

## **PRO-ENVIRONMENT INTENTIONS: EXAMINING THE AFFECT OF PLACE ATTACHMENT, ENVIRONMENTAL ATTITUDES, PLACE SATISFACTION AND ATTITUDES TOWARD PRO-ENVIRONMENTAL BEHAVIOUR**

*Elizabeth Halpenny, University of Waterloo*

Studies reveal there is general agreement amongst North Americans that natural environments are important places but they have been damaged and continue to degrade (Schultz & Zelezny, 1998). Unfortunately individuals and communities continue to make choices that contribute to the decline of natural environments, despite an increased awareness that this affects human health and compromises opportunities to work and recreate in sustainable, healthy environments. Practitioners and researchers have been searching for an understanding of this disconnect between environmental awareness, attitudes towards the environment and the behaviours that effect the environment. This paper attempts to explore part of this puzzle.

In particular, it is proposed that the relationships people have with particular *places*, settings that have meaning and value to individuals, may affect how individuals make choices about environmental actions and give practitioners a greater understanding of how to encourage pro-environmental behaviour. This paper outlines how individuals' attitude toward a particular setting (i.e., place attachment) affect place specific pro-environment behavioural intentions. Additionally the interaction of place attachment with other factors such as general environmental attitudes, attitudes towards pro-environment behaviour and place satisfaction is examined.

*Pro-environmental behaviour* can be defined as the action of an individual or group that advocates the sustainable or diminished use of natural resources (Sivek & Hungerford, 1989/90). As it is difficult to measure actual behaviour, it is proposed that it is the expressed intent of an individual to perform a pro-environment behaviour that provides a more accurate assessment of their future actions. In attempting to map what factors can encourage pro-environment behavioural intentions Ajzen and Fishbein's (Fishbein & Ajzen, 1975) theory of reasoned action can be used as a basis of exploration. This theory posits that the best predictor of behaviour is the *intention* to perform the behaviour. In turn the intention to perform the behaviour is believed to be caused by the individual's *attitude* toward performing the behaviour and the individual's *subjective norms* about the behaviour. Finally, attitudes toward the behaviour are thought to be a function of the individual's *beliefs* about the behaviour. In the case of exploring an individual's intention to perform environmentally responsible behaviours an individual's attitude towards pro-environmental behaviour should play an important direct role.

However Ajzen and Fishbein also recognize that other external factors affect behavioural intentions. In the case of pro-environment behavioural intentions it is proposed here that these include: 1) an individual's attitudes towards the environment in general; 2) an individual's previous experience with a place and the attachment that develops from these experiences; and 3) an individual's satisfaction with the environmental quality of a particular place. The salience of selecting these factors for study as well as a fourth factor, 4) attitudes towards pro-environmental behaviours, is explored next and is accompanied by some propositions regarding their relationship with pro-environment behavioural intentions, and with each other.

## **General Attitudes Towards The Environment**

A meta-analysis of environmental attitude-behaviour research found that individuals with more positive attitudes toward the environment are more likely to report participating in pro-environmental behaviour (Hines, Hunderford, & Tomera, 1987). More recent research has attempted to characterize environmental attitudes towards the environment as a spectrum ranging from anthropocentric to eco- or bio-centric. Individuals who display attitudes towards the environment that recognize the importance of nature and the environment, valuing it for its own sake, tend to display higher levels of self-reported or observed pro-environmental behaviour than those with anthropocentric environmental attitudes (Corral-Verdugo, Bechtel, & Fraijo-Sing, 2002; Schultz, 2000; Stern, Dietz, & Guagnano, 1995). Based on this the following is proposed:

P1. An eco-centric orientation towards the environment will result in a higher level of pro-environmental intentions than anthropocentric attitudes.

## **Place Attachment**

Place attachment is a positive emotional bond with a setting (Low & Altman, 1992). Place theorists speculate that individuals who are emotionally, psychologically or functionally attached to a place will act to protect that place (Tuan, 1997; Relph, 1976). Empirical research has shown this is true in several different contexts. These settings include neighbourhoods and communities (Mesch and Manor, 1998; Shumaker & Taylor, 1982); parks and protected areas (Kaltenborn & Williams, 2002; Walker & Chapman, 2003); and, recreation landscapes (Bricker & Kerstetter, 2002; Kaltenborn 1998; Kyle, Absher, & Graefe, 2003; Stedman, 2002; Vaske & Korbin, 2001; Vorkinn & Riese, 2001). Actions which protect the places that individuals are attached to can take many different forms ranging from voting for pro-environmental laws to protesting government policies. An increased understanding of the link between place attachment and pro-environment behavioural intentions needs to be explored in different settings and for different groups of individuals (Stedman, 2003). However, based on known theoretical and empirical research the following relationship is proposed for a protected area leisure-based setting:

P2. High levels of place attachment will encourage place-specific pro-environment behavioural intentions toward the place of attachment.

