

Assessing Motivations for Sports Volunteerism

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ABSTRACT

Drawing on recent conceptual models on volunteer motivations developed mainly in social psychology, this study proposes that motivation for sports volunteerism is a multidimensional construct that comprises five distinct components, namely (1) Altruistic Value, (2) Personal Development, (3) Community Concern, (4) Ego Enhancement, and (5) Social Adjustment. A 20-item scale measuring motivations for sports volunteerism was developed using survey data from 935 qualified respondents. Results of confirmatory factor analysis via LISREL software provided reasonably adequate support for the five-factor dimensionality, reliability, convergent validity, and discriminant validity of the measurement scale.

INTRODUCTION

Every year, millions of volunteers donate substantial amounts of their time and effort to a cause that they care about. The most recent survey on giving and volunteering in the United States shows that 83.9 million Americans, accounting for 44 percent of American adults, engaged in some form of volunteer activities with a formal organization in 2000, with the total number of hours volunteered reached 15.5 billion hours (Independent Sector 2001). According to the latest survey of voluntary work by the Australian Bureau of Statistics (2001), about 4.4 million Australians, representing 32 percent of the total adult population, provided volunteer services through an organization in 2000. Moreover, there is ample evidence that volunteerism is a global phenomenon that can be found in many other parts of the world (Curtis, Grabb and Baer 1992).

The opportunities for volunteer service are now as broad as the spectrum of human needs. Volunteers can be found in such wide-ranging areas as the arts, youth service, education, health care, welfare, environmental protection, sports and recreation. As a growing and widespread social phenomenon, volunteerism is obviously a topic worthy of researchers' attention. Yet surprisingly, a review of the literature indicates that many prior studies on volunteerism have been primarily descriptive in nature (e.g., Brudney 1993; Perkins 1989; Spacapan and Oskamp 1992). Lack of reliable and valid measures appears to be one major reason for the relative paucity of rigorous empirical research on volunteerism. For example, Cronbach's alpha associated with measures used in one empirical study ranged just from 0.25 to 0.37 (Unger 1991). Among the limited number of empirical studies found in the literature, there were many studies using either just single-item scales to measure volunteer motivations or exploratory factor analysis to assess the motivational dimensionality underlying volunteerism (e.g., Andrew 1996; Farrell, Johnston, & Twynam 1998; Lysack and Krefting 1993; Phillips 1982).

However, exploratory factor analysis without a sound conceptual foundation and the use of single-item measures have long been shown to be inadequate in construct validation and theory testing (e.g., Churchill 1979; Gerbing and Anderson 1988; Nunnally and Bernstein 1994). The development of any scientific theory is virtually impossible without accurate and reliable measurement of theoretical constructs. Using confirmatory factor analysis via LISREL (Jöreskog and Sörbom 1993), the present research attempts to develop a psychometrically sound multi-item scale to measure motivations for sports volunteerism. Data for the main study were collected from prospective volunteers for the Sydney

2000 Olympic Games. As little research has been done in the area of volunteer activity for sporting events, this study draws on the conceptual models on volunteer motivations developed mainly in social psychology.

The remainder of this paper is organized into five sections. The first section reviews the relevant literature on volunteer motivations. The second section discusses the proposed five motivations for sports volunteerism. The third section outlines the research methodology, while the fourth section reports study results. The paper concludes with a discussion of research findings and suggestions for future research.

LITERATURE REVIEW

Despite recent advances in research on volunteer motivations, there is still considerable debate about the underlying structure or dimensionality of volunteer motivations. Cnaan and Goldberg-Glen (1991) argue that motivation to volunteer is a unidimensional construct. Smith (1981) proposes a two-dimensional structure consisting of altruistic and egoistic motives (see also Phillips 1982).

