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What Moves Which Volunteers to Donate Their Time? An Investigation of Psychographic Heterogeneity Among Volunteers in Australia

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Abstract

Many local environmental volunteering organisations face difficulties attracting volunteers from specific subgroups of the community. Consequently, it is crucial to gain understanding about the variety of factors that move people to participate in environmental volunteering. Factors which might have been underestimated in the past given the rather homogeneous community groups of volunteers which are, e.g., predominantly of Anglo-Saxon origin. This study reports on an analysis of volunteering motivations based on a representative data set provided by the ABS. It reveals that volunteering motivations vary widely and illustrates possible new ways of marketing volunteering organisations in order to attract new community groups to participate. Six community groups are constructed that are characterised by different motivation patterns. They are externally valid and demonstrate significant differences in socio-demographic profiles.

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What Moves Which Volunteers to Donate Their Time?
An Investigation of Psychographic Heterogeneity Among Volunteers in Australia

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Many local environmental volunteering organisations face difficulties attracting volunteers from specific subgroups of the community. Consequently, it is crucial to gain understanding about the variety of factors that move people to participate in environmental volunteering. Factors which might have been underestimated in the past given the rather homogeneous community groups of volunteers which are, e.g., predominantly of Anglo-Saxon origin. This study reports on an analysis of volunteering motivations based on a representative data set provided by the ABS. It reveals that volunteering motivations vary widely and illustrates possible new ways of marketing volunteering organisations in order to attract new community groups to participate. Six community groups are constructed that are characterised by different motivation patterns. They are externally valid and demonstrate significant differences in socio-demographic profiles.

Keywords: volunteering, motivations to volunteer, *a posteriori* segmentation

Introduction

In Australia, the volunteering sector has an estimated value of 42 billion AUD per annum with 4.4 million individuals contributing 704 million hours (Volunteering Australia, 2001). Despite the many prior studies on volunteering, investigation of variety among volunteers has so far been limited to descriptions or *a priori* groupings based on criteria such as gender and age. Significant potential for improvement of target marketing for the purpose of recruitment of volunteers in the face of increasing competition in the volunteering sector (Courtney, 1994; Riecken, Babakus and Yavas, 1994) thus lies in identifying homogeneous sub-groups of volunteers in a data-driven manner. This research gap has been explicitly mentioned by numerous researchers (Chinman and Wandersman, 1999; Reed and Selbee, 2000). For example, Bussell and Forbes (2002, p. 248) recommend that "Establishing meaningful segments of the volunteer 'market' could lead to more effective targeting of particular groups and, thus, more effective recruitment and retention strategies." The aim of this paper is to fill this gap by constructing data-driven market segments based on motivations for donating time. The definition of volunteering to be used is that adopted by the Australian Bureau of Statistics (ABS) for the Voluntary Work Survey 2000, that is 'someone who, in the last 12 months, willingly gave unpaid help, in the form of time, service or skills, through an organisation or group' (ABS, 2001, p. 3).

Many researchers have acknowledged the existence of variety amongst volunteers (Bussell and Forbes, 2002; Wilson and Pimm, 1996) and investigated their socio-demographic, attitudinal and motivational characteristics and the impact these have on volunteering behaviour. Most of these studies centre on **socio-demographic personal characteristics**. Certain characteristics have been strongly and consistently linked with volunteering behaviour such as education (Edwards and White, 1980; McPherson and Rotolo, 1996; Yavas and

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Riecken, 1985), employment status (Curtis, Grabb and Baer, 1992), and income (Menchik and Weisbrod, 1987; Smith, 1994). Furthermore, volunteers have been found to display distinctive **attitudes** such as an awareness and concern for the common good (Reed and Selbee, 2000), altruistic attitudes such as sense of civic duty (Harris, 1990; Musick, Wilson and Bynum, 2000), and a higher sense of political efficacy (Florin, Jones and Wandersman, 1986; Smith, 1994). Volunteers also display distinctive values such as morality, empathy, efficacy, emotional stability (Allen and Rushton, 1983), patriotism, and support of political democracy and national progress (Hougland and Christenson, 1982). **Regarding motivations**, many volunteers donate their time to receive individual benefits such as maintaining a service (Riecken, Babakus and Yavas, 1994), gaining social prestige (Okun, 1994; Wilson and Pimm, 1996), having the opportunity to express particular values (Harris, 1990; Omoto and Snyder, 1995; Wymer, 1998), improving human capital (Anderson and Moore, 1978; Caudron, 1994; Loeb, 1996; Raskoff and Sundeen, 2001; Schweitzer, 1998), or health and fitness (Musick, Herzog and House, 1999).