## **Place Satisfaction**

One of the factors that can play a role in the formation of place attachment is satisfaction with a place. If an individual is satisfied with a park, he or she will likely return to that park if the opportunity presents itself. Repeated visits build meanings and values associated with the park. However one can also be attached to a place and not be satisfied with it. For example a forestry worker may be functionally attached to a logging town because he or she lacks the skills to gain employment in other sectors (Beckley, 2003; Manzo, 2003). Alternatively Stedman (2002) discovered that full and part-time residents of a Wisconsin lake district could be attached to their lake but not satisfied with its current environmental quality. Those attached but dissatisfied were more likely to

express intent to take action to help address environmental quality of the lake than those who expressed low levels of place attachment. Based on these observations the following is proposed:

P3. The affect of place satisfaction on pro-environmental intentions will be mediated by place attachment. Outcomes will include the following: a) Dissatisfaction with an area's natural environment will result in an individual taking action to improve the area's natural environment if he or she is positively attached to that place; b) dissatisfaction with an area's natural environment will result in an individual failing to take pro-environmental action, or relocating from the area if he or she is not positively attached to the place; c) satisfaction with a natural environment may contribute to the development of place attachment; and, d) satisfaction with an area's natural environment will contribute little to encouraging individuals to choose to engage in place related pro-environmental action.

### **Attitudes Towards Pro-environmental Behaviours**

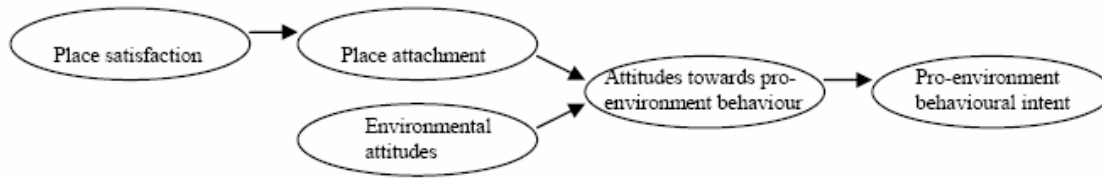
As described above, attitudes towards a specific behaviour are theorized to have a direct affect on their intention to perform the behaviour. Research supports this relationship (Ajzen, 1980; Kleiber & Mannell, 1997). Attitudes toward pro-environmental behaviour can be based in an individual's perceptions of locus of control (ability/opportunity to affect change) and efficacy (feelings of competency and effectiveness in participating in pro-environmental behaviours) (Hines, et al., 1987). Much less is known about how attitudes towards pro-environmental behaviour interact with external factors such as individuals' attitudes towards a particular place. Based on results from empirical research that have detected a strong link between attitudes towards pro-environmental behaviour and pro-environment behavioural intentions, the following relationships are proposed:

P4. Attitudes toward pro-environment behaviour will have a greater effect on pro-environment behavioural intentions than place attachment, place satisfaction and general environmental attitudes.

P5. Attitudes toward pro-environment behaviour will mediate the affect of place satisfaction, place attachment and general environmental attitudes.

A model of these relationships is proposed below (Figure 1). Interaction between these factors needs to be examined. In contrast to the model below, it may be found that place satisfaction, place attachment and general environmental attitudes directly affect pro-environment behavioural intentions. If this is the case, then attitudes toward pro-environment behaviours are expected to affect pro-environmental behavioural intentions more strongly than the remaining three factors. A study of relations between these factors is currently being conducted within the context of a Canadian protected area. Initial results will be reported at the conference.

Figure 1: A hypothetical model of how different environmental attitudes affect pro-environment behaviour



### Practical Implications

Natural area managers will have to focus on all these environment-related attitudes to effectively encourage sustainable park visitor behaviour and predict levels of park advocacy. However, special efforts which increase environmental knowledge as well as feelings of efficacy and locus of control related to support for heritage conservation need to be emphasized in manager and employee training and public outreach efforts.

