



UNIVERSITY  
OF WOLLONGONG  
AUSTRALIA

University of Wollongong  
Research Online

---

Faculty of Commerce - Papers (Archive)

Faculty of Business

---

2006

# Environmental Volunteers: Are They Driven By Altruism and a Strong Feeling of Regional Identity?

Melanie J. Randle

*University of Wollongong*, [mrandle@uow.edu.au](mailto:mrandle@uow.edu.au)

Sara Dolnicar

*University of Wollongong*, [s.dolnicar@uq.edu.au](mailto:s.dolnicar@uq.edu.au)

---

## Publication Details

This article originally appeared as Randle, M and Dolnicar, S, Environmental Volunteers: Are They Driven By Altruism and a Strong Feeling of Regional Identity?, in Proceedings of the Australasian Non-profit and Social Marketing Conference, Newcastle, Australia, 10-11 August 2006.

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library:  
[research-pubs@uow.edu.au](mailto:research-pubs@uow.edu.au)

---

# Environmental Volunteers: Are They Driven By Altruism and a Strong Feeling of Regional Identity?

## **Abstract**

The significant growth of the nonprofit sector in Australia has led to increased competition between organisations in attracting and retaining volunteers. Nonprofit managers are under increasing pressure to adopt commercial marketing techniques in order to achieve volunteer targets, and are recognising the need for detailed market information in order to develop customised and targeted marketing strategies. Environmental organisations within Australia lack information in relation to the particular segment of the market which is most likely to volunteer for their type of cause. This study addresses this issue by investigating whether environmental volunteers display unique characteristics, such as strong levels of altruism and regional identity, which will enable environmental organisations to target them effectively. Whilst few differences are found between environmental volunteers and non-environmental volunteers in terms of demographic characteristics, significant attitudinal and behavioural differences are identified.

## **Keywords**

volunteering, environment, altruism, regional identity

## **Disciplines**

Business | Social and Behavioral Sciences

## **Publication Details**

This article originally appeared as Randle, M and Dolnicar, S, Environmental Volunteers: Are They Driven By Altruism and a Strong Feeling of Regional Identity?, in Proceedings of the Australasian Non-profit and Social Marketing Conference, Newcastle, Australia, 10-11 August 2006.

# **Environmental Volunteers: Are They Driven By Altruism and a Strong Feeling of Regional Identity?**

Melanie Randle and Sara Dolnicar, University of Wollongong

## **Abstract**

The significant growth of the nonprofit sector in Australia has led to increased competition between organisations in attracting and retaining volunteers. Nonprofit managers are under increasing pressure to adopt commercial marketing techniques in order to achieve volunteer targets, and are recognising the need for detailed market information in order to develop customised and targeted marketing strategies. Environmental organisations within Australia lack information in relation to the particular segment of the market which is most likely to volunteer for their type of cause. This study addresses this issue by investigating whether environmental volunteers display unique characteristics, such as strong levels of altruism and regional identity, which will enable environmental organisations to target them effectively. Whilst few differences are found between environmental volunteers and non-environmental volunteers in terms of demographic characteristics, significant attitudinal and behavioural differences are identified.

## **Introduction**

The nonprofit sector in Australia has grown significantly in recent decades, primarily due to the devolution of services previously provided by governments at all levels (Goerke, 2003). Many of these nonprofit organisations are facing the growing challenge of trying to attract and retain volunteers in what is becoming an extremely competitive environment. Increasingly they are turning to business practices which have previously been considered the domain of the commercial sector. The value of utilising 'tried and tested' marketing techniques in the nonprofit sector has received widespread support in many areas, for example segmentation (Dolnicar and Randle, 2004; Shelley and Polonsky, 2002), positioning (Wray, 1994), targeting (Yavas and Riecken, 1985), and branding (Hankinson and Rochester, 2005). However in trying to develop effective marketing strategies many organisations face a lack of information regarding market segments. This is the case for environmental volunteering organisations within Australia which find themselves unsure of the extent to which (i) the profiles of volunteers in general can be applied to volunteers who are involved specifically with environmental organisations and (ii) the profiles of volunteers from other nations can be applied to Australian volunteers. Certainly generic international studies suggest that environmental volunteers do display distinctive characteristics when compared to non-volunteers and volunteers for other causes (Inglehart, *et al.*, 2004).

