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MARKETING MILITARY SERVICE: BENEFITS SEGMENTATION BASED ON GENERALIZED AND RESTRICTED EXCHANGE¹

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Abstract

Willingness to engage in exchange is based on desired benefits. In typical commercial transactions, restricted exchange benefits dominate. However, public policy, social marketing situations might require consideration of both restricted and generalized exchange benefits. Applying factor analysis, cluster analysis and cross-tabulation, this paper reports research that has successfully segmented a young adult target market regarding interest in military service based on considerations of generalized and restricted exchange motivations. This research contributes to a growing body of literature on generalized exchange as a key conceptual element for social marketing. Results demonstrate the utility of the generalized exchange concept in identifying a market segment distinguished by strong interest in military service and positive perceptions on several key generalized exchange factors.

Introduction

In recent years, a growing body of literature has begun to emerge regarding the concept of generalized exchange and generalized exchange benefits as useful tools in public policy and social marketing. Social marketing involves influencing voluntary behavior of people towards a broad social end by offering or demonstrating benefits to be received as a result of desired behaviors (Bagozzi 1975, Kotler and Andreasen 1991). Social marketing presents a dilemma to marketers in that marketers typically focus on an exchange model that emphasizes self-interest, whereas social marketing programs often address situations in which individuals are asked to act in the interest of others or the broader social group (Bendapudi, Singh and Bendapudi 1996). Altruism and the needs of others are common themes, but these may be seen as lacking an exchange orientation, a fundamental principle of marketing. Generalized exchange, as a social marketing concept, offers an alternative to appeals based on altruism and other's need.

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Generalized exchange firmly roots social marketing efforts in a marketing exchange context by emphasizing indirect exchange benefits desired by target markets rather than altruistic orientations or direct reciprocal exchange benefits. In so doing, generalized exchange ties individual self-interest to the interest of the social group. Previous examples of applications of generalized exchange to social marketing include tax support for public education and social welfare systems (Bagozzi 1975, Marshall 1998). These are discussed further below. While cognizant of Hutton's (2001) concerns over the expansion of the field of marketing, the current research follows a long tradition in which a marketing exchange perspective is applied to encouraging voluntary behaviors in which two or more entities transfer values to mutual benefit (Houston and Gassenheimer 1987, Bagozzi 1975).

The current project applies the social marketing concept of "generalized exchange" to the recruitment of personnel into the all-volunteer military. Although to many, pure volunteerism would not involve pay or other restricted exchange benefits, we follow social convention here by referring to today's military in the United States as "all-volunteer." Given the commitment and sacrifices involved in modern military service, it would be unrealistic to expect the military to depend only on persons who would serve without pay or related benefits. Still, such pay and benefits clearly separate today's United States military personnel from the theoretical "ideal type" of unpaid volunteer helping behavior such as discussed by Bendapudi, Singh and Bendapudi (1996). Moreover, in this paper we explore the extent to which interest in joining a military service is associated with a community service orientation in comparison to financial and other types of restricted exchange benefits. However, we do not depend on altruism as a motivator as might the pure volunteerism concept. Instead, we consider the possibility of a

linkage of community interest and self-interest as a motivator for military service.

We have set as our objective the determination of whether perceptions of generalized exchange and restricted exchange benefits can be useful dimensions for segmenting the target market of young adults into clusters with clearly different levels of interest in military service. Military recruitment as social marketing (Kotler and Andreasen, 1991) is a particularly useful test of the generalized exchange concept because military service requires an extensive time commitment and demanding, often dangerous, service to society. The current research is based on data from 600 respondents to a national telephone survey carried out in the Summer of 2001 among young adults eighteen to twenty-four years of age who were non-institutionalized, unmarried and without their own children living in their home. In this paper, we first review prior research into interest in military service among young people and research into the field of public service motivations. We then review research and theoretical foundations of the concept of generalized exchange and distinguish it from restricted exchange. Last, factor analysis, cluster analysis and cross-tabulations are applied to assess the utility of joint consideration of generalized and restricted exchange factors for identifying and targeting market segments for military recruitment.