Using content analysis, Morrow-Howell and Mui (1989) identified three major categories of volunteer motivations: (1) Altruistic, (2) Material, and (3) Social. As the name implies, altruistic motives pertain to intangible rewards that are intrinsic to the volunteering act itself, namely satisfactions resulted from feeling that one has helped someone else. Material motives, in contrast, are concerned with tangible rewards such as collecting memorabilia, strengthening one's résumé, and developing one's career. Finally, social motives refer to individual satisfactions with rewards of interpersonal interactions. In a study of motivations for participating in a recreation-related voluntary association, Caldwell and Andereck (1994) described three categories of motivations for volunteering: (1) Purposive, (2) Material, and (3) Solidary. Their scheme bears a strong resemblance to that of Morrow-Howell and Mui (1989). Purposive motives relate to doing something useful to society. Material motives pertain to tangible rewards such as learning job-related skills. Solidary motives are concerned with social interaction, group identification, and networking.

In their program of research on AIDS volunteers, Omoto and Snyder (1995) found that five specific motivations for volunteer work could be consistently identified. They defined these motivations as (1) Values, (2) Understanding, (3) Personal Development, (4) Community Concern, and (5) Esteem Enhancement. Values pertain to the underlying beliefs held by a person that one should make altruistic and humanitarian contributions to society. Understanding reflects the fact that volunteering may serve to satisfy a person's intellectual curiosity about other people and the problems that they face. Personal development focuses on issues of personal growth and the opportunity to make friends and gain new skills. Community concern reflects people's sense of obligation to or concern about their community (see also Omoto and Snyder 2002). Finally, Esteem enhancement encompasses motivations that deal with finding ways to cope with guilt over being more fortunate than others.

Similarly, Clary and her associates (1994) identified five motivation factors that may affect intention to volunteer. They include (1) Knowledge, (2) Social Adjustment, (3) Value Expression, (4) Ego Protection, and (5) Utilitarian Concern. Four of the above five motivations, namely Knowledge, Value Expression,

Ego Protection, and Utilitarian Concern, correspond to Omoto and Snyder's (1995) Understanding, Values, Esteem Enhancement, and Personal Development motivations respectively. More recently, Clary and her associates (1998) identified a set of six motivations, which they claim to be of generic relevance to volunteerism. The set of six generic motivations includes (1) Values, (2) Understanding, (3) Social, (4) Career, (5) Protective, and (6) Enhancement.

FIVE MOTIVATIONS FOR SPORTS VOLUNTEERISM

Drawing on the various conceptual models on volunteer motivations reviewed in the preceding section, this section examines five salient motivations considered most relevant to sports volunteers: (1) Altruistic Value, (2) Personal Development, (3) Community Concern, (4) Ego Enhancement, and (5) Social Adjustment. There are two major reasons for adopting this multi-dimensional structure or conceptualization of volunteer motivations. First, previous evidence to support the unidimensional structure was rather weak. Although acknowledging the existence of multiple motives for volunteering, Cnaan and Goldberg-Glen (1991) decided on the unidimensional structure based primarily on the results of an exploratory factor analysis. In their factor analysis of 28 potential motivation items culled from extant literature, only the first factor, made up of 22 items, turned out to have acceptable level of reliability. No follow-up confirmatory factor analysis was conducted. Such an exploratory and data-driven approach is widely considered inadequate in construct validation (e.g., Churchill 1979; Nunnally and Bernstein 1994). This is evidenced by the low factor loadings (ranged from 0.309 to 0.650) and the apparent lack of face validity with some of the scale items. For instance, items measuring social motivation, such as "opportunity for relationships," were lumped together with altruistic motives, such as "it creates a better society," and egoistic motives, such as "excellent educational experience."

Second, the overwhelming majority of prior studies have suggested that motivation to volunteer is a multidimensional construct (see Cnaan and Goldberg-Glen 1991 for a comprehensive review of various motives for volunteerism). Recent studies on volunteerism (e.g., Clary et al. 1998; Omoto and Snyder 1995, 2002) have provided not only convincing arguments for developing conceptually distinct motivation dimensions, but also compelling empirical evidence in support of the multidimensional structure. Unlike most of earlier studies that relied on just content analysis and exploratory factor analysis (e.g., Morrow-Howell and Mui 1989), recent studies have incorporated new developments in structural equation modeling (Jöreskog and Sörbom 1993) and employed the state-of-the-art techniques for scale development and construct validation (Nunnally and Bernstein 1994). From the methodological point of view, recent studies are much more rigorous than most earlier studies on volunteerism. Therefore, the present research used these recent empirical studies as the point of departure to study motivations for sports volunteerism.