Despite the large amount and disciplinary broadness of studies conducted in the area of volunteering, heterogeneity of volunteers has only been studied in an *a priori* manner in the past, assuming that the criteria are known in advance and managerially useful to segment volunteers. We propose the use of data-driven segmentation based on a set of motivations. The underlying assumption is that volunteers demonstrate different motivational patterns. Consequently, groups of volunteers with specific motivational patterns could be identified. Some of the emerging patterns would have not been used in communication with the community to attract new volunteers yet, offering an excellent marketing opportunity to attract new volunteers.

Empirical Study

Data

The analysis is based on a Confidentialised Unit Record File (CURF) provided by the ABS. The data was collected as part of the national Voluntary Work 2000 survey conducted over four quarters in 2000. Private dwellings were randomly selected. The data is analysed in its weighted form, thus allowing for statements representative for the entire population of Australian volunteers. The data set includes socio-demographic information about the respondents and psychographic and behavioural information related to volunteering activities. Descriptive analysis of the data set results in the following general insights into the Australian volunteering sector: between 1995 and 2000 the percentage of Australian adults involved in voluntary activities grew from 24% to 32%. Volunteers contributed over 704 million hours of voluntary work in 2000, an increase of almost 200 million from 1995, however the average hours worked per week has remained stable (ABS, 2001). Australians are more likely to volunteer if they live in non-metropolitan areas, are female, aged between 35-44, have dependent children, were born in Australia, and are employed in professional occupations. Two thirds volunteer for one organisation only and two types of organisations account for almost half of all volunteers: community/welfare and sporting/recreation (ABS, 2001).

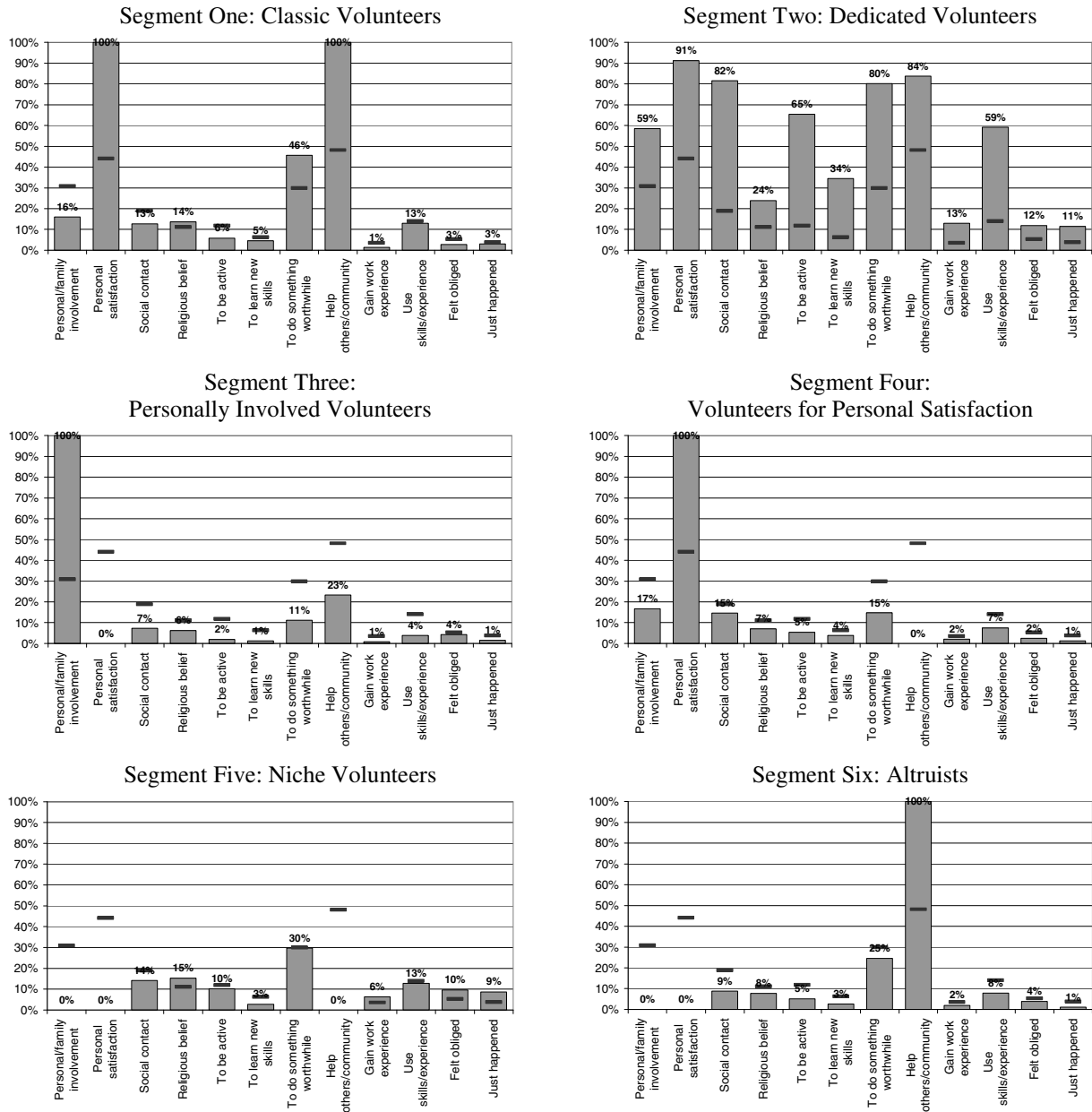### Motivational Patterns Among Volunteers