Prior Research

Three substantive avenues of prior research relate to this project: propensity of youth for military service, public service motivations, and generalized exchange. The *first*, the field of propensity of youth to serve in the military, is largely demographic in nature and reports on trends among high school students regarding interest in serving in the military, and the demographic characteristics of military enlistees following high school. This work has

largely developed from the "*Monitoring the Future*" (MtF) project (Segal et al., 1999; Segal et al., 1998, Segal, 1986; Bachman et al., 1998) and the "*High School and Beyond*" (HSB) studies (Teachman and Call, 1993) sponsored by the United States Department of Defense. These studies have involved frequent surveys of high school students since 1975 regarding interest in military service. Findings indicate substantial variation across major demographic groups and over time, but such factors as parents' lower socioeconomic background and education, lower student grade point averages, rural versus urban locations, Southern United States origin, and lack of college education aspirations tend to be associated with propensity for military service. While the demographic patterns associated with interest in and actual military service are interesting and might imply underlying socioeconomic motivations, this largely demographic research does not document underlying motivations for military service that might aid development of recruitment programs to help recruiters target potentially highly motivated candidates. The current project addresses this gap.

The *second* line of research, public service motivations (PSM), has not explicitly addressed military service. However, its emphasis on citizenship and the relationship between the individual and contributions to the larger society can be informative as to potential motivations and attitudes that might underlie propensity toward military service and commitment to completion of terms of duty. This work is represented by Perry (Perry and Wise 1990, Perry 1996, 1997), Houston (2000), Crewson (1997), Wittmer (1991), Frederickson and Hart (1985), Kelman (1987), Buchanan (1975), and Rainey (1982). In general, these researchers have demonstrated differences in motivations of public service employees and managers as compared to private, for-profit organizations' employees and

managers. In large part, public service employees are reported to be more motivated by contributing to the common social good and by a sense of duty, than are private, for-profit sector employees. Public sector employees are reported to place higher values on intrinsic job rewards, helping others, and performing work worthwhile to society, while being less money, prestige and status oriented. However, this line of research also recognizes that both intrinsic and extrinsic rewards (including financial rewards) must be present and balanced to provide an effective motivational system. This holds an important implication for application of the concept of generalized exchange, as it suggests that effective social marketing programs may need to promote a wide range of benefits that go beyond immediate utilitarian self-interest.

The *third* line of research, generalized exchange, has been addressed by sociological, anthropological, and marketing researchers (Bearman, 1997; Marshall 1998, 1999; Takahashi 2000). Generalized exchange was first introduced into the sociology and anthropology literature by Levi-Strauss (1969) and subsequently reviewed as an element of sociological exchange theory by Ekeh (1974). In 1975, the generalized exchange concept was introduced into the marketing literature by Bagozzi who offered it as a central social marketing concept and illustrated it with a theoretical analysis of taxpayer support for a social welfare system for the needy. In the nineties, Marshall (1998, 1999) elaborated the concept of generalized exchange and applied it to voter support for taxation and volunteerism in support of public schools.

Bagozzi (1975) contrasted generalized exchange with two other types of exchange, restricted exchange and complex exchange. Restricted exchange involves the direct reciprocal transfer of values between two parties. The partners in restricted exchange receive desired benefits directly, although actual receipt of the benefit (e.g. retirement benefits) may be

delayed to a future delivery date. Restricted exchange is the usual form of exchange studied by marketers. An example would be a typical sales situation in which, for example, a person provides money in exchange for a house, a car or groceries. Complex exchange involves a sequence of restricted exchanges such as characterize sales distribution channels involving a manufacturer, a retailer and a final customer. The baker sells a loaf of bread to a store owner for a dollar, and the store owner then sells the bread to a customer for two dollars. This chain may be extended to include any number of transfers, but each is a direct, reciprocal transfer characteristic of restricted exchange.

Generalized exchange is fundamentally different from restricted and complex exchange in that the exchange process, as described by Bagozzi in 1975 and Marshall in 1998, involves a system of indirect, univocal exchanges. In generalized exchange, an individual contributes a value to a social system without the expectation of a direct, reciprocal return benefit, but with the expectation of an overall improvement in the state of the system, that will eventually yield an indirect benefit to the contributing individual as a member of the system. Through generalized exchange, the individual ties his own self-interest to the interest of the larger society.

As presented by both Bagozzi (1975) and Marshall (1998), the concept of generalized exchange suggests that, within a social marketing context, individuals may be motivated to desired behavior as a result of awareness of the broad community benefits of their behavior, and awareness that they will benefit personally (including benefits to loved ones) should the broad community benefits occur. The concept of generalized exchange is distinguished from altruistic appeals. Altruism refers to a situation in which an individual acts without expectation of a benefit

to himself or herself. In contrast, in the case of generalized exchange, the individual recognizes that he or she will benefit as a member of the society from the community benefits that result from his or her behavior.

