

# **Connection to nature in adulthood: Investigating the psychology of nature conservation across the lifespan**

*EU-FP7 Environment Project BIOMOT*

*Motivational strength of ecosystem services and alternative  
ways to express the value of biodiversity*



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## Research question

How do people become activists for nature?

How do individuals develop a commitment to act for biodiversity conservation?

formation and development of an environmental ethic (ethic of care), conservation behaviours, environmental lifestyles

conservation psychology  
theories of of motivation



## Methods



exemplarity research (cf. Matsuba et al. 2013)

biographical analysis

activists for nature/biodiversity and activists for other causes

15 each per country, 7 countries; N=210

life story interviews

survey questionnaire

20 motivation cards

# Findings

1. early experiences in nature
2. influence of other people and organizations
3. opportunities for environmental education
4. **environmental self / identity formation**  
~ **connectedness to nature**
5. future orientation / generativity



- developmental model  
possible trajectories toward nature / biodiversity  
conservation activism

## Findings (continued)

most activists see themselves in close relation to and interdependent with nature

*„I consider myself the social worker for nature“* (GER\_IN 27)

- respect / reverence for nature
- moral obligation to protect nature
  - act in ways that respect, care for, protect nature / biodiversity
  - prevent harm
- implicit: intrinsic value placed on nature

development of an ethic of care – expanded sense of self  
nature essential for a meaningful life

# 1. early experiences in nature

- early and sustained social and educational experiences in nature
  - early experiences are not solitary
  - typical: family members, peers
  - opportunity to access nature, knowledge about nature
- experiences in semi-natural areas, unspoiled natural world
- playing / roaming in nature, living in a rural context

~ positive affective responses

(cf. Bisson et al. 2012; Chan 2009; Chawla 1999; Clayton/Myers 2009; Horwitz 1994, 1996; Mayer/Frantz 2004; Wells/Lekies 2006)

## 1. early experiences in nature (cont'd)

- negative – traumatic – experiences  
witnessing environmental destruction influences development of environmental sensitivity / commitment to act on behalf of nature  
(cf. Bisson et al. 2012)

early (positive) experiences in nature foundational

~ connection to nature

~ later activism / environmental behaviours

~ environmental self / identity

environmental activists report strong bond / identification with nature

vs. non-nature activists (cf. Bisson et al. 2012)

## **2. influence of other people and organizations**

### **3. opportunities for environmental education**

adolescence/early adulthood:

- formal education via school and university
- helps shape environmental activism
- often not what triggers interest
- opportunity to deepen knowledge





## 4. environmental self / identity formation

environmental identity

- part of self-concept/mental representation of self
- identity formation in adolescence/emerging adulthood  
(Erikson 1968)
- developing sense of self as being intimately connected to nature (Chan 2009; Clayton/Myers 2009; Horwitz 1996; Opatow 2013)

→ how to promote development of environmental identity in adolescence/early adulthood?

formation of environmental self begins to emerge in childhood for many activists

## 4. environmental self/identity (cont'd.)

adolescence / emerging adulthood – other research:

- environmental activists had more developed environmental identities relative to comparison individuals (cf. Alisat et al. 2013; James et al. 2010)
- environmental activists score higher on measures of general identity maturity and environmental identity (cf. Matsuba et al. 2012; James et al. 2010)

**sustained** involvement with nature and environmental organizations shapes how activists perceive themselves / their identities

## **dynamics of formation of env'al activism**

- early exposure to nature a critical developmental influence, socially facilitated  
early play experiences in nature
- sustained exposure throughout childhood and adolescence  
more formal activities in nature (organization-based outdoor recreation) – facilitate development of environmental competencies – expand/deepen interest in nature – general cognitive and affective development
- active involvement in adulthood via profession and/or volunteer engagement

(cf. Chawla 2007; Clayton/Myers 2009; Clayton/Opatow 2003; James et al. 2010; Kellert 2002; Matsuba et al. 2013; Wells/Lekies 2006; Weinstein et al. 2009)

## connectedness to nature

- environmental psychology: cognitive interests and emotional bonds to nature
- plus behavioural and spiritual elements

### related concepts:

affinity to nature  
empathy for nature  
environmental identity (Clayton/Opotow 2003)  
place attachment  
commitment (Davis et al. 2009, 2011)  
environmental striving



- How do activists sustain their connectedness to nature?
- What factors influence connectedness to nature in adulthood?
- Which forms of expressions does connectedness to nature take in adulthood?

## Two thoughts to close

(1) *generational environmental amnesia* (Kahn 2002):

- with each ensuing generation, amount of environmental degradation increases
- each generation in its youth takes the degraded condition *as the non-degraded condition*, as the normal experience
- effects on people's conception of nature / connectedness to nature?



## Two thoughts to close (cont'd.)

(2) *"it's in the genes"* (GER\_IN 5)

theory of multiple intelligences (Gardner 1983)

**naturalistic intelligence** (Gardner 1999)

- nurturing and relating to one's natural surroundings
- ecological receptiveness - deeply rooted in a "sensitive, ethical, and holistic understanding" of the world and its complexities – including the role of humanity within the greater ecosphere