The starting point for the analysis of motivational patterns among volunteers is a binary data set including answers from 4,267 volunteers. The 12 variables are statements about what motivates them to donate their time. The segmentation study of volunteers undertaken has

been developed using prior publications that have critically reviewed assumptions and methodologies used in data-driven market segmentation (Dolnicar, 2002a, 2002b, 2003; Wright, 1996) as a starting point to avoid typical mistakes and misconceptions. The authors consequently (1) do not expect true segments to exist in the data (Dolnicar and Leisch, 2003, 2001). The aim is to determine whether one or more stable segments of volunteers can be determined which are externally valid and could be used by volunteering organisations to try to attract new volunteers with novel communications messages. (2) Stability and external validity are sufficient criteria to evaluate segments. The managerial test, however, will be the effectiveness of attracting new volunteers. The latter criterion cannot be reported in this study as new communication messages have not been developed to date.

Topology representing networks (TRNs) (Martinetz and Schulten, 1994) were used to partition the data because TRNs emerged as highly stable partitioning technique in an extensive comparative Monte Carlo study (Buchta, Dolnicar and Reutterer, 2000) . TRNs are unsupervised neural network algorithms and can be classified as non-hierarchical exploratory partitioning techniques. After selecting the number of segments to be revealed (Frank, Massey and Wind, 1972; Myers and Tauber, 1977) or constructed (Mazanec, 1997; Wedel and Kamakura, 1998), starting vectors are picked at random. The iterative procedure commences with the computation of the distances between each of the starting points and each respondent's answer pattern. Each respondent is assigned to the closest starting point. The starting point is then adapted to better represent the new member. Furthermore, the neighbouring starting points are allowed to adapt at a lower rate, thus assuring a topological representation of the segmentation solution at the end of the partitioning process. The process of assigning members and adapting starting points (prototypes) is repeated at decreasing learning rates until the process is interrupted or only minor changes in prototype values occur. All distance computations were made using Euclidean distance. The number of clusters selection was based on a stability comparison of 50 repetitions of each cluster number between 2 and 10. Six segments emerged as most stable with regard to pairs of respondents being located in the same segment repeatedly.

Figure 1 provides the profiles of all segments. Grey columns illustrate the percentages of segment members who agree with the respective motive to volunteer, the total sample average is represented by black horizontal lines. For segment one (15% of the sample, 14% of the Australian volunteering population) motivations are threefold: doing something worthwhile, personal satisfaction, and helping others. This is a typical volunteering motivation pattern, where the latter two motives are actually stated by every member of this market segment. Because this segment identifies with typical volunteering motives it is labelled "classic volunteers". Segment two (11% / 10%) was initially suspected to be an answer tendency, as these individuals state every reason more frequently than the total sample. Through the external validation with background variables, however, it becomes evident that this segment is indeed a specific type of volunteer, probably the most dedicated one, consequently referred to as "dedicated volunteers". All members of segment three (19% / 21%), "personally involved volunteers", agree on one reason for volunteering: personal involvement. Interestingly, not a single one states that they derive any personal satisfaction by working as volunteers. The contrary is the case for segment four (20% / 20%), "volunteers for personal satisfaction". This segment almost seems to be egoistically motivated, as personal satisfaction drives them to volunteer and helping others is irrelevant. Segment five (16% / 16%), demonstrates above-average agreement with feeling obliged to volunteer and getting into the volunteering activity almost by accident, but they also state that gaining work experience and religious beliefs motivate them to engage in unpaid work. Due to this high level of heterogeneity, they are referred to as "niche volunteers". Finally, segment six (20% / 20%) are "the altruists" and primarily want help others.

