

# Broadening the tent of environmental attitudes

Cameron Brick, PhD  
Hamilton College  
10/20/16

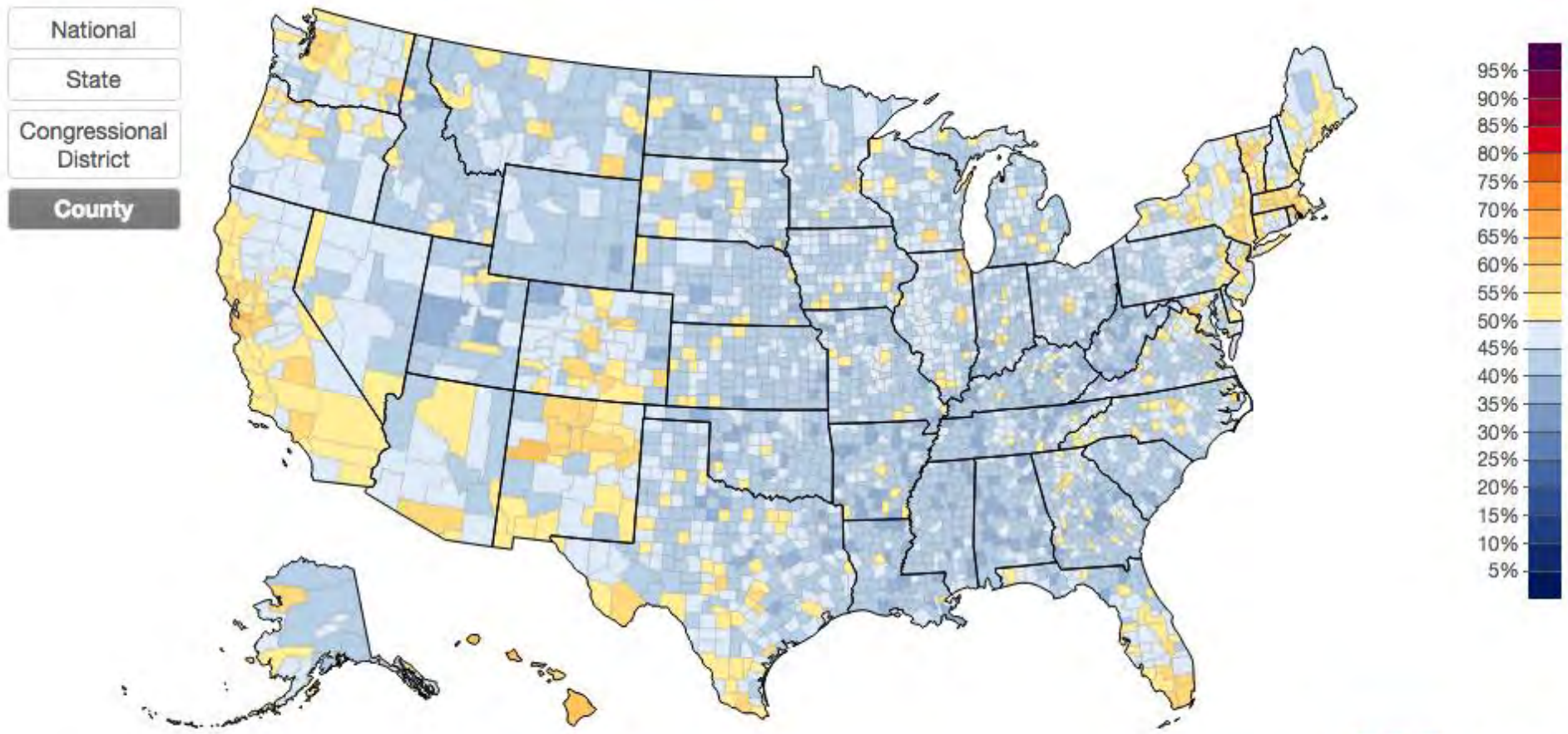


MAP · Apr 6, 2015

# Yale Climate Opinion Maps – United States

By Peter Howe, Matto Mildenerger, Jennifer Marlon and Anthony Leiserowitz

“Global warming is mostly caused by human activities.”



