The influence of an ecological worldview on tourist consumers’ behaviour and choice:

What’s love got to do with it?

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Ecological crisis

“Civilised man has marched across the face of the Earth and left a desert in his footprints” (Anonymous, cited in Suzuki, 1997, p. 100)
The background: Environmental degradation, the Australian example

- Australia has the fourth largest ecological footprint in the world – 7.09 hectares pp, compared with 2.18 ha pp for the rest of the world.
- Ecological footprint is a measure of the impact of everything humans do and consume in environmental terms - estimate of the land area that would be needed to sustain an individual indefinitely (ACF, 2004-2008).
- Sustainable carrying capacity of the earth is only 1.89 hectares per person (ACF, 2004-2008).
- Australia is well over the limit in terms of its use of the earth’s resources
- Apart from actions of governments and relevant authorities, what each individual does and consumes in their everyday lives matters.
The problem ...

- Increasing levels of environmental awareness and environmental knowledge per se have not necessarily fostered positive environmental attitudes or consistent environmentally responsible behaviour and choices among individuals – good deal of “buck passing” and widespread inertia (McKenzie-Mohr, 2000; Pooley & O'Connor, 2000; Stern, 2000b).

- The irony is that this inertia is coupled with growing interest in green products & services including tourism.
Ecotourism as green tourism

- Ecotourism arguably fastest growing sector of the global tourism industry; some say ecotourism contributes as much as 20% of all tourism revenue - heated debate about this because of lack of consistent definitions of ecotourism & lack of effective measurement tools for its economic impact.

- Yet in spite of ecotourism’s economic impact - to date no conclusive evidence of tourists who prefer or are more interested in ecotourism experiences being any more environmentally aware than mass tourists?

- Lack of understanding of these consumers – preference for nature based experiences only one aspect of general green or responsible consumerism?  

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Some questions ...

- Tourism choices and preferences (as well as other consumer choices and behaviour etc.) at least partially as a result of underlying psychological make-up of consumers?
- Does a deep pro-environmental orientation and concern for nature influence consumers’ choices and behaviours not only in a tourism setting but in their day to day lives as well?
Emphasis in this research - the research question

- **Psychological**, rather than sociological or technical.
- Government and business action necessary but **not enough**.
- Understand what motivates each individual to take consistent **action** in their daily lives.
- **The primary research question:**
  
  Does an ecological worldview (in the deepest and broadest sense) actually **influence individuals’ behaviour and choices**, including preferences for ecotourism over mainstream tourism?
What is an ecological worldview? Some of the literature

- **It is not** just a set of broad beliefs – New Ecological Paradigm (NEP) Dunlap et al. – used over decades but somewhat limited and perhaps outdated?
- Capra (1996): The Web of Life - worldview built on **intrinsic value of nature**
- Leopold (1949/ 1987): A Sand County Almanac - the “land ethic” – compassion and **care** for the community of nature
- Suzuki (1997, 1999)– The Sacred Balance - **interconnectedness** of all life and “sacredness” of nature
- Darwin (1894) – The Descent of Man and Selection in Relation to Sex - social and moral evolution to include **moral consideration** for non-human life or nature

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What is an ecological worldview? Some of the literature

- Johnson (1991) – A Morally Deep World
- Holmes Rolston III – so-called father of environmental ethics – oneness with nature esp. at leisure in nature
- Naess (1989): deep ecology and value of nature – The UN Earth Charter is built on many of these concepts and ideas
Need for cross-disciplinary research

Some of the fields of research necessary for more thorough understanding of the human-nature relationship and its influence on human altruistic behaviour:

- Philosophy of morals and ethics (e.g. Darwin, Johnson, Van Hooft, Noddings, etc.)
- Environmental philosophy and ethics (e.g. Capra, Carson, Clayton & Opotow, Gould, Leopold, Naess, Roszak, Rolston, Seamon, Suzuki, Ulrich, Wilson, etc.)
- Psychology of human morals and self-transcendence (e.g. Aron et al., Batson, Erikson, Fromm, Maslow, etc.)
Cross disciplinary research

- Psychology of values (e.g. Feather, Rokeach, Schwartz, etc.)
- Environmental (conservation) psychology (e.g. Stern, Dietz et al., Oskamp, Schultz, Schmuck, Kaiser et al., Kals et al., etc.)
- Environmental education (e.g. Fien, Miles, Orr, Meadows et al., Rolston, etc.)
- Ecotourism (e.g. Eagles, Fennell, Weaver, Sharpley, Wearing & Neil, Wight, etc.)

**TWO KEY THEMES EMERGED FOR TRUE ENVIRONMENTAL ETHIC – VALUES AND DEEP CARING AS LOVE FOR NATURE**
Key psychological components: values and love

A question of values – Core values

☐ Core values – central to one’s sense of self – “oughtness” quality to them – at the basis of behaviour, particularly **moral and ethical behaviour** – guiding principle

☐ Relatively few in number – less than attitudes or lower order values

☐ **Basis of** both lower values, attitudes, social norms, and behaviour

☐ Character – moral force of a person – described by person’s system of core values
Structure of Core Values Systems

- Schwartz and colleagues: two dimensional circular model of the structure of core values systems.
- **Self-transcendence** versus **self-enhancement**
- **Openness to change** versus **conservatism** (Schwartz termed this “conservation”)
- **Conflict among values and values types** and the **relative tradeoffs** which determine behaviour
Openness to Change

Self-Transcendence

Self-Direction

Stimulation

Hedonism

Achievement

Self-Enhancement

Conformity

Tradition

Security

Conservation

Power

Universe


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Environmental value orientations

- **Stern, Dietz** and colleagues – three environmentally relevant value orientations

- **Biospheric, socio-altruistic** and **egoistic** values (from work of Rokeach and Schwartz et al.)

- Biospheric and socio-altruistic are **self-transcendent or altruistic** values types – focus on concerns beyond mere self-interest.

- Egoistic – **self-enhancement** values types – focus on self-interest

- Combined **altruistic values** type predict more pro-environmental beliefs, attitudes and behaviour. **Egoistic values** type predict less pro-environmental orientation in terms of beliefs, attitudes and behaviour

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1. Protecting the environment, preserving nature (*self-transcendent biospheric values*)
2. Unity with nature, fitting into nature (*self-transcendent biospheric values*)
3. Respecting the earth, harmony with other species (*self-transcendent biospheric values*)
4. A world at peace, free of war and conflict (*self-transcendent altruistic values*)
5. Social justice, correcting injustice care for the weak (*self-transcendent altruistic values*)
6. Equality, equal opportunity for all (*self-transcendent altruistic values*)
7. Honoring parents and elders, showing respect (*conservatism or traditional values*)
8. Family security, safety for loved ones (*conservatism or traditional values*)
9. Self-discipline, self-restraint, resistance to temptation (*conservatism or traditional values*)
10. Authority, the right to lead or command (*self-enhancement or egoistic values*)
11. Influential, having an impact on people and events (*self-enhancement or egoistic values*)
12. Wealth, material possessions, money (*self-enhancement or egoistic values*)
13. A varied life, filed with challenge, novelty, and change (*openness to change values*)
14. An exciting life, stimulating experiences (*openness to change values*)
15. Curious, interested in everything, exploring (*openness to change values*)

**Brief Inventory of Values BIV**

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Stern et al. 1998
And the importance of love ...

“When we see land as a community to which we belong, we may begin to use it with love and respect. ... That land is a community is the basic concept of ecology, but that land is to be loved and respected is an extension of ethics” (Leopold, 1949/1987, p. viii).

Hypotheses for research revolved around identifying the relative influence of environmentally relevant values and love and caring for nature in terms of tourists’ attitudes, behaviours and choices, including preferences for ecotourism over mainstream tourism – to answer the primary research question.
Hypotheses

- **H1:** Stronger biospheric values will have a positive relationship with tourist pro-environmental attitudes, behaviours, willingness to pay, and choices including interest in ecotourism.

- **H2:** Stronger socio-altruistic values will have little or no relationship with tourist pro-environmental attitudes, behaviours, willingness to pay, and choices.

- **H3:** Stronger egoistic values will have a negative relationship with tourist pro-environmental attitudes, behaviours, willingness to pay, and choices including interest in ecotourism.

- **H4:** Love and care for nature will have a positive relationship with tourist pro-environmental attitudes, behaviours, willingness to pay, and interest in ecotourism.

- **H5:** Love and care for nature will be a better predictor of tourist pro-environmental willingness to sacrifice than values and beliefs as the level of sacrifice increases.
The research approach

Prior to testing the hypotheses – necessary to develop a measure of love and care for nature – prior to this research none exists.

Therefore research required two separate empirical studies – one for scale development and one for hypothesis testing.
Study One- scale development

- Study One – new measure of Love and Care for Nature - LCN
- 100 + items reduced to 15 of the best performing items over several stages: expert survey, pre-pilot survey, pilot 300+ university students, initial field trial.
- Cronbach’s alpha remained very high at over .9 in spite of reduction of scale
- Good evidence for content, criterion related, and construct validity
- New 15 item LCN scale used in Study two hypothesis testing

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Study Two – Hypothesis testing

- Tourists participating in **leisure activities** where **nature** at least **some point of interest**, through to being the **actual focus** of the experience.

- **Sampling frame** – Gold Coast tourists (nature is marketed as being either focus or backdrop of many tourism activities in this region). Gold Coast one of the premier tourism regions of Australia – good deal of diversity of tourism experiences available.

- Tourists sampled from iconic marine theme park on the Gold Coast and accredited ecotourism venue.

- Sampled for as much **diversity** in tourists and their relative interest in nature as possible.
Lamington National Park – Gold Coast
Hinterland
O’Reilly’s Rainforest Retreat

- **Accredited ecotourism venue** – both nature resort type facilities and wildlife watching – strict guidelines for visitors to protect the natural environment – low impact visitation
- [ ] In the Lamington National Park
- [ ] Multi award winner for ecotourism efforts, environmental initiatives, and wildlife protection
Seaworld marine theme park


- All the elements of a theme park (rides, shopping, entertainment shows etc.) but with marine animals as a major but not only attraction – zoo-like

- **Mainstream tourism/ visitor venue**

- Marine animal rescue and rehabilitation arm not particularly prominent for most tourists
Overview methodology

☐ Quantitative – survey based method
☐ Leisure participants/ tourists on Gold Coast – nature at least some part of experience – both mainstream and ecotourism venues
☐ Seaworld – iconic marine wildlife theme park – mainstream venue
☐ O’Reilly’s Rainforest Retreat – advanced ecotourism accreditation
Survey method - quantitative Measures

- Core values – 15 item BIV (Stern et al., 1998)
- Love and Care for Nature (LCN) scale – developed in Study One – 15 items
- New Ecological Paradigm (Dunlap et al, 2000) – beliefs
- Tourism specific attitudes
- General consumer attitudes and behaviour
- Self reported pro-environmental behaviours
- Willingness to make personal sacrifices to protect the environment
- Preferences for particular types of tourism experiences and activities – ecotourism type versus mainstream type.
- General interest in nature based ecotourism type activities (Ecotourism Interest scale Juric et al. 2002) – as compared with more mainstream tourism activities.
Field Sample – Study Two

- 261 tourists completed the survey - 167 day visitors to Seaworld, and 59 day visitors and 34 overnight visitors to O’Reilly’s Rainforest Retreat.
- 107 males and 147 females (7 respondents failed to indicate their gender).
- Ages ranged 18 to 75 years, the average age of the whole sample was just over 41 years.
- The age profiles of males and females were similar, as were the age profiles of visitors to Seaworld and the visitors to O’Reilly’s Rainforest Retreat.

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## Relationship between ecotourism interest and holiday preferences

<table>
<thead>
<tr>
<th>Holiday preference</th>
<th>Ecotourism Interest (EI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecotourism holiday</td>
<td>.48***</td>
</tr>
<tr>
<td>Wildlife watching and photography holiday</td>
<td>.46***</td>
</tr>
<tr>
<td>Volunteer ecotourism holiday</td>
<td>.36***</td>
</tr>
<tr>
<td>Sun and surf beach holiday</td>
<td>-.32***</td>
</tr>
<tr>
<td>Luxury resort holiday</td>
<td>-.47***</td>
</tr>
<tr>
<td>Nightlife, shopping and gaming holiday</td>
<td>-.35***</td>
</tr>
</tbody>
</table>

*** p < .001

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<tr>
<th>Holiday preference...</th>
<th>Environmental beliefs NEP</th>
<th>Love and care for nature LCN</th>
<th>Biospheric values</th>
<th>Socio-altruistic values</th>
<th>Egoistic values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecotourism nature based holiday</td>
<td>0.24***</td>
<td>0.33***</td>
<td>0.38***</td>
<td>0.21**</td>
<td>-0.37***</td>
</tr>
<tr>
<td>Wildlife watching or wildlife photography holiday</td>
<td>0.27***</td>
<td>0.32***</td>
<td>0.33***</td>
<td>0.14*</td>
<td>-0.21**</td>
</tr>
<tr