Generalized exchange and restricted exchange rewards may be complementary. In Bagozzi's view (1975), restricted and generalized exchange may involve utilitarian rewards (monetary or barter goods, or even overt behavior or labor may be provided in the current author's view) and symbolic rewards. Symbolic rewards are psychological and social intangibles that carry meaning, such as status or prestige, and may be independent of or attached to tangible goods (Levy 1959). While both utilitarian and symbolic rewards may result from either generalized or restricted exchange, symbolic rewards such as social prestige, identity with community, and pride in conformity to social norms, may be more frequently characteristic of generalized exchange. Generalized exchange benefits are linked to community well being. Restricted exchange rewards are received directly from the specific exchange partner and do not depend on the broad social impact of the individual's exchange behavior. However, utilitarian and symbolic rewards may derive from either type of exchange.

Generalized Exchange and Military Recruitment

Social exchange theory essentially posits that successful exchanges involve transfers of values among two or more parties, such that each party feels that he or she has obtained something of equal or greater value than that which was given up, and that the exchange was entered into voluntarily (Houston and Gassenheimer 1987). Values that are transferred may be monetary, objects with utilitarian functions, services, or symbolic values (Bagozzi 1975, Levy 1959). Voluntary willingness to enter into exchange requires that each party see the

exchange as beneficial in terms of self-interest. These criteria fit the case of recruitment and retention of enlistees into the all-volunteer military. Potential recruits are asked to provide extensive time and dedication to the military mission, and are asked to voluntarily give up extensive personal freedom. In return, the military organization offers a variety of rewards including monetary benefits, job training, medical care, team membership, close friendships and contributions to the larger society.

The concept of "generalized exchange" is particularly appropriate as a social and marketing concept applicable to military recruitment. A society's military organizations logically exist to benefit the society by providing protection and security. Presumably, the security that results from adequate military protection allows other transactions and activities occurring within the social system to be carried out with greater confidence, thus improving the state of the system and the quality of life of its members. As government-based organizations, military services might be well positioned by appealing to "generalized exchange" perceptions and values that tie the individual's well being to the state of the social system (i.e. the contributions the organization makes to society).

The current study provides an opportunity to assess generalized and restricted exchange motivations for enlistment in the United States military. The United States military recruits some 55,000 Americans per year to join its active duty ranks (United States Navy, 1998). However, for the past decade, some military recruiters have struggled to meet their annual recruitment goals (Ryan, 2001). Researchers have attributed these difficulties to ambiguity about military missions (Segal et al., 1999), less job security provided by the military, as evidenced by the 1980's military downsizing (Barley, 1998; Segal, 1986), a lack

of patriotism (Faris, 1995), and disingenuous military advertising (Shyles and Hocking, 1990). Moreover, the current military situation in the Middle East might either stimulate patriotic movements, and so facilitate recruitment, or produce an anti-military backlash that would impede recruitment. In addition, the broader implications of research into generalized exchange for social marketing programs must not be overlooked. By linking the individual to the broader society through univocal exchange benefits rather than altruism, generalized exchange, if viable, ties self-interest to community interest and so can broaden the appeal of social marketing programs to audiences whose immediate and reciprocal benefit interests might not be adequate motivations. In so doing, generalized exchange can, potentially, enhance social cohesion.

The present research proposes that an individual's propensity for military service can be explained within a combined generalized exchange and restricted exchange paradigm. In this paradigm, young adults' interest in joining the military will be influenced by their perceptions of benefits that derive from military service both for themselves and for the larger community. As the society seeks labor (behavior) and long-term psychological and social commitment from the individual, a social marketing challenge is presented. When a strong military is perceived to benefit society in a way that enhances the quality of life of all members of the society, the potential for generalized exchange is present. To the extent that military service may offer direct benefits to the individual in the form of money, prestige, lifestyle or job training (as examples), potential restricted exchange benefits are present. The question then becomes whether market segments related to interest in military service could be defined on the basis of perceptions related to generalized and restricted exchange benefits.