[Tweet](#)

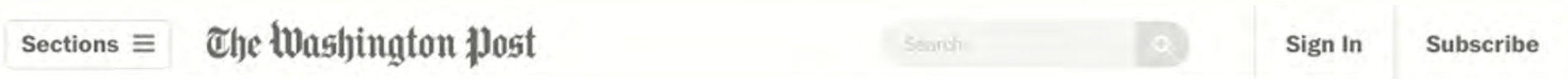
[7k](#)  
[Like](#)

Brick & Lewis (2016)

Personality → Environmental Attitudes → Behavior  
Controlling for political orientation

special case **Conscientiousness**: *duty, diligence, taking responsibility*

Feature article by Chris Mooney



Energy And Environment

# Can your personality explain how you feel about the Keystone XL pipeline?





# Two Scales of Environmental Attitudes

## **New Ecological Paradigm Scale** (15 items: Dunlap et al., 2000)

“Plants and animals have as much right as humans to exist.”

1 (*Strongly Disagree*) – 5 (*Strongly Agree*)

## **Connectedness to Nature Scale** (15 items: Mayer & Frantz, 2004)

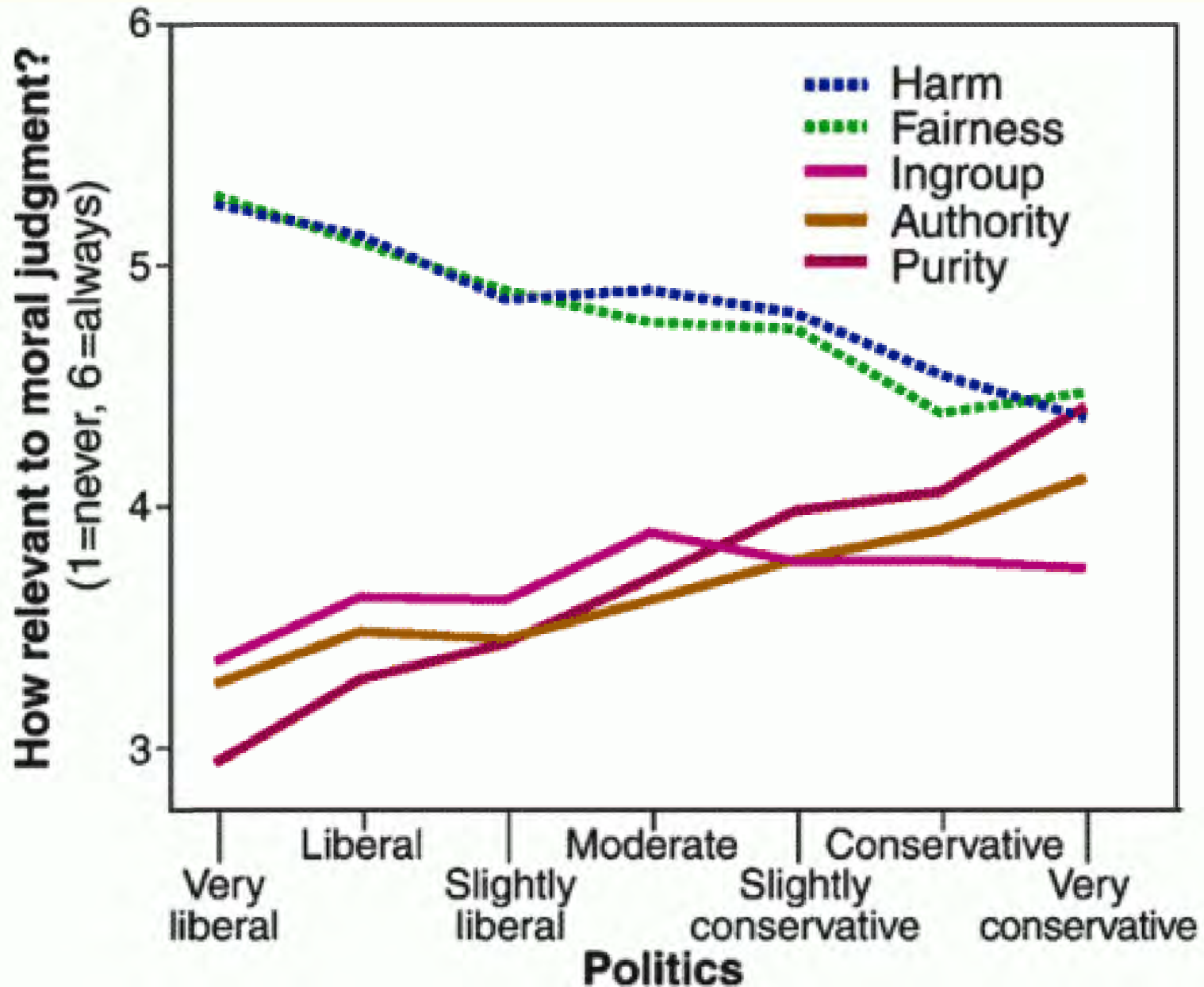
“I often feel a sense of oneness with the natural world around me.”