### References

- Ajzen, I. (1988). *Attitudes, personality, and behaviour*. Milton Keynes, UK: Open University Press.
- Beckley, T. M. (2003). The relative importance of sociocultural and ecological factors in attachment to place. In L. E. Kruger (Ed.), *Understanding Community-Forest Relations. USFS, General Technical Report PNW-GTR-566* (pp. 105-126). Seattle, WA: USFS.
- Bricker, K. S. (2000). Level of specialization and place attachment: An exploratory study of whitewater recreationists. *Leisure Sciences, 11*, 233-257.
- Corral-Verdugo, V., Bechtel, R. B., & Fraijo-Sing, B. (2003). Environmental beliefs and water conservation: An empirical study. *Journal of Environmental Psychology, 23*, 247-257.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behaviour: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Hines, J. M., Hungerford, H. R., & Tomera, A. N. (1987). Analysis and synthesis of research on responsible environmental behavior: A meta-analysis. *Journal of Environmental Education, 1-8*.
- Kaltenborn, B. P. (1998). Effects of sense of place on responses to environmental impacts: A study among residents in Svalbard in the Norwegian high Arctic. *Applied Geography, 18*(2), 169-189.
- Kaltenborn, B. P., & Williams, D. R. (2002). The meaning of place: attachments to Femundsmarka National Park, Norway, among tourists and locals. *Norsk Geografisk Tidsskrift -- Norwegian Journal of Geography, 56*, 189-198.
- Kyle, G. T., Absher, J. D., & Graefe, A. R. (2003). The moderating role of place attachment on the relationship between attitude toward fees and spending preferences. *Leisure Sciences, 25*, 33-50.
- Low, S. M., & Altman, I. (1992). Place Attachment: A Conceptual Inquiry. In I. Altman & S. M. Low (Eds.), *Place Attachment* (pp. 1-13). New York: Plenum Press.
- Mannell, R. C., & Kleiber, D. A. (1997). *A social psychology of leisure*. State College, PA: Venture Publishing.

- Manzo, L. C. (2003). Beyond house and haven: Toward a revisioning of emotional relationships with places. *Journal of Environmental Psychology*, 23, 47-61.
- Mesch, G. S., & Manor, O. (1998). Social ties, environmental perception, and local attachment. *Environment and Behavior*, 30(4), 504-519.
- Relph, E. (1976). *Place and placelessness*. London: Pion Limited.
- Schultz, J. W., & Zelezny, L. C. (1998). Values and proenvironmental behavior: A five-country survey. *Journal of Cross-cultural Psychology*, 29(4), 540-558.
- Schultz, P. W. (2000). Empathizing with nature: The effects of perspective taking on concern for environmental issues. *Journal of Social Issues*, 56(3), 391-406.
- Shumaker, S. A., & Taylor, R. B. (1983). Toward a clarification of people-place relationships: A model of attachment to place. In N. R. Feimer & E. S. Geller (Eds.), *Environmental Psychology: Directions and perspectives* (pp. 119-251). New York, NY: Praeger.
- Sivek, D. J., & Hungerford, H. (1989/1990). Predictors of responsible behavior in members of Wisconsin conservation organizations. *The Journal of Environmental Education*, 21(2), 35-40.
- Stedman, R. C. (2002). Toward a social psychology of place: Predicting behavior from place-based cognitions, attitude and identity. *Environment and Behavior*, 34(5), 561-581.
- Stern, P. C., Dietz, T., & Guagnano. (1995). The new ecological paradigm in socio-psychological context. *Environment and Behavior*, 27(6), 723-743.
- Tuan, Y. F. (1977). *Space and Place: The perspective of experience*. Minneapolis, MN: University of Minnesota Press.
- Vaske, J. J., & Kobrin, K. C. (2001). Place attachment and environmentally responsible behavior. *The Journal of Environmental Education*, 32(4), 16-21.
- Vorkinn, M., & Riese, H. (2001). Environmental concern in a local context: The significance of place attachment. *Environment and Behavior*, 33(2), 249-263.
- Walker, G. J. (2002). The effects of frequency and experience on place attachment during independent nature-based leisure events. In E. L. Jackson (Ed.), *10th Annual Canadian Congress on Leisure Research, 22-25 May 2002, Edmonton Alberta*. (pp. 334-335). Edmonton, AB: Canadian Association for Leisure Studies.
- Walker, G. J., & Chapman, R. (2003). Thinking like a park: The effects of sense of place, perspective-taking, and empathy on pro-environment intentions. *Journal of Park and Recreation Administration*, 21(4), 71-86.

**ABSTRACTS**  
**of Papers Presented at the**  
**Eleventh Canadian Congress on Leisure Research**  
**May 17 – 20, 2005**  
**Hosted by**  
**Department of Recreation and Tourism Management**  
**Malaspina University-College**  
**Nanaimo, B.C.**  
**Abstracts compiled and edited by**  
**Tom Delamere, Carleigh Randall, David Robinson**  
**CCLR-11 Programme Committee**  
**Tom Delamere**  
**Dan McDonald**  
**Carleigh Randall**  
**Rick Rollins**  
**and**  
**David Robinson**



**Copyright © 2005 Canadian Association for Leisure Studies**  
**ISBN 1-896886-01-9**



Appropriate Use of Documents: Documents may be downloaded or printed (single copy only). Please note that this document is copyrighted and CREDIT MUST BE PROVIDED to the originator of the document when you quote from it. You must not sell the document or make a profit from reproducing it. You must not copy, extract, summarize or distribute downloaded documents outside of your own organization in a manner which competes with or substitutes for the distribution of the database by the Lifestyle Information Network (LIN). <http://www.lin.ca>