Generalized and Restricted Exchange Motivators

The current project investigates whether the concepts of generalized and restricted exchange can be used to segment young adults in the United States into distinguishable clusters that are related to interest in military service. This research has importance to social marketing theory in that the generalized exchange concept is a potentially powerful social marketing tool that (1) ties the interests of the individual to the larger society, (2) is independent of the more elusive notion of altruism that does not incorporate transference of values, and (3) may complement restricted exchange benefit appeals. As such, it is appropriate to attempt to define clusters based on configurations of generalized exchange and restricted exchange factors. This work is rooted in marketing (Gundlach, et al. 1995; Houston and Gassenheimer 1987; Bagozzi 1975), sociology and social-psychology exchange theory (Blau 1994, 1964; Ekeh 1974; Homans 1974), and theories of public service motivations (Raadschelders 1995; Crewson, 1997; Houston 2000). Should "interest in military service" clusters be identified that incorporate high levels of both generalized and restricted exchange motivators, the argument that restricted and generalized exchange factors are potentially complementary would be supported. If this is the case, recommendations could be made to incorporate appeals to both types of motivators together in social marketing programs. By the same token, clusters might be discovered that emphasize one or the other of these factors. Should this be the case, this too would be an opportunity to provide recommendations to enhance social marketing campaigns.

The Marshall generalized exchange model (1998, 1999), developed and applied in

regard to the generation of support for public schools, incorporates four factors related to willingness to engage in generalized exchange: 1) perceptions of broad community benefits; 2) perceptions of the effectiveness of the organization's performance; 3) perceptions of a social responsibility ethic; and 4) perceptions of equity in the sense of equal participation by all members of society. Perceptions of community benefits as generalized exchange motivators are stressed in the Marshall model because they represent indirect benefits that the individual desires and believes can result from his or her contribution to improving the state of the community or society. Performance perceptions are included based on expectancy theory. Perceptions that the organization performs effectively reflect the expectation that the organization is able to succeed in its mission and therefore that the desired improvements in the state of the society will result.

The original Marshall model also included perceptions of a social responsibility ethic because group norms may exist that encourage or mandate behavior in support of the organization (Takahashi 2000). Alternatively, group norms might not exist to support the organization or might operate to actively discourage participation in the organization. The issue of group norms addresses in part what Takahashi (2000) refers to as the risk of "unilateral resource giving," "an invitation to exploitation," and the "free rider problem" (p. 1107). Takahashi addresses this issue on theoretical grounds by postulating the possibility of a collective norm of reciprocity - the universal reciprocity principle. This principle is represented by perceptions of a social responsibility ethic calling for military service by all qualified citizens, although law does not require such service. This potential factor is incorporated by inclusion of "perceptions of a social responsibility ethic" as a group norm as

noted above.

Perceptions of equity were also included in the original Marshall model and are included in the current model because resistance to participation may result if an individual feels that more is demanded of him or her than of others. Takahashi addresses this in the context of "fairness-based selective giving in pure generalized exchange" (2000, p. 1113). This also addresses the "free-rider" problem in that including equity perceptions in the model allows assessment of the degree to which subjects perceive that inequitable situations exist in regard to military service. To the extent to which equity is perceived, individuals may be more willing to engage in generalized exchange out of a sense of fairness because perceptions of equity may reinforce perceptions of a social responsibility ethic. However, if military service is seen as inequitably distributed through the society, such perceptions may undermine the social responsibility ethic and reduce interest in serving.

Methodology

The data for this project were gathered through a national telephone interview survey of 300 male and 300 female young adults between 18 and 24 years of age who were not married, did not have children living at home, lived in the continental United States, and had not enlisted in or been rejected by the military. Data were collected in June and July of 2001. Initially efforts were made to limit the study to persons age 18 to 20 and not enrolled in a four-year college. After approximately 150 respondents were interviewed, the sample frame was expanded to include persons through age 24 and persons enrolled in four-year colleges because locating such respondents was found to be too expensive.

Fixed list calling was carried out with a sample of 24,000 names and phone numbers

from throughout the continental United States. Fact-Finders, Inc. of St. Louis carried out the telephone interviews and recorded the data in SPSS system files. Calls were placed in random order. The purchased list was to provide names and phone numbers of young adults up to age 24. A total of 25,025 call attempts were made and 6,983 individuals were contacted. The overall response rate was 63.7% (persons contacted agreeing to be interviewed), the overall disqualification rate was 93.1% (interviewed but disqualified due to screening criteria - primarily age and during the preliminary stage due to four-year college attendance), and the completion rate was 93.2% of those qualified. These approaches to assessing response rates correspond to American Association for Public Opinion Research (2000) recommendations.