1 (*Strongly Disagree*) – 5 (*Strongly Agree*)

# Moral Foundations Theory

- ..... Harm
- ..... Fairness
- Ingroup
- Authority
- Purity

# Moral Foundations Theory



(Haidt & Graham, 2007)

# Moral Environmentalism Scale

(Sparks & Brick, in preparation)

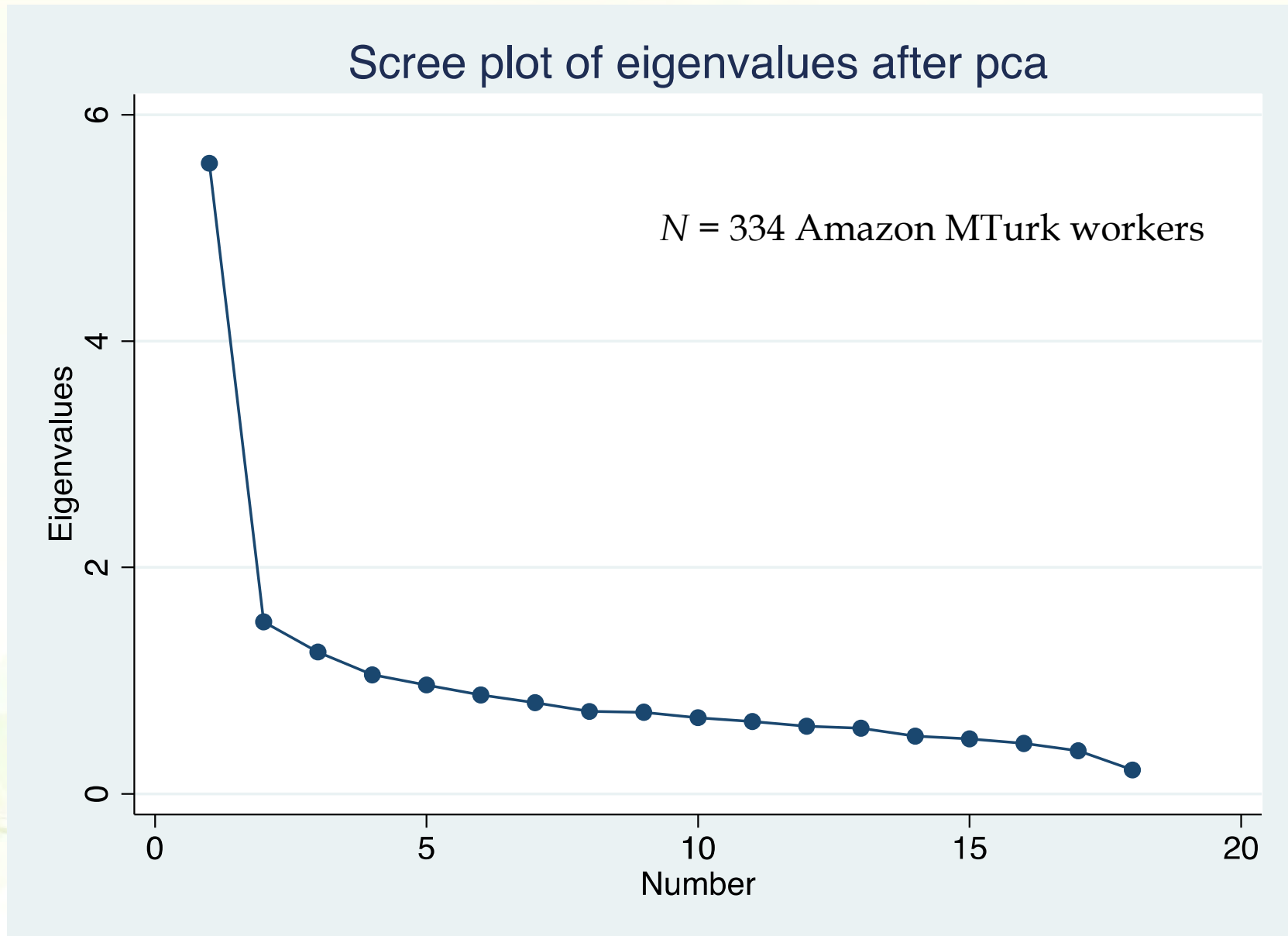
**34 items**, *Strongly disagree – Strongly agree*