A multitude of studies in recent decades have built up a substantial body of knowledge relating specifically to the Australian volunteering market. Some recent examples include studies providing generic profiles of Australian volunteers (Volunteering Australia, 2005), investigations into the complexities of managing volunteers (Tactics and Gardner, 2005), evaluations of the factors affecting the productivity of volunteering programs (Warburton, *et al.*, 2005) and methods for effectively predicting volunteer participation (Greenslade and White, 2005).

This domestic knowledge is important considering the numerous studies which have highlighted the significant impact culture can have in terms of the distinctive attitudes and values of Australian individuals compared to foreign cultures (for example Schwartz and Bardi, 2001). Consistent with this notion, there are indications that the nonprofit sector within Australia may display somewhat different characteristics from those of other widely researched markets. For example a recent study by Wilson, Spoehr and McLean (2005) of South Australian nonprofit organisations found that contrary to the widely supported view that numbers of volunteers are declining (Putnam, 2000; Tiehen, 2000; Wymer, 1997), South Australia is actually experiencing a steady increase in the number of volunteers. Therefore it would seem that there is a continuing need for Australian based studies to obtain information specific to this market to ensure that the limited marketing budgets of Australian volunteering organisations are spent to maximum effect.

### **Prior Research**

While it is generally acknowledged that volunteers are extremely heterogeneous (Bussell and Forbes, 2002), there have been many studies which have sought to categorise volunteers according to certain descriptive variables. While education has been found to be the most consistent predictor of volunteering behaviour (Reed and Selbee, 2000), other characteristics such as age, sex, income, ethnicity and marital status have produced conflicting findings. For example Davis Smith (1999) reports women more likely to volunteer than men, while Curtis, Grabb and Baer (1992) concluded that it was men who were more likely to volunteer. Given that specific segments of the volunteering market seem to produce such different results in terms of socio-demographic profile it would seem reasonable to expect that:

***H1: Environmental volunteers will be characterised by a distinct socio-demographic profile when compared to those who do not volunteer for environmental causes***

Similarly, studies of the psychographic characteristics of volunteers have found certain underlying empathetic and altruistic themes, however there has been no agreement on the specific attitudes of volunteers. For example Hooghe (2003) reports volunteers as having democratic attitudes, Reed & Selbee (2000) describe volunteers as having a distinctive worldview which involves a concern for a significant common good, while Wymer (1997) notes that volunteers are more likely to display particularly pro-social attitudes. It is clear from these results that there is limited value in using generic descriptions of volunteers to develop customised marketing campaigns as results seem to vary so much according to particular sample and/or organisation being studied. As a starting point however, the most consistent finding in terms of the attitudes of volunteers relates to altruism so for the purposes of this initial investigation we hypothesise that:

***H2: Individuals who volunteer for an environmental organisation are more altruistic than those who do not volunteer for environmental organisations***

To the authors' knowledge there have been no attempts to provide a detailed profile of those volunteers who give their time specifically to environmental organisations. There has however been significant investigation into related topics such as (i) the attitudes of different groups towards the environment and (ii) the factors influencing involvement in environmental behaviours generally (such as recycling, picking up litter etc). A number of studies have found that pro-environmental attitudes positively predict environmental behaviour (Johnson, Bowker and Cordell, 2004; Rauwald and Moore, 2002; Roberts and Bacon, 1997), while Carrus, Bonaiuto and Bonnes (2005) demonstrated the positive role of regional identity in predicting support for

specific local parks. These findings, combined with anecdotal feedback from local environmental volunteering organisations lead us to hypothesise that:

***H3: Individuals who volunteer for an environmental organisation have stronger pro-environmental attitudes than those who do not volunteer for environmental organisations***

***H4: Individuals who volunteer for an environmental organisation have a stronger regional identity than those who do not volunteer for environmental organisations***

Pro-environmental attitudes have also been found to predict other key environmental behaviours such as the acceptance and use of recycled water (which is professionally cleaned waste water) and desalinated water (which is treated sea water and is considered less environmentally friendly because it requires large amounts of energy and produces significant greenhouse emissions).