Operationalization of Key Concepts

Three categories of variables were used in this study: interest in military service, restricted exchange motivators drawn from current military recruitment campaigns, and the components of generalized exchange drawn from the Marshall model (1998, 1999). All respondents provided data for all variables used in this report.

Interest in Military Service. One item was used in this study to indicate the main outcome variable – Interest in Military Service. The fourth question asked "At this time, how interested are you in enlisting in the United States Military? Would you be ____?" Options read included "Not at all interested" coded "1," "Somewhat disinterested" coded "2," "Neither interested nor disinterested" coded 3," "Somewhat interested," coded "4," and "Very interested," coded "5." Volunteered "Don't know" responses were coded as "3" as these were deemed to

reflect a neutral orientation. For purposes of this study, responses were recoded into "No Interest" (codes 1, 2, 3) and "Some or Very Much Interest" (codes 4 and 5).

Potential Restricted Exchange Benefits. During the exploratory phase of the research and in the process of developing the questionnaire, the members of the study team visited recruiting offices, reviewed recruiting materials, and informally spoke with recruiters in person and via telephone, in order to identify key restricted exchange benefits of military enlistment that were stressed in recruitment campaigns and appeals. The intention was to identify benefits of military service that were promoted in then-current recruitment campaigns so that the appropriateness of these to target markets of young adults could be assessed. Such benefits are, in effect, promises held out by the military to young adults with the intention of motivating potential recruits.

Because the intention was to assess the relevance of currently promoted benefits, the list is not offered as inclusive of all possible benefits that might be of interest to young adults. Many important restricted exchange motivators may be overlooked by United States Military campaigns and would not, therefore, have been considered in this research project. This is an important limitation of this study. Nonetheless, based on the research team's reviews of recruitment materials, visits to recruitment offices, and discussions with military recruiters, the benefits considered here substantially reflect the range of restricted exchange benefits promoted by the United States Military.

While many themes emerged in the exploratory phase of the research, the themes identified were reduced to thirteen key benefits that fit the situation of restricted exchange. These benefits are reported in Table 1. Further validation of the range of items was obtained from an open-ended question that asked respondents expressing that they were "somewhat" or

"very" interested in enlistment to give reasons underlying their interest. These responses were compared with the restricted exchange benefits listed and considerable overlap was observed, particularly in regard to the most frequently mentioned open-ended items that relate to discipline, travel, career training, pay, life experience (a possible reference to adventure), military image (a possible reference to social respect and prestige), and health benefits. However, the open-ended responses also revealed some potentially important restricted exchange benefits not explicitly included in this study such as pay for schooling, physical fitness, life experience, and a friend in the military.

The thirteen restricted exchange benefits items were incorporated as structured, importance ratings questions in the twenty-minute telephone interview. During the telephone interview, the respondent was asked, "*Now I'm going to read a few reasons people might give for enlisting. For each, tell me if that reason would be very important, somewhat important, neither important nor unimportant, somewhat unimportant, or not at all important if you were to enlist in the U.S. military?*" The benefits were then read with random rotation to prevent order bias. In the current analyses, responses were coded "1" for "Not Important," "2" "Somewhat Unimportant," "3" "Neither" (interpreted in these analysis as a neutral response, "4" "Somewhat Important," and "5" for "Very Important."

Generalized Exchange Items. The four components of the Marshall generalized exchange model were represented in the interview by 16 items. "Perceptions of Community Benefits" was represented by items V14 through V19. Items V20 through V22 in Table 1 represented "Perceptions of a Social Responsibility Ethic." Items V23 through V26 represented "Perceptions of Performance." Items V27 through V29 represented "Perceptions of Social

Equity." Each of the items in these scales were coded on a five point Likert scale with 1 for strongly disagree, 2 for disagree, 3 for don't know or neutral, 4 for agree, and 5 for strongly agree. These items are presented in Table 1.