Altruistic Value

Volunteerism, by its very nature, is prosocial and altruistic. Altruistic value represents a person's intrinsic beliefs in helping others and contributing to society. A person with altruistic value tends to think about the welfare of other people, to feel empathy for them, and to act in a way that benefits them. Volunteering for a worthy cause provides people with an opportunity to express their humanitarian concerns and translate their deeply held values into actions. Prior research on volunteerism suggests that intention to volunteer is positively related to altruistic value and volunteers

often choose their voluntary acts without expecting a complete *quid pro quo* (Piliavin and Charng 1990; Unger 1991).

Personal Development

Personal development refers to a volunteer's desire to receive self-oriented benefits pertaining to personal growth and learning of new skills. Volunteers seeking personal development value not only the chance to gain new knowledge and experience but also the opportunity to challenge themselves and test their existing skills and abilities. The review of literature on volunteerism indicates that there are egoistic as well as altruistic motivations for volunteering (e.g., Phillips 1982; Smith 1981). Personal development represents one important aspect of egoistic motivations. Volunteerism provides people with the opportunity to learn job-related skills and allows those who are not participating in the job market to acquire or maintain employment skills. This is consistent with Becker's (1964) theory of human capital investment. Human capital investments are those activities that enhance labor market value. Such activities improve a person's skills, knowledge, and mental health.

Community Concern

Community concern reflects people's sense of obligation to and/or involvement with their communities (Omoto and Snyder 2002). At a time of shrinking government funding and rising public demand, more and more social service organizations rely on volunteers to help feed the hungry, house the homeless, and put the unemployed back to work. Community leaders are urging their members to pitch in to strengthen and improve their communities. As a community service, volunteerism is regarded as an integral part of civil society. Bonjean, Markham, and Macken (1994) found community involvement to be an important dimension of self-expression in volunteer organizations.

Ego Enhancement

Ego enhancement encompasses motivations that deal with positive strivings of the ego (Clary et al. 1998). Research on mood and helping behavior suggests that people use helping as a means of maintaining or enhancing positive feelings about themselves (e.g., Carlson, Charlin, and Miller 1988). Feeling good about oneself can be a powerful motivator of volunteerism. For example, Clary and her colleagues (1998) found ego enhancement to be significantly related to satisfaction with volunteering and intentions to volunteer. To help with the staging of the Olympic Games is a once in a lifetime experience for most people. Volunteering for an international sporting event such as the Olympic Games can thus be very exciting and would instill pride and self-esteem in sports volunteers.

Social Adjustment

Social adjustment reflects motivations regarding relationships with other people. Volunteer work is an activity in which a person can participate with his or her friends and engage in activities viewed favorably by important others (Clary et al. 1994, 1998). Past research has provided consistent evidence that people consider perceived social expectations when they form behavior intentions. Harrison (1995) found subjective norm to be positively related to intention to volunteer in a homeless shelter. Fisher and Ackerman (1998) used a social norm perspective to examine the effects of recognition and group need on volunteerism. Their experimental results showed that group members would volunteer when the group need is high and recognition is promised. Clary and her colleagues (1998) found social adjustment to be significantly related to satisfaction with volunteering and intentions to volunteer.

TABLE 1
Results of Exploratory Factor and Reliability Analyses

Measurement Item (m=scale mean; sd=standard deviation; α =Cronbach's alpha)	Rotated Factor Loading	Item to Total Correlation
(1). Altruistic Value (m=4.52; sd=1.33; α=0.82)		
I have an obligation to help others.	0.749	0.53
I volunteer because of my personal values and beliefs.	0.722	0.66
I volunteer because I enjoy helping other people.	0.686	0.68
Because I consider myself to be a person who gets involved.	0.684	0.67
(2). Personal Development (m=4.57; sd=1.46; α=0.86)		
To challenge myself and test my skills.	0.813	0.73
To learn more about other people and cultures.	0.764	0.66
To get to know people interested in the same things as I am.	0.749	0.68
To gain experience.	0.712	0.66
To share my knowledge and skills with others.	0.659	0.69
(3). Community Concern (m=5.63; sd=1.07; α=0.79)		
Volunteering does something good for the community.	0.770	0.61
Volunteers make a valuable contribution to the community.	0.732	0.58
Volunteering is a community service.	0.701	0.50
We should promote volunteerism for the good of society.	0.692	0.60
People should be willing to donate time to help others.	0.665	0.57
(4). Ego Enhancement (m=4.89; sd=1.50; α=0.79)		
I would enjoy being part of the occasion.	0.769	0.69
It would just be fun.	0.731	0.62
It would make me feel good.	0.613	0.58
(5). Social Adjustment (m=4.90; sd=1.32; α=0.80)		
People at my job/school would approve of my volunteering.	0.856	0.78
People who are close to me would support me to volunteer.	0.776	0.57
My family members would encourage me to volunteer.	0.761	0.58