Assuming environmental volunteers do display pro-environmental attitudes it would seem logical to assume that they also engage in other environmentally responsible behaviours. To test this assumption we will use two examples: (i) generic environmental behaviour in two different contexts (at home and while on vacation), and (ii) acceptance of two alternative forms of water.

***H5: Individuals who volunteer for an environmental organisation are more likely to behave in an environmentally responsible manner (i) at home, and (ii) while on vacation***

***H6: Individuals who volunteer for an environmental organisation are (i) more likely to adopt recycled water, and (ii) less likely to adopt desalinated water***

## **Data and Methodology**

The questions used for this study were included in a survey about environmental behavior that was conducted in Australia using a permission-based internet panel. The panel is set up and maintained in a way that is representative of the Australian population. Respondents were drawn randomly from the total panel and invited to complete a 30 minute online questionnaire. The questionnaire was available online until 1,000 respondents had completed the survey (4 days). To allow profiling of Australian environmental volunteers, the survey included questions relating to: (1) frequency of environmental volunteering; (2) level of altruism; (3) environmental attitudes; (4) environmental behavior at home and on vacation; (5) likelihood of adopting recycled and desalinated water; and (6) socio-demographic variables. Analysis of variance was used to test the significance of metric variables and Chi-squared tests were used to test the significance of nominal and ordinal variables. Unless otherwise specified, all statistics reported in this paper have significance levels of 95% or higher.

## **Results**

Respondents were asked to indicate how often they volunteered for an environmental group or project on a five point scale ranging from 0 = 'never' to 4 = 'always'. Those respondents who indicated that they volunteer 'sometimes' (2), 'often' (3) or 'always' (4) were grouped to form the 'environmental volunteers' in which n=160 or 16% of the total sample. The remainder of the sample, those who had not volunteered for an environmental organisation, or 'non-volunteers' (n=840) were used as a reference group by assessing significant differences.

***H1: Environmental volunteers will be characterised by a distinct socio-demographic profile when compared to those who do not volunteer for environmental causes***

Few significant differences were found, most surprisingly (and contrary to the findings of many studies of volunteers) no differences were found in the education levels of environmental volunteers versus non-volunteers. There were also no significant differences between the groups in relation to gender, age, income, occupation, relationship status, religion, frequency of travel, media usage or how 'Australian' they feel. Therefore this hypothesis is not supported.

Interestingly however, significant differences were found in the proportion of the group speaking a second language with less than expected second language speakers in the environmental volunteers group. This indicates that there may be significant cultural differences between environmental volunteers and non-volunteers and may be an interesting area for further research. There were also significant differences found between States, with higher than expected environmental volunteers in South Australia and Western Australia, and lower than expected numbers in Queensland. While the association between rurality and environmental volunteering is insignificant, there is a tendency of more environmental volunteering in smaller towns,  $X^2(2)=5.6, p=0.061$ .

***H2: Individuals who volunteer for an environmental organisation are more altruistic than those who do not volunteer for environmental organisations***

Clark, Kotchen and Moore's (2003) nine itemscale was used to measure level of altruism.

Examples of items include 'My personal actions can greatly improve the well being of people I don't know' and 'It is my duty to help other people when they are unable to help themselves'.