Statistical Analyses and Findings

The analyses reported here proceeded through four phases: factor analysis, cluster analysis, analysis of variance, and cluster membership. In the first phase, factor analysis of twenty-nine restricted and generalized exchange items was carried out to select items for specific generalized and restricted exchange scales (see Table 1). The Varimax and Principal Components methods were used. Based on the factor analyses, three items were excluded either because they loaded .4 or above on more than one factor, or because they did not load .4 or above on any factor. These items are noted in Table 1. As indicated in Table 1, the remaining twenty-six items were assigned to scales based on the factor on which each item loaded .4 or higher. All factors had eigenvalues greater than 1.0 (Hair 1998). These scales were then assessed using Crombach's Alpha reliability coefficients. All Alphas were greater than 0.60, indicating that the scales are reliable (SOURCE).

Overall, the generalized exchange items loaded as anticipated for the four dimensions of the Marshall generalized exchange model, and the restricted exchange items generated two factors reflecting social rewards and financial rewards.

In the second phase, two-stage cluster analysis was used to develop groups of respondents distinguished by their generalized and restricted exchange scale scores (see Table 2). In the two-stage procedure, the Ward's method was first used to identify the number of clusters and initial cluster centroids. Cluster solutions using from two to nine clusters were examined and

a five-cluster solution was chosen as best because it provided the largest number of clusters without producing any cluster with fewer than thirty respondents. The SPSS K-means Cluster procedure was then applied, specifying five clusters and using the scale centroids from the Ward's five-cluster solution as input to the K-means Cluster procedure. The resulting five-cluster solution was used to assign respondents to clusters.

Table 2 shows the scale centroids for the five identified clusters. Using these centroids, the clusters were ranked and identified as being high, medium, or low on each scale (see Table 3). The clusters were highly similar on the four generalized exchange scales and highly similar on the two restricted exchange scales. Based on these similarities, the clusters were assigned labels indicating their standings on generalized and restricted exchange: Cluster 1 High Generalized Exchange and High Restricted Exchange, Cluster 2 Medium Generalized Exchange and Low Restricted Exchange, Cluster 3 Low Generalized Exchange and High Restricted Exchange, Cluster 4 Medium Generalized Exchange and Medium Restricted Exchange, and Cluster 5 Low Generalized Exchange and Low Restricted Exchange. The groups appeared to each be distinct from the others.

In the third phase, the differences between the final clusters was tested using analysis of variance on the centroids (means) of the six generalized and restricted exchange scales (see Table 4). Each cluster differed from every other cluster on at least two of the scales. Cluster 1 differed significantly from all clusters on generalized exchange and all but Cluster 3 on restricted exchange. Cluster 2 differed significantly from Clusters 1 and 5 on generalized exchange and from all clusters on restricted exchange. Cluster 3 differed significantly from Cluster 1 on generalized exchange and from clusters 2, 4, and 5 on restricted exchange. Cluster 4 differed

significantly from Clusters 1 and 5 on generalized exchange and from Clusters 1, 2, and 3 on restricted exchange. Cluster 5 differed significantly from Clusters 1, 2, and 4 on generalized exchange and from Clusters 1, 2, and 3 on restricted exchange.

In the fourth phase with the distinctiveness of the clusters verified, cluster membership was cross-tabulated with "interest in military service" (using three levels of interest with 1=some or very much, 2=don't know or neutral, and 3=very little or not at all) to assess whether the final clusters are distinguished by substantial differences in interest in military service (see Table 5). Results of this cross-tabulation determine whether the generalized and restricted exchange concepts developed here are useful for identifying benefit segments for military recruitment campaigns, and, by extension, social marketing campaigns. Chi square analysis indicated that the clusters differed significantly in the proportion indicating interest in military service (Chi-square = 43.08, $p < .0001$). The highest degree of interest in military service was indicated by members of Cluster 1, followed by members of Cluster 3. Both of these clusters had high scores on restricted exchange; Cluster 1 was also high on generalized exchange. The clusters that showed the least interest in military service (2, 4, and 5) rated at most medium on either type of exchange.

Study Limitations

The primary limitation of this study is that the final sample under-represented racial and ethnic minorities. This is not unusual in telephone interview projects (Adams-Esquivel and Lang 1987, Keeter, 1995, Marin, Vanoss and Perez-Stable 1990, Smith 1990), but it is unfortunate in regard to African-Americans, given this group's historical patterns of high propensity for and

actual service in the United States Military. African-Americans represented only 6.2 percent of the final sample.

A second limitation is the small proportion of persons who expressed high interest in military service. However, since these estimates are in line with data from the HSB and MtM studies, this may be less of a limitation and more of a reflection of the representativeness of the sample. A third possible limitation is the limited range of restricted exchange benefits considered. While the open-ended item discussed earlier helps to validate the items that were used, other potentially important items may have been excluded. Future studies might expand the range of benefits presented.