Figure 1: Psychographic Segments

Segment One: Classic Volunteers

Segment Two: Dedicated Volunteers

Segment Three: Personally Involved Volunteers

Segment Four: Volunteers for Personal Satisfaction

Segment Five: Niche Volunteers

Segment Six: Altruists

The ABS volunteering data set also includes a wide variety of socio-demographic and behavioural information that can be used to externally validate the segments. As all variables included in the data set are categorically or ordinally scaled, Chi-squared tests were computed for variables of interest and the p-values Bonferroni corrected to account for multiple testing on the same data. All differences discussed are significant at the 99% level[2].

"Classic volunteers" are older, with more than one fifth above 60. The majority are born in Australia, and over a third are not employed (anymore). They incur high expenses from volunteering. They are very active volunteers, with almost half investing more than 140 hours a year into volunteering activities. Teaching/instruction as well as being committee members/coordinating work are their main contributions. "Dedicated volunteers" are similar to classic volunteers, however this group is more strongly female dominated, has the highest

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[2] A complete table of socio-demographic profiles and the Bonferroni-corrected p-values can be obtained from the authors. The table is 2 pages long and can consequently not be included in the ANZMAC paper.

proportion of members with university level education, and one third is not in the labour force. The commitment of this segment to volunteer is supported by their volunteering behaviour: these people are the most likely to donate their time to more than one organisation, 55 per cent work more than 140 hours a year, 27 per cent of which work more than 300. They incur the highest expenses (of which 60 per cent are not reimbursed) and their main activities are management, fundraising and providing information. One quarter of this segment has been volunteering for more than 10 years. "Personally involved volunteers" are entirely different. They represent the highest household income segment and include most part-time workers. They contribute to one volunteering organisation only and invest the least hours. They typically know someone involved in the organisation, probably their child, as over half of the segment is aged between 30 and 44 and two thirds are couples with dependent children. This segment has the highest proportion of women, probably mums. "Volunteers for personal satisfaction" do not demonstrate a very distinct profile. They are differentiated by the high proportion not born in Australia and by the lowest levels of education. "Niche volunteers" have an atypically low proportion of women, resulting in a reasonably equal numbers of men and women in this segment. A high proportion is living alone, and almost one fifth is under 24 years old. It has the highest proportion of members born outside of Australia and the highest proportion with a university education. They typically help one organisation, have not been volunteering for many years and do not contribute many hours to their volunteering activity. "Altruists" are just as likely to be men as women. Other components of the socio-demographic pattern do not demonstrate strong deviations from the general volunteering population. They contribute to three organisations on average, which makes them the second most involved group. They are usually involved in befriending/ listening to people, managing/coordinating and teaching.

Conclusions

Volunteering has attracted much attention from researchers in the past. In terms of heterogeneity among volunteers, the predominant direction of research has been to describe volunteers and investigate differences based on *a priori* selected criteria assumed to influence volunteering behaviour. This study extends this line of research into data driven (*a posteriori*, *post-hoc*) market segmentation, using volunteering motivations to determine groups of volunteers who represent useful targets for customised marketing, thus helping volunteering organisations to more successfully recruit new members. For instance, communication messages aimed at segment five, "niche volunteers", should contain appeals regarding the potential for leaning new skills or highlight the agency's affiliation with religious organisations, whereas the likelihood of attracting volunteers from segment six, "altruists', will increase by informing them about the selfless and humanitarian aims of the organisation. Six segments were identified which demonstrate distinct motivational patterns. Some segments did show consistency with certain demographic and attitudinal findings of previous studies, for example the high levels of employed volunteers found in segments three and four (consistent with the findings of Auslander and Litwin, 1988; Curtis, Grabb and Baer, 1992; Smith, 1994); and the particularly altruistic attitudes found in segment six (as suggested by Florin, Jones and Wandersman, 1986; Reed and Selbee, 2000). However due to the very distinct profiles which emerged for each segment, it is hard to find broad associations between the findings of prior studies and the six segments identified here. This illustrates the added value of the data-driven segmentation approach in addressing the biggest problem volunteering organisations face in the 21st century: recruitment of new volunteers in a competitive environment.

Acknowledgements

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