Respondents answered these items by stating their levels of agreement on a five point scale from 'strongly agree' to 'strongly disagree'. The level of altruism for each individual was computed by adding the items indicating altruism and subtracting the items indicating lack of altruism. Results show that most environmental volunteers display moderate levels of altruism (over 65 percent of environmental volunteers score between +1 and +7 on a scale in which -14 indicates extremely non-altruistic attitudes and +14 indicates extremely altruistic attitudes). The hypothesis that environmental volunteers are more altruistic than non-environmental volunteers is supported, mean altruism values of 3.8 for non-volunteers and 4.7 for volunteers indicate that environmental volunteers are significantly more altruistic ( $F=9.6, df=1, p<0.01$ ).

***H3: Individuals who volunteer for an environmental organisation have stronger pro-environmental attitudes than those who do not volunteer for environmental organisations***

Environmental attitudes were measured using a 15-item validated scale known as the New Ecological Paradigm (NEP) (Dunlap, *et al.*, 2000). The scale included a range of pro-environmental statements (for example 'when humans interfere with nature, it often produces disastrous consequences') and anti-environmental statements (for example 'humans were meant to rule over the rest of nature'). Respondents answered these items by stating their level of agreement on a five point scale ranging from strongly disagree to strongly agree. Individual level environmental attitude was derived by adding pro-environmental and subtracting anti-environmental statements. Analysis of variance found that environmental volunteers do have more pro-environmental attitudes than non-volunteers. The average level of pro environmental attitude for environmental volunteers is 10.9 as opposed to 8.2 for non-volunteers. This is significant at the 99.9% level ( $F=13.1, df=1$ ). The above hypothesis is therefore supported.

***H4: Individuals who volunteer for an environmental organisation have a stronger regional identity than those who do not volunteer for environmental organisations***

Respondents were asked to indicate their level of regional identity by answering the question 'How strong is your feeling of belonging and attachment to the region you live in?'. A four point

answer scale was used ranging from 'strong' to 'non-existent'. Results showed that environmental volunteers do identify significantly more strongly with the local region in which they live than non-volunteers,  $X^2(3)=8.6$ ,  $p=0.035$ . Therefore the hypothesis is supported.

***H5: Individuals who volunteer for an environmental organisation are more likely to behave in an environmentally responsible manner (i) while at home, and (ii) while on vacation***

Respondents were presented with a list of 30 environmentally friendly behaviours and asked to indicate how often they undertook each behaviour (i) while at home during the past year and (ii) while on their last vacation. A five point answer scale was used ranging from 'never' to 'always'. Examples of items include 'I picked up litter that was not my own' and 'I took bags from home when going shopping'. The total level of pro-environmental behaviour was computed by adding the values for all variables. Analysis of variance showed that environmental volunteers behave in a significantly more environmentally responsible manner than non-volunteers when at home (average values of 63.4 for environmental volunteers and 49.1 for non-volunteers). This is significant at the 99.9% level ( $F=129.6$ ,  $df=1$ ). Results show that environmental volunteers also behave significantly more responsibly than non-volunteers whilst on vacation (average values of 55.8 for environmental volunteers and 38.7 for non-volunteers). This is also significant at the 99.9% level ( $F=47.4$ ,  $df=1$ ). The lower levels of responsible environmental behaviour while on vacation than at home for all groups seems consistent with the finding discussed earlier that individuals are more likely to volunteer if they strongly identify with the region in which they live.

***H6: Individuals who volunteer for an environmental organisation are (i) more likely to adopt recycled water and (ii) less likely to adopt desalinated water***

Respondents were presented with a list of 20 different uses of water (for example watering the garden, cooking, bathing the baby, brushing teeth) and were asked to indicate on a five-point scale how likely they are to adopt both recycled water and desalinated water for each use. Five answer options were given, ranging from 'very unlikely' to 'very likely'. The sum over all likelihood statements was used to determine the general level of likelihood of using recycled water and desalinated water. The analysis of variance indicates no difference between environmental volunteers and non-environmental volunteers in their likelihood of adopting either recycled water or desalinated water. There was also no significant difference between the two groups in the proportion indicating they had (i) experienced water restrictions and (ii) felt restricted by water restrictions. These findings are unexpected when considering prior research which shows that those with stronger pro-environmental attitudes are more likely to participate in environmental behaviours (Johnson, Bowker and Cordell, 2004). This could possibly be explained by the fact that the adoption of alternative water sources represents environmentally friendly behaviour which is perceived to possibly have negative health consequences. As opposed to other environmentally friendly behaviours which only come at the cost of time to engage in the behaviour, as for instance in the case of recycling. Another possible explanation is that Australians have experienced drought for many years now and are all aware of the necessity to consider alternative water sources. This awareness and the resulting likelihood to adopt new water sources may therefore vary to a lower extent than expected across groups.

