Exploring the Influence of Outdoor Recreation Participation on Pro-environmental Behavior

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Background

- Efforts to promote conservation often focus on factors influencing the development of pro-environmental behavior (PEB) (Turaga et al. 2010)
- Traditional PEB prediction models have centered on causal relationships among values, attitudes, & behaviors (i.e., Stern et al. 1995)
- However, studies suggest that other factors may also contribute, including:
  - Socio-demographics (Johnson et al. 2004)
  - Outdoor recreation participation (Kareiva 2008; Tarrant & Green, 1999)

Statement of Purpose

- To extend existing models & account for the effects of demographic diversity & outdoor recreation participation on PEB.

Methods

- Intercept survey of summer 2009 visitors to Georgia State Parks (N=319, response rate=83%)
- Structural equation modeling used to examine relationships among PEB & potential correlates:
  - Pro-environmental Behavior (PEB)
  - Environmental Value Orientations
    - Biocentric (Bio EVO)
    - Anthropocentric (Anthro EVO)
  - Socio-demographics
    - Gender
    - Ethnicity
    - Education
    - Income
  - Outdoor Recreation Participation
    - During childhood (Kid Out)
    - During adulthood (Adult Out)

Results

- PEB Prediction Model Accounting for Environmental Value Orientations, Socio-demographics & Outdoor Recreation Participation
  - Only standardized coefficients of significant paths are shown
  - Model Fit Statistics: Satorra Bentler χ²(99) = 195.2, p<0.001; SRMR = 0.07; RMSEA = 0.06; NNFI = 0.93; CFI = 0.95

Future Research

- Account for motivation to participate in PEB
- Examine other latent variables including subjective norms, behavior intentions, & perceived behavioral control – critical components of Theory of Planned Behavior (Ajzen 1991) & Value-Belief-Norm Theory (Stern et al. 1999)
- Incorporate other PEB metrics (i.e., green consumerism, environmental citizenship, energy/water conservation, etc.)
- Build on existing framework to investigate factors influencing relationship between outdoor recreation & PEB

Discussion

- Both biocentric & anthropocentric value orientations linked to PEB
- Anthropocentric connection could stem from desire to produce societal good
- Effects of socio-demographics on PEB mediated by value orientations
- Low income/education associated with higher anthropocentric scores
- Females & minorities associated with higher biocentric scores
- Indirect effects of socio-demographics on PEB suggest that ethnicity & income may not influence PEB participation, challenging traditional assumptions (Floyd 1998)
- Evidence for link between outdoor recreation participation & PEB
- Supports theory that time outdoors could influence conservation ethos (Cordell & Tarrant 2002, Louv 2008)
- Supports evidence that childhood interaction with nature promotes adult environmentalism (Wells & Lekies 2006)

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For more information about this study & associated references, see: Larson, L. R., Whiting, J. W., & Green, G. T. (2011). Exploring the influence of outdoor recreation participation on pro-environmental behaviour in a demographically diverse population. Local Environment, 16(1), 67-86.