METHOD

Data Collection

Data for the study were collected from people aged 18 or over who were living in the metropolitan area of Sydney, Australia. A quota sampling technique was adopted to obtain a reasonably representative sample from both males and females and across four age brackets: 18 to 34, 35 to 49, 50 to 64, and 65 or over. The data collection method involved the use of personal interviews with a self-administered questionnaire. The fieldwork was undertaken by 170 undergraduate students from a major university in Sydney as part of their course work for a marketing research subject. The questionnaire used in the survey had previously been pretested using a convenience sample of 82 Sydney residents. Several items were removed because of low reliability. A number of minor wording and layout changes were also made as a result of this process. Of the total number of 1020 questionnaires distributed for completion, 935 usable ones were obtained. The sample is balanced across gender with 49% males and 51% females.

Measure Development

All constructs of interest were measured with multiple items. These multi-item measures were developed following the recommended psychometric scale development procedures (e.g., Churchill 1979; Gerbing and Anderson 1988; Nunnally and Bernstein 1994). Based on the definitions of the constructs, items were generated from previous measures found in the relevant literature (e.g., Clary et al. 1994; Cnaan and Goldberg-Glen 1991; Harrison 1995; Omoto

and Snyder 1995) and from interviews with past volunteers. In addition to traditional assessment methods such as exploratory factor analysis, Cronbach's coefficient alpha, and item-to-total correlation, the present study assessed psychometric properties of the final measures by means of confirmatory factor analysis procedures using LISREL (Jöreskog and Sörbom 1993).

Respondents were asked to indicate their agreement on a 7-point Likert type scale (ranging from 1 being "strongly disagree" to 7 being "strongly agree") with statements regarding the five dimensions of motivations for sports volunteerism: (1) Altruistic Value, (2) Personal Development, (3) Community Concern, (4) Ego Enhancement, and (5) Social Adjustment.

RESULTS

As described in the preceding section, items derived from conceptualizations of the five proposed dimensions were first analyzed with traditional scale assessment methods. They included exploratory factor analysis (principal components with varimax rotation), Cronbach's coefficient alpha, and item-to-total correlation analyses. Through these exploratory analyses, unreliable and ambiguous items (i.e., items that loaded on multiple constructs or had low item-to-total correlations) were identified and removed during the pretest. As shown in Table 1, this process resulted in a 20-item instrument measuring the five motivational dimensions for sports volunteerism.

To help assess the dimensionality and internal consistency of the measure, the 20-item motivation scale for sports volunteerism was subjected to exploratory factor analysis and reliability analysis

TABLE 2
Results of Five-Factor Confirmatory Factor Analysis

Model Fit Statistics	
Chi-square: χ^2	773.26
Degree of freedom	160
p-value	0.000
GFI (goodness-of-fit index)	0.92
AGFI (adjusted goodness-of-fit index)	0.90
TLI (Tucker and Lewis index)	0.91
CFI (comparative fit index)	0.93
RMSEA (root mean square error of approximation)	0.06
Construct Reliability	
CR for Altruistic Value	0.82
CR for Personal Development	0.86
CR for Community Concern	0.79
CR for Ego Enhancement	0.79
CR for Social Adjustment	0.82
Average Variance Extracted	
AVE for Altruistic Value	0.53
AVE for Personal Development	0.56
AVE for Community Concern	0.45
AVE for Ego Enhancement	0.56
AVE for Social Adjustment	0.62
Maximum ϕ^2	0.49

using the data of the main study. Kaiser's rule (eigenvalue larger than one) was used to determine the number of factors to extract. The results are summarized in Table 1. Examination of the exploratory factor analysis results in Table 1 indicates that the 20-item motivation scale yielded five factors. All the items were loaded on hypothesized factors with very low cross-loadings and the factor loadings were all above 0.60. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy value was high (0.90), indicating that all the items in the motivation scale appear to be well developed. Examination of the reliability analysis results in Table 1 shows that Cronbach's coefficient alpha values ranged from 0.79 to 0.86 and the item-to-total correlations were all above the recommended value of 0.5 (Nunnally and Bernstein 1994). These results suggest that the five motivation subscales for sports volunteerism were reliable measures.

To further examine the measurement model of the motivations for sports volunteerism, the 20 motivational items were subjected to confirmatory factor analysis via LISREL (Jöreskog and Sörbom 1993). The five-factor model representing the hypothesized correlated five-dimension structure was estimated for purposes of assessing overall model fit, construct reliability, convergent validity, and discriminant validity (Gerbing and Anderson 1988). Table 2 summarizes the confirmatory factor analysis results.

As shown in Table 2, the hypothesized five-factor measurement model representing the five motivations for sports volunteerism appears to fit the data reasonably well ($\chi^2(160)=773.26$; $p<0.01$, $GFI=0.92$, $AGFI=0.90$, $TLI=0.91$, $CFI=0.93$, and $RMSEA=0.06$). Although the chi-square statistic was statistically significant ($\chi^2(160)=773.26$; $p<0.01$), this is not unusual given the large sample size in this study and the large number of items needed to measure

the five motivations for sports volunteerism (Bollen 1989). Under these circumstances, absolute fit measures such as the chi-square statistic are less useful than incremental fit measures such as the Tucker and Lewis index (TLI) and Bentler's comparative fit index (CFI). The high values of TLI and CFI as well as GFI and AGFI (0.90 or greater) and the low value of the root mean square error of approximation (RMSEA, less than 0.08) all indicate a reasonably good level of overall model fit.

To further assess the dimensionality of the 20-item scale measuring the five motivations for sports volunteerism, a series of tests of the nested models were conducted, which comprised the null model, one-factor model, two-factor model, three-factor model, four-factor model, and five-factor model. The factor loading matrix specification in LISREL for one- to five-factor models comes from the results of exploratory factor analysis using principal components extraction method and varimax rotation. Instead of using Kaiser's rule (eigenvalue larger than one) to determine the number of factors to extract, the program was told to extract one, two, three, four, and five factors, respectively. Table 3 provides the test results of the nested models.

As can be seen from Table 3, model fit improves from the null model to the five-factor model (All chi-square changes are significant, $p<0.01$). And more important, among the six measurement models tested, the five-factor model exhibits the best fit in terms of GFI, AGFI, TLI, CFI, and RMSEA. These findings thus lend further support to the five-factor structure of the 20-item motivation scale for sports volunteerism.

Evidence of internal consistency or scale reliability in confirmatory factor analysis is provided by construct reliability (CR). As shown in Table 2, CR estimates for the five motivations ranged

TABLE 3
Tests of Nested Measurement Models

Model	χ^2	df	$\Delta\chi^2$	p-value	GFI	AGFI	TLI	CFI	RMSEA
Null model	8459.45	190	n/a	N/a	0.32	0.25	n/a	n/a	0.22
1-factor	3211.69	170	5247.76	0.000	0.68	0.61	0.59	0.63	0.14
2-factor	2191.96	169	1019.73	0.000	0.78	0.72	0.73	0.76	0.11
3-factor	1482.40	167	709.56	0.000	0.84	0.79	0.82	0.84	0.09
4-factor	1097.54	164	384.86	0.000	0.89	0.86	0.87	0.89	0.08
5-factor	773.26	160	324.28	0.000	0.92	0.90	0.91	0.93	0.06

from 0.79 to 0.86. Consistent with those of Cronbach's coefficient alpha reported earlier, these results suggest that the five motivation subscales for sports volunteerism possess adequate reliabilities.