Discussion and Recommendations

The present research proposed that an individual's propensity for military service can be explained within a combined generalized exchange and restricted exchange paradigm. The results support this proposal. First, factor analysis supported the four dimensions of generalized exchange postulated by Marshall (1998) and two concepts of restricted exchange reflecting social rewards and financial rewards. Second, cluster analysis determined five market segments based upon the six dimensions of generalized exchange and restricted exchange. These segments are distinct from each other based upon the generalized exchange and restricted exchange concepts. Third, these segments differ on their interest in military service.

The segment that exhibited the highest percentage of interest in military service scored high levels on both the generalized exchange and the restricted exchange dimensions. The segment with the second highest percentage of interest in military service was high on the restricted exchange dimension, but low on the generalized exchange dimension. The other three

segments were not high on either dimension and did not show a high percent of interest in military service. These results support the argument that restricted and generalized exchange factors are potentially complementary.

In more general terms, the findings of this report provide support for the utility of the concept of generalized exchange, particularly in light of the fact that this research has applied the generalized exchange concept to a very different social marketing issue than has been considered previously. While the current study is not definitive, promising target market segments have been identified and distinguished using components of the Marshall generalized exchange model and generalized exchange benefits. In addition, the proposition that social marketing programs may benefit from joint consideration of both generalized and restricted exchange factors has also been supported in that the segment with the highest interest in military service exhibited high scores on generalized exchange factors and on restricted exchange financial rewards.

On practical grounds, it is recommended that military recruitment campaigns give greater emphasis to the contributions that enlistees make to the larger society, while continuing to make clear the restricted exchange benefits that the enlistee obtains. Linking community interest and self-interest may yield highly effective social marketing programs. Current efforts to recruit young people into the military have stressed only the restricted exchange benefits. These efforts are likely to have attracted the members of the cluster with the second highest level of interest in the military, but less likely to have attracted the members of the cluster that is most interested in such service. The former cluster represented only 13.0 percent of the sample, compared to 38.8 percent in the latter cluster. Thus, the efforts of the military to attract recruits may have been falling far short of the potential by ignoring the concepts of generalized exchange.

The broad utility of the concept of generalized exchange must also be acknowledged. At this point, generalized exchange has been applied with some success to both public education and to military recruitment. Thus, evidence mounts that the utility of the concept as a social marketing tool can be extended to many different social issues. While further work is needed regarding operationalization of core concepts and to demonstrate external validity, it does not seem too early to suggest that new research projects explore the application of this concept to such diverse social marketing fields as ecology, charitable giving, volunteerism, and public health and safety.

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Table 1: Item Labels and Rotated Factor Loadings for Restricted and Generalized Exchange Factors¹.

Scale	Items ²	Community Benefits	Social Resp. Ethic	Military Perform.	Social Equity	Social Rewards	Financial Security
Community Benefits	Military protects freedom of Americans	.69670					
	America is safer because of the US military	.72257					
	US is more stable society because of the US military	.66222					
	Americans have a better life because of the US military	.73979					
	We should be proud of the contribution the US military makes to our society.	.64443					
	National defense is important to the well being of American citizens.	.74601					
Social Responsibility	Although not required by law, it is the civic duty of all citizens to serve in the military		.79153				
	Military service is an important way of paying society back		.68234				
	Military service is an important obligation of citizenship		.72093				
Military Performance	Our military forces do their job very well			.66941			
	The United States Military is well run			.73203			
	The United States Navy is a well run organization			.75223			
Social Equity	Americans from all walks of life				.71486		

	contribute to the US Military.						
	The burdens of military defense are carried out fairly by all Americans				.62546		
	Military service is appropriately shared by all groups in America				.75579		
Social Rewards	Importance of job training					.62305	
	Importance of belonging to team					.70852	
	Importance of adventure					.69940	
	Importance of life-long friendships					.62181	
	Importance of social respect-prestige					.63962	
	Importance of a disciplined lifestyle					.52797	
	Importance of travel					.60946	
Financial Rewards	Importance of pay						.68834
	Importance of twenty year retirement						.73200
	Importance of VA home loans						.60327
	Importance of guaranteed medical care						.61449
Alpha		.8325	.7721	.7562	.6034	.7958	.6804
Excluded Items	Importance of duty station					.45187	.44900
	The United States Military is an effective fighting force	.51603		.45327			
	Importance of combat/firearms training						
	Factor Eigenvalues	6.77819	1.39556	1.18329	1.09352	3.64377	1.60178
	Percent of Variance	23.4	4.8	4.1	3.8	12.6	5.5