## Conclusions

Few differences were found in the socio-demographic profiles of environmental volunteers which is surprising considering that most studies of volunteers do identify specific variables of this kind

to characterise them. From a more strategic perspective, the strong regional attachment of environmental volunteers is very interesting for environmental organisations. If this could be increased, that is building loyalty and attachment to the local area (for example through Brand building and promotional activities) it could result in greater participation within the wider community in environmental programs. This is a more strategic issue that could be developed in conjunction with other stakeholders in the community, for example local Councils. There were also significant differences found between environmental volunteers and non-volunteers in terms of attitudes and behaviours. This is very useful for environmental volunteering organisations in terms of customising messages to reach this group. For example, environmental volunteers display relatively strong pro-environmental attitudes so the direct and immediate benefits to the environment of being involved in these activities should be communicated as clearly as possible. Environmental volunteers are also highly altruistic when compared to non-volunteers which again suggests that messages communicating the benefits to others and the environment would be more effective in attracting this group than, for example, benefits to themselves such as keeping fit or socialising with others. This aim of this study was to provide an initial outline of the characteristics of environmental volunteers. While distinct demographic characteristics were not identified some interesting attitudinal and behavioural results were found, particularly in the areas of altruism and regional identity. This provides a platform from which further research could be launched, for example investigations into the values and motivations of this group, building to a fuller picture of this particular segment of the market.



## Acknowledgements

This project is funded by the Australian Research Council through the Discovery Grant Scheme (DP0557769) and the Linkage Grant Scheme (LP0453682), and by the Commonwealth Department of Education Science and Training through the OzAquarec project (CG030025).

## References

Bussell, H. and Forbes, D., 2002. Understanding the Volunteer Market: The What, Where, Who and Why of Volunteering. *International Journal of Nonprofit and Voluntary Sector Marketing*. 7(3), 244-257.

Carrus, G., Bonaiuto, M. and Bonnes, M., 2005. Environmental Concern, Regional Identity, and Support for Protected Areas in Italy. *Environment and Behavior*. 37(2), 237-257.

Clark, C. F., Kotchen, M. J. and Moore, M. R., 2003. Internal and External Influences on Pro-environmental Behavior: Participation in a Green Electricity Program. *Journal of Environmental Psychology*. 23(

Curtis, J. E., Grabb, E. G. and Baer, D. E., 1992. Voluntary Association Membership in Fifteen Countries: A Comparative Analysis. *American Sociological Review*. 57(2), 139-152.

Davis Smith, J., 1999. Poor Marketing or the Decline of Altruism? Young People and Volunteering in the United Kingdom. *International Journal of Nonprofit and Voluntary Sector Marketing*. 4(4), 372-377.

Dolnicar, S. and Randle, M. 2004. What Moves Which Volunteers to Donate Their Time? An Investigation of Psychographic Heterogeneity Amongst Volunteers in Australia. Australia and New Zealand Marketing Academy (ANZMAC) Conference CD Proceedings. Wellington, New Zealand.

Dunlap, R. E., Van Liere, K. D., Mertig, A. G. and Jones, R. E., 2000. Measuring Endorsement of the New Ecological Paradigm: A Revised NEP Scale. *Journal of Social Issues*. 56(3), 425-442.

Goerke, J., 2003. Taking the Quantum Leap: Nonprofits are Now in Business. An Australian Perspective. *International Journal of Nonprofit and Voluntary Sector Marketing*. 8(4), 317-327.