After assessing dimensionality and reliability, convergent validity and discriminant validity are examined. Two approaches were used to assess convergent validity. The first one recommended by Anderson and Gerbing (1988) is to examine whether factor loading for each indicator is statistically significant. Since t-test shows that factor loadings for all the indicators were highly significant ($p < 0.001$), the motivation scale for sports volunteerism appear to have convergent validity. Fornell and Larcker (1981) proposed a more stringent test of convergent validity. Their approach calls for the calculation of a statistic known as average variance extracted (AVE). AVE estimates of 0.5 or above indicate convergent validity. As shown in Table 2, AVE estimates for all the dimensions were above 0.5, with the exception of community concern, whose AVE estimate was 0.45, slightly lower than the recommended cut-off value of 0.5. These results indicate that the motivation scale for sports volunteerism exhibited reasonably adequate convergent validity.

There are also two approaches that can be used to assess discriminant validity. The first approach was proposed by Anderson and Gerbing (1988). They suggested that discriminant validity should be assessed by chi-square differences test through putting equality constraints, one at a time, in the factor variance-covariance matrix. In the current study, discriminant validity is established if the chi-square fit of the five-factor model is better than the fit of all possible combinations of four-factor models. In all of the ten necessary comparisons, the overall fit of the model was significantly diminished by constraining the factor correlation to unity. The chi-square difference values ranged from 312.91 to 1100.94, far above the critical value of 18.47 ($df=4$) at the significance level of 0.001. These results thus indicate discriminant validity for the five-factor measurement model.

Fornell and Larcker (1981) described an alternative approach to the assessment of discriminant validity. According to them, for any pair of constructs to demonstrate discriminant validity, the average variance extracted (AVE) for each construct should be greater than the squared factor structural coefficient (ϕ^2 derived from LISREL) between the pair. The squared structural coefficients ranged from 0.09 to 0.49. As shown in Table 2, all the AVE estimates were greater than the squared structural coefficients, indicating again that the motivation scale for sports volunteerism seemed to have adequate discriminant validity.

Overall, the findings reported so far have provided reasonably strong evidence in support of the five-dimension structure, reliability, convergent validity, and discriminant validity associated with the 20-item motivation scale for sports volunteerism.

DISCUSSION AND CONCLUSIONS

Every day around the world, countless volunteers from all walks of life share their time, skill, and energy to help those in need. Given the growing emphasis on volunteerism in both nonprofit and business organizations, it is important to understand and assess the motivations underlying volunteerism. By identifying such motivations, volunteer organizations can design effective programs to recruit prospective volunteers and retain their existing volunteer labor force. However, a review of the extant literature indicates that very few studies have systematically evaluated the factors that motivate people to participate in volunteer programs. Lack of reliable and valid scales to measure motivations for volunteerism appears to be one major reason for the relative paucity of rigorous empirical research on volunteerism.

This research represents one of only a few empirical examinations of the motivational dimensionality underlying sports volunteerism. It offers a conceptualization and a multi-item measure of motivations for sports volunteerism. Drawing mainly on recent conceptual models on volunteer motivations (e.g., Clary et al. 1998; Omoto and Snyder 1995, 2002), the present research proposes that motivation to volunteer in major sporting events is a multidimensional construct that comprises five distinct components, namely (1) Altruistic Value, (2) Personal Development, (3) Community Concern, (4) Ego Enhancement, and (5) Social Adjustment. Results of confirmatory factor analysis via LISREL provided support for the overall measurement model, reliability, convergent validity, and discriminant validity associated with the scale for sports volunteerism.

Results of the study highlight the need for researchers to examine measures of motivations for volunteerism in a more rigorous manner. Structural equation modeling, as demonstrated in the current research, provides an appropriate way of assessing multi-item measurement scales. This research offers a point of departure for future research on sports volunteerism. Further refinements in both conceptualization and measurement are both possible and desirable. Although the current research has developed a multidimensional scale to measure motivations for sports volunteering, many of the items are general in nature and could be adapted to measure motivations for volunteering in other domains. Researchers in the future could also examine the structural relationships among motivations for volunteerism, their antecedents, and outcomes in various research settings.

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