1. The natural environment is being **harmed** by humans. **HARM**
2. It is our duty to **protect** the earth. **AUTHORITY**
3. Pollution is **gross**. **PURITY**

Based on moral dictionary at [www.moralfoundations.org](http://www.moralfoundations.org)



# Study 1 National Survey: Scale Validation



# Study 1

## National Survey

Correlations <i>r</i> (330)	NEP	CNS	Conservatism	Enviro. Behavior
New: Moral Environmentalism	.80	.59	-.33	.35

All correlations  $p < .001$

New scale is similar to other measures

# Study 2

## National Survey

### Goals

1. Change items to improve validity & reliability
  - a. Item Response Theory
  - b. Principal Components Analysis
2. Predict behavior better

# Study 2

National Survey  
MTurk  $N = 403$

## Findings: same as Study 1

1. One factor
2. Confounded with existing attitude scales
3. Predicts behavior moderately

# Study 3

National Survey

MTurk  $N = 448$

1. Separate attitude scales to avoid fatigue: NEP or MES
2. New behavior measure

[Additional ways to help the environment \(opens new window\)](#)

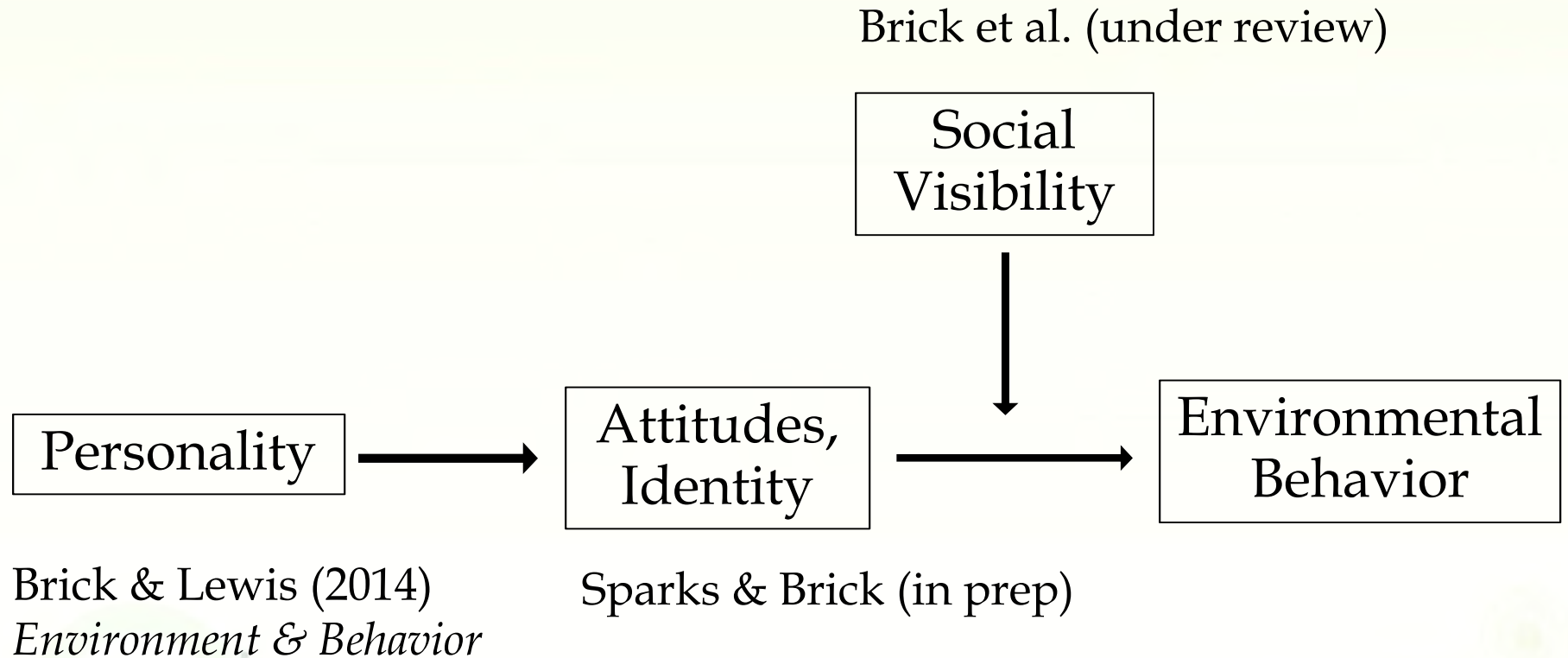
# Study 3

National Survey  
MTurk  $N = 448$

Standardized beta ( $p$ )	NEP $n = 223$	MES $n = 225$
Environmental behavior (self-report, 21 items)		
Clicked for info		



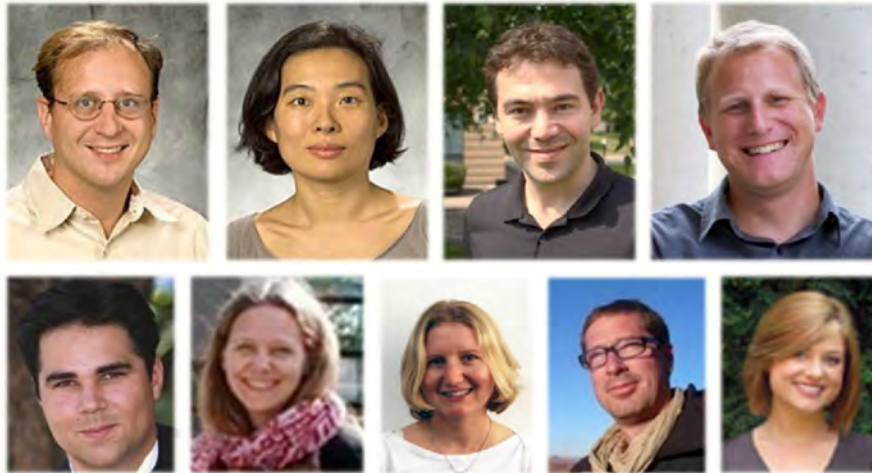
# Proposed Model





# Acknowledgments

NSF Fellowship, DGE-0707430  
Crossroads Fellowship, UCSB



Aaron Sparks



artist: Daniel Landman

[cbrick@hamilton.edu](mailto:cbrick@hamilton.edu)