Greenslade, J. H. and White, K. M., 2005. The Prediction of Above-Average Participation in Volunteerism: A Test of the Theory of Planned Behavior and the Volunteer Functions Inventory in Older Australian Adults. *The Journal of Social Psychology*. 145(2), 155-172.

Hankinson, P. and Rochester, C., 2005. The Face and Voice of Volunteering: A Suitable Case for Branding? *International Journal of Nonprofit and Voluntary Sector Marketing*. 10(2), 93-105.

Hooghe, M., 2003. Participation in Voluntary Associations and Value Indicators: The Effect of Current and Previous Participation Experiences. *Nonprofit and Voluntary Sector Quarterly*. 32(1), 47-69.

- Inglehart, R., Basanez, M., Diez-Medrano, J., Halman, L. and Luijkx, R., 2004. *Human Beliefs and Values: A Cross-Cultural Sourcebook Based on the 1999-2002 Values Surveys*. Mexico: Siglo XXI Editores.
- Johnson, C. Y., Bowker, J. M. and Cordell, H. K., 2004. Ethnic Variation in Environmental Belief and Behavior: An Examination of the New Ecological Paradigm in a Social Psychological Context. *Environment and Behavior*. 36(2)
- Putnam, R., 2000. *Bowling Alone*. New York: Simon & Schuster.
- Rauwald, K. S. and Moore, C. F., 2002. Environmental Attitudes as Predictors of Policy Support Across Three Countries. *Environment and Behavior*. 34(6), 709-739.
- Reed, P. B. and Selbee, L. K., 2000. Distinguishing Characteristics of Active Volunteers in Canada. *Nonprofit and Voluntary Sector Quarterly*. 29(4), 571-592.
- Roberts, J. A. and Bacon, D. R., 1997. Exploring the Subtle Relationships Between Environmental Concern and Ecologically Conscious Consumer Behavior. *Journal of Business Research*. 40(1), 79-89.
- Schwartz, S. H. and Bardi, A., 2001. Value Hierarchies Across Cultures: Taking a Similarities Perspective. *Journal of Cross-Cultural Psychology*. 32(3), 268-290.
- Shelley, L. and Polonsky, M. J., 2002. Do Charitable Causes Need to Segment Their Current Donor Base on Demographic Factors?: An Australian Examination. *International Journal of Nonprofit and Voluntary Sector Marketing*. 7(1), 19-29.
- Tacticos, T. and Gardner, H., 2005. Cost Restraint: Tensions in Volunteer Use and Support. *Australian Journal on Volunteering*. 10(1), 17-23.
- Tiehen, L., 2000. Has Working More Caused Married Women to Volunteer Less? Evidence From Time Diary Data, 1965-1993. *Nonprofit and Voluntary Sector Quarterly*. 29(4), 505-529.
- Volunteering Australia, 2005. *Snapshot 2004: Volunteering Report Card*. Available from <http://www.volunteeringaustralia.org/Snapshot2004.htm>, accessed 12 July 2005.
- Warburton, J., Marshall, S., Warburton, K. and Gooch, M., 2005. Information-related Constraints on the Effectiveness of Environmental Volunteers: A Case Study. *Australian Journal on Volunteering*. 10(1), 24-31.
- Wilson, L., Spoehr, J. and McLean, R., 2005. Volunteering in Not-for-profit Organisations and the Accumulation of Social Capital in South Australia. *Australian Journal on Volunteering*. 10(1), 32-41.
- Wray, B. R., 1994. Branding, Product Development and Positioning the Charity. *The Journal of Brand Management*. 1(6), 363-370.

Wymer, W. W., 1997. Segmenting Volunteers Using Values, Self-Esteem, Empathy, and Facilitation as Determinant Variables. *Journal of Nonprofit and Public Sector Marketing*. 5(2), 3-28.

Yavas, U. and Riecken, G., 1985. Can Volunteers be Targeted? *Journal of the Academy of Marketing Science*. 13(2), 218-228.