¹Only rotated factor loadings above .4 are reported. Principal Components Extraction and Varimax Rotation were used. Generalized exchange (community benefits, military performance, social equity and social responsibility) scales' items coded as 1=strongly disagree, 2=disagree, 3=don't know/neutral, 4=agree, 5=strongly agree. Restricted exchange (social rewards and financial rewards) scales' items importance items coded "1" for "not important," "2" "somewhat unimportant," "3" "neither" (interpreted in these analysis as a neutral

response, "4" "somewhat important," and "5" for "very important."

Table 2: Cluster Analysis – Cluster Labels, N's and Scale Centroids.

Cluster	Scale Centroids for Final Clusters ¹						N (%)
	Community Benefits	Military Performance	Social Equity	Social Responsibility Ethic	Social Rewards	Financial Rewards	
1	25.75	12.10	11.30	10.20	31.38	18.10	233 (38.8)
2	23.78	10.67	10.22	8.02	14.72	10.98	54 (9.00)
3	18.58	9.78	9.19	7.85	31.31	17.26	78 (13.0)
4	24.78	11.07	10.26	8.63	24.78	15.40	167 (27.8)
5	17.56	9.21	8.72	5.85	20.87	14.34	68 (11.3)
Overall Mean	23.44	11.06	10.35	8.77	26.98	16.17	600 (100)
# of Items	6	5	3	3	7	4	

¹Scales created by summing the raw scores of the items selected by the factor analyses results reported in Table 1.

Table 4: Significant Cluster Centroid Differences¹.

Scale Centroid	Clusters				
	1	2	3	4	5
Community Benefits	2,3,4,5	1,3,5	1,2,4	1,3,5	1,2,4
Military Performance	2,3,4,5	1,3,5	1,2,4	1,3,5	1,2,4
Social Equity	2,3,4,5	1,3,5	1,2,4	1,3,5	1,2,4
Social Responsibility Ethic	2,3,4,5	1,5	1,5	1,5	1,2,3,4
Generalized Exchange	2,3,4,5	1,5	1	1,5	1,2,4
Social Rewards	2,4,5	1,3,4,5	2,4,5	1,2,3,5	1,2,3,4
Financial Rewards	2,4,5	1,3,4,5	2,4,5	1,2,3	1,2,3
Restricted Exchange	2,4,5	1,3,4,5	2,4,5	1,2,3	1,2,3

¹ANOVA revealed significant differences across clusters for all five scales. Numbers in cells represent clusters for which centroids for the corresponding scale were statistically significantly different from the cluster corresponding to the column based on the Tukey true difference multiple comparisons test, $P < .05$.

Table 3: Cluster Centroid Ranks¹.

Cluster Id Number	Centroid Ranks and Comparisons (1=Lowest, 5=Highest)					
	Community Benefits	Military Performance	Social Equity	Social Responsibility Ethic	Social Rewards	Financial Rewards
1	5 High	5 High	5 High	5 High	5 High	5 High
2	3 Medium	3 Medium	3 Medium	3 Medium	1 Low	1 Low
3	2 Low	2 Low	2 Low	2 Medium	4 High	4 High
4	4 Medium	4 Medium	4 Medium	4 Medium	3 Medium	3 Low Medium
5	1 Low	1 Low	1 Low	1 Low	2 Low Medium	2 Low Medium

¹Where centroid values for adjacent ranks were not statistically significantly different (Table 3), ranks considered to be tied and were assigned the same labels.

Table 5: Cluster Labels and Descriptions.

Cluster Number	Rank on Interest in Military Service ¹	% Interest in Military Service	Generalized Exchange	Restricted Exchange
1	5	26.6	High	High
2	1	5.6	Medium	Low
3	4	15.4	Low	High
4	3	6.0	Medium	Medium
5	2	5.9	Low	Low

¹Interest in military service ranks are arranged with 1= low and 5 =high. Percentages are based on respondents reporting somewhat or very interested in military service. Chi square analysis indicates statistically significant differences among clusters in proportions indicating interest in military service with interest. Chi-square=43.08205, P<.0001.