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Contemporary Environmental Typologies: Renewing the New Environmental Paradigm Scale

The New Environmental Paradigm scale

Most widely used measure of pro-environmental attitudes worldwide\(^1\)

Dunlap and Van Liere, 1978: NEP vs. DSP

Unidimensional; 5 sub-scales, 15 questions, 1-5 Likert ratings

Critiques

- Reliability\(^2\)
- Validity\(^3\)

Alternatives

- Unidimensional\(^4\)
- Multidimensional: ”Thought exercises”\(^5\) or otherwise problematic\(^6\)
- Environmental Attitudes Inventory (EAI)\(^7\)

1. Hawcroft 2010
3. LaLonde and Jackson, 2002; Chatterjee, 2008; Gooch, 1995; Schultz & Zelezny, 1998; Kopnina, 2011; Lundmark, 2007
4. Ellis & Thompson, 1997; Thompson & Barton, 1994; Dobson, 1998; Nash, 1982; Steffen, 2004; Devall, 1980; Nadasdy, 2005
5. Merchant, 1980; Dryzek, 1997; Nisbet 2014
7. Milfont & Duckitt, 2010
### New Environmental Paradigm Scale

| Belief in an inherent balance of nature | The balance of nature is very delicate and easily upset  
The balance of nature is strong enough to cope with the impacts of modern industrial nations  
When humans interfere with nature, it often produces disastrous consequences |
|---|---|
| Existence of fundamental limits to growth | We are approaching the limit of the number of people the earth can support  
The earth is like a spaceship with very limited room and resources  
Despite our special abilities humans are still subject to the laws of nature |
| Anti-anthropocentrism | Plants and animals have as much right as humans to exist  
Humans were meant to rule over the rest of nature  
The earth has plenty of natural resources if we just learn how to develop them |
| Rejection of human exceptionalism | Human ingenuity will insure that we do NOT make the earth unlivable  
Humans have the right to modify the natural environment to suit their needs  
Humans will eventually learn enough about nature works to be able to control it |
| Possibility of an impending ecological crisis | The so-called “ecological crisis” facing humankind has been greatly exaggerated  
Humans are severely abusing the environment  
If things continue on their present course, we will soon experience a major ecological catastrophe |
Problem Statement and Research Questions

NEP insufficient; Critique insufficient

Research Questions

1. Which themes differentiate the worldviews of contemporary environmentalists?
2. Can environmentalist worldviews be grouped in ideologically coherent ways?
3. Does the existing New Environmental Paradigm scale capture the breadth of contemporary environmental worldviews?
Methodology

Sampling Approach: Non-probability; Purposive; Maximum variability

Recruitment

Two stage data collection

1. Quantitative, Likert-style questionnaire
2. In-depth Repertory Grid Interviews: Topic, Elements, Constructs, Ratings

Content analysis
Sample Description

N = 22

Demographics

• Gender: Male (12), Female (10)
• Age: 19-24 (2), 25-34 (9), 35-44 (7), 45-54 (1), 55-64 (1), 65+ (2)
• Ethnicity: White (15), Hispanic (3), AfrAm (2), Asian (1), Biracial (1)
• Education: >High School (2), Some college (3), College (6), Post-graduate (11)

“Environmentalism”

• How important is environment: Important (6), One of the most important (16)
• Trade-offs: Environment vs. Economy (1-5): Both Equal (3), 4 (10), Environment (9)
• Environmentalist?: No (6), Yes (16)
Cluster Analysis of Pre-Screener data

Kmeans clustering; items with p = >.250 eliminated; one-way ANOVA & Bonferroni’s post-hoc test

Final solution: 4 items (p<.001), 2 iterations for convergence, well-distributed cluster membership

Groups

1. Pragmatic Reformers (n=5)
2. Activist Greens (n=9)
3. Ecomodernists (n=3)
4. Ecofatalists (n=5)

Descriptive only of sample

Cautions

<table>
<thead>
<tr>
<th>Question Item</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>How important is…people making small changes in their daily lives</td>
<td>17.27</td>
<td>.000</td>
</tr>
<tr>
<td>Almost everything we do in modern life is harmful to nature</td>
<td>9.12</td>
<td>.001</td>
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<tr>
<td>We will experience a major ecological catastrophe if society continues on its present course</td>
<td>26.91</td>
<td>.000</td>
</tr>
<tr>
<td>Technology causes more environmental problems than it solves</td>
<td>23.97</td>
<td>.000</td>
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</tbody>
</table>
Sub-Group Descriptions: *Pragmatic Reformers* (n=5)

Young to middle age (80% > 44 y/o)

Caucasian (80%)

Believe in planetary boundaries
- “Earth has limited room/resources” ($M = 3.80$, $SD = .447$); “Approaching the maximum number of people earth can support” ($M = 3.80$, $SD = .477$)

Apocalyptic
- “Major ecological catastrophe if society continues on its present course” ($M = 4$, $SD = 0$)

Pro-technology
- “Environmental problems will eventually be solved through better technology” ($M = 2.80$, $SD = .447$); “Technology causes more environmental problems than it solves” ($M = 1.60$, $SD = .548$).

Sees positive environmental change happening in multiple ways
- i.e. shopping decisions made by individuals ($M = 2.6$, $SD = .894$)
- And at multiple scales (individual, grassroots, global, esp. national ($M = 4$, $SD = 0$)
RepGrid Analysis: *Pragmatic Reformers* (n=5)

**Elements:** Moderate
- Green Technology ($M = 1.60$)
- Policies/regulations ($M = 1.40$)
- Reduce resource consumption ($M = 1.20$)

**Constructs:** Moderate
- Economics ($M = 1.20$)
- Social change ($M = 1.60$)
Sub-Group Descriptions: **Activist Greens (n=9)**

Older; Diverse (6/9 Caucasian); More female than male (5/9)

See nature as fragile
- “Everything in modern life is harmful to nature” ($M = 3.44$, $SD = .527$)
- “Nature at harmony if human leave it alone” ($M = 3.33$, $SD = .866$).

Believe in planetary boundaries
- “Earth has limited room and resources” ($M = 3.89$, $SD = .333$)

Apocalyptic
- “Major ecological catastrophe if society continues on its present course” ($M = 3.89$, $SD = 0.333$).

Anti-technology
- Technology culpable for environmental degradation ($M = 3.33$, $SD = .500$).
- Technology will not solve environmental problems ($M = 2.22$, $SD = .972$)

Favor grassroots action more than other groups ($M = 3.22$, $SD = .441$)
Repertory Grid Analysis: **Activist Greens** (n=9)

**Elements**
- Policies and regulations ($M = 1.78$)
- Reducing Resource Consumption ($M=1.22$)
- Individual political lifestyle decisions ($M = 1.20$)
- Education/Awareness ($M=1.22$)

**Constructs**
- Time ($M = 1.66$)
- Attitudes/values/behaviors ($M = 0.89$)

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**Respondent 19**

<table>
<thead>
<tr>
<th>Private</th>
<th>1</th>
<th>1</th>
<th>3</th>
<th>3</th>
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<th>3</th>
<th>Public</th>
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<tbody>
<tr>
<td>Significant reduction</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>Slight reduction</td>
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<tr>
<td>Active</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>Passive</td>
</tr>
<tr>
<td>Harder to get people engaged</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>Easier to get people engaged</td>
</tr>
<tr>
<td>Larger impact on carbon reductions</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>Smaller impact on carbon reductions</td>
</tr>
<tr>
<td>Needs less people to be effective</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>Needs many people to be effective</td>
</tr>
</tbody>
</table>

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**PC1: 86.3%**

1. Public
2. Slight reduction
3. Active
4. Easier to get people engaged
5. Smaller impact on carbon reductions
6. Needs many people to be effective

**PC2: 9.8%**

1. Private
2. Significant reduction
3. Active
4. Harder to get people engaged
5. Larger impact on carbon reductions
Sub-Group Descriptions: *Ecomodernists* (n=3)

Young to middle age (25-34); Caucasian; Educated

See nature as resilient

- “Nature at harmony if human beings would just leave it alone” \( (M = 1.33, SD = .577) \)
- “Everything in modern life is harmful to nature” \( (M = 1.33, SD = .577) \).

Not reaching planetary boundaries

- “We are approaching the maximum number of people the earth can support” \( (M = 1.67, SD = 1.15) \),

Optimistic

- “Major ecological catastrophe” \( (M = 2, SD = 0) \)

Pro-technology

- “Environmental problems will be solved through better technology” \( (M = 3, SD = 1.73) \)

Large scale action

- Reject effectiveness of individual behavior \( (M = 1.33, SD = .577) \); grassroots action \( (M = 2, SD = 0) \)
Sub-Group Descriptions: *Ecomodernists* (n=3)

**Elements**
- Green technology ($M = 3.67$)
- Adaptation/planning ahead ($M = 0.67$)

**Constructs**
- Technology ($M = 1.67$),
- Degree of difficulty ($M = 2$)
- Degree of upheaval ($M = 2$)

![Respondent 13](chart.png)
Sub-Group Descriptions: *Ecofatalists* (n=5)

44 or younger

Ethnically diverse; Highly educated

Believe in planetary boundaries
  – “Earth has limited room and resources” (M = 3.20, SD = .837)

Anti-technology
  – “Technology causes more environmental problems than it solves” (M = 3, SD = 0)

Individual behavior paramount
  – “People making small changes in their daily lives” (M = 3.82, SD = .548).
  – National laws and policies (M = 3, SD = .707)
  – International agreements (M = 2.60, SD = .548)
Sub-Group Descriptions: *Ecofatalists (n=5)*

**Elements**
- Reducing resource consumption ($M = 2.0$)
- Decreasing traditional car dependence ($M = 1.20$)
- Recycling ($M = 0.60$)

**Constructs**
- Economic issues ($M = 3.20$)
- Social change ($M = 1.60$)
Research Questions

1. Does the existing New Environmental Paradigm scale capture the breadth of contemporary environmental worldviews?

2. Which themes differentiate the worldviews of contemporary environmentalists?
   - “Nature” less important than hypothesized; Technology more important than hypothesized; Scale critical in attitudes towards social change

3. Can environmentalist worldviews be grouped in ideologically coherent ways?
   - 4-part typology
Conclusions and the panel theme…

Research Considerations
Further Research
The BIG questions

• How do we draw a larger, more inclusive circle?
• How do we “engage successfully”?
• Challenge- and “opportunity”? 
References


