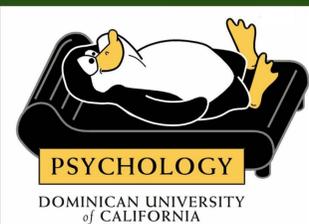


Relationship Between Exposure to Nature in Childhood and Environmental Identity in Adulthood



Samantha Koss
Dominican University of California

DOMINICAN
UNIVERSITY
of CALIFORNIA

INTRODUCTION

It is a universal understanding that in order for nature to survive, humans must live responsibly. In October 2018 at the Intergovernmental Panel on Climate Change, the world's leading scientists issued a twelve year ultimatum to change our environmental habits (National Geographic, 2018). However, the critical issue of climate change has not evoked a correspondingly serious and crucial response among the general public.

Ecological identity, otherwise known as Environmental identity, refers to how one views oneself in relation to the natural world, and a part of how we form our self-concept (Clayton, 2013).

Past research has shown that humans feel a greater responsibility to nature when they are directly exposed to it. For example, Clayton, Luebke, Saunders, Matiasek, & Grajal (2014) found that feeling connected to animals at the zoo or an aquarium was significantly associated with cognitive and emotional responses to climate change.

Other research has proposed that having a strong ecological identity in adulthood may have developed through greater exposure to nature during one's childhood (Kals, Shumaker, & Montada, 1999).

The purpose of the present study was to more closely examine the relationship between childhood exposure to nature and adulthood ecological identity.

HYPOTHESES

Hypothesis 1: Those who report more exposure to nature during childhood would have a stronger sense of ecological identity.

Hypothesis 2: Those who work or volunteer for environmental agencies would report having more exposure to nature during their childhood.

METHOD

Participants

- A total number of 99 people (78% Female), recruited via email, participated in this study.
- Approximately 34% of the participants were employed by environmental agencies, and 64% worked in non-environmental agencies.
- Participants ranged in age from 19 to 72, with a mean of 35.6 and a standard deviation of 17.17.
- 94% of the participants grew up in the U.S. (19 states represented) and 5% grew up in countries outside of the U.S. (5 countries represented).
 - The largest percentage of participants were from northern California (44%), and the state of Washington (13%).

Materials

- A demographic questionnaire created by the researcher, measured childhood experience with nature and current environmental behavior.
- The 15 item New Environmental Paradigm Scale (Dunlap & Liere, 1978) was used to measure ecological identity.
 - The measure contains five subscales: the reality of limits to growth, anti-anthropocentrism, the fragility of nature's balance, rejection of exemptionalism, and the possibility of eco-crisis.

Procedure

- Participants volunteered from 5 different environmental agencies around the Bay Area, as well as 1 non-environmental agency.
- The remaining participants were gathered through social media postings and snowball sampling.
- Interested participants received a link to an online survey at SurveyMonkey.com, the survey took approximately 10 minutes of each participant's time.

RESULTS

Hypothesis 1:

- As expected, all correlations between childhood experience and NEP were positive; however, only the fragility subscale showed a significant relationship with childhood experiences. ($r(96) = +.21, p < .05$)

Hypothesis 2:

- There was no significant difference in childhood experience between environmental workers ($M=3.17, SD=.53$) and non-environmental workers ($M=3.27, SD=.45$).

Miscellaneous Results:

- There was no significant difference between people who work in the environmental field compared to those not working in the environmental field, in terms of their adherence to ecologically sound habits.
- There was, however, a significant difference in the habits of those who volunteer for environmental agencies. ($t(96) = -2.00, p < .05$)
- Volunteers also had significant difference on the NEP scale versus non-volunteers. Volunteers scored significantly higher on the limits, reject, and eco-crisis scales. ($p < .05$ LIMITS, $p < .01$ REJECT & ECOCRISIS)
- Those who had some type of environmental education program during childhood scored significantly higher on their habits, as well as Eco-crisis and Fragility subscales.

DISCUSSION

Conclusions

- H1 was somewhat confirmed, as all correlations between childhood experience and NEP were positive, however were only significant on 1 subscale.
- H2 was not confirmed. On the contrary, the non-environmental workers reported more childhood experience than environmental workers.

Limitations

- There was some bias in the sample; the Bay Area is more progressive than much of the nation, in regards to their environmental consciousness.
- Because the measure was separated into 5 subscales, it made it difficult to get a true hypothesis confirmation.

Future Research

- Further research may want to look into those who volunteer in the environmental field, rather than those who work.
- The implementation of environmental education in childhood seemed to make a difference on adults' environmental habits. Further research may look deeper into this factor.

FIGURE 1: Enviro-Workers Vs. Non



FIGURE 2: Workers Vs. Volunteers

