confirmatory Factor Analysis. Beverly Hills: Sage Publications.

Lopez, D.J., & Getzel, G.S. (1987). Strategies for volunteers caring for persons with AIDS. Social Casework, 68, 387-394.

Marsh, H.W. (1987). The hierarchical structure of self-concept and the application of hierarchical confirmatory factor analysis. Journal of Educational Measurement, 24, 17-39.

Maslach, C. & Jackson, S.E. (1986). Maslach Burnout Inventory Manual, 2nd Edition. Palo Alto CA: Consulting Psychologists Press.

Miller, L. (1985). Understanding the motivation of volunteers: An examination of personality differences and characteristics of volunteers' paid employment. Journal of Voluntary Action Research, 14, 112-122.

Norusis, M.J. (1990). SPSS/PC+ Statistics 4.0. Chicago: SPSS Inc.

Oliner, S.P., & Oliner, P.M. (1988). The Altruistic Personality: Rescuers of Jews in Nazi Europe. New York: The Free Press.

Omoto, A.M. & Snyder, M. (1993). AIDS volunteers and their motivations: Theoretical issues and practical concerns. Nonprofit Management and Leadership, 4, 157-176.

Omoto, A.M., Snyder, M., & Berghuis, J.P. (1993). The psychology of volunteerism: A conceptual analysis and a program of action research. In J.B. Pryor & G.D. Reeder (Eds.), The Social Psychology of HIV infection (pp. 333-356). Hillsdale, NJ: Erlbaum.

Omoto, A.M. & Snyder, M. (1995). Sustained helping without obligation: Motivation, longevity of service, and perceived attitude change among AIDS volunteers. Journal of Personality and Social Psychology, 68, 671-686.

Ouellette Kobasa, S.C. (1990). AIDS and volunteer associations: Perspectives on social and individual change. Milbank Quarterly, 68 (Suppl. 2), 280-294.

Ouellette, S.C., Cassel, J.B., Maslanka, H., & Wong, L.M. (1995). Why people become AIDS volunteers. Manuscript submitted for publication.

Phillips, M. (1982). Motivation and expectation in successful volunteerism. Journal of Voluntary Action Research, 11, 118-125.

Qureshi, H., Davies, B., & Challis, D. (1979). Motivations and rewards of volunteers and informal care givers. Journal of Voluntary Action Research, 8, 47-55.

Rapkin, B.D., & Luke, D.A. (1993). Cluster analysis in community research: Epistemology and practice. American Journal of Community Psychology, 21, 247-277.

Revenson, T.A., & Cassel, J.B. (1991). An exploration of leadership in a medical mutual help organization. American Journal of Community Psychology, 19, 683-698.

Shilts, R. (1987). And The Band Played On. New York: St. Martin's Press.

Sills, D.L. (1957). The Volunteers: Means and Ends in a National Organization. Glencoe, IL: The Free Press.

Smith, D.H. (1981). Altruism, volunteers, and volunteerism. Journal of Voluntary Action Research, 10, 21-36.

Smith, M.B. (1966). Explorations in competence: A study of Peace Corps teachers in Ghana. American Psychologist, 21, 555-566.

Snyder, M. & Omoto, A.M. (1992). Who helps and why? The psychology of AIDS volunteerism. In S. Spacapan & S. Oskamp (Eds.), Helping and Being Helped: Naturalistic Studies (pp. 213-239). London: Sage Publications.

Sober, E. (1989). What is psychological egoism? Behaviorism, 17, 89-102.

Staub, E. (1980). Social and prosocial behavior: Personal and situational influences and their interactions. In E. Staub (Ed.), Personality: Basic Aspects and Current Research (pp. 236-295). Englewood Cliffs, NJ: Erlbaum.

Steblay, N.M. (1987). Helping behavior in rural and urban environments: A meta-analysis. Psychological Bulletin, 102 (3), 346-356.

Tabachnick, B.G. & Fidell, L.S. (1989). Using Multivariate Statistics. New York: Harper & Row.

Vallance, T.R. & D'Augelli, A.R. (1982). The helping community: Characteristics of natural helpers. American Journal of Community Psychology, 10, 197-205.

Wachtel, P.L. (1980). Investigation and its discontents: Some recent constraints on progress in psychological research. American Psychologist, 35, 399-408.

Williams, J.A., Jr. & Ortega, S.T. (1986). The multidimensionality of joining. Journal of Voluntary Action Research, 15, 35-44.

Zeisel, H. (1985). Say it with Figures. New York: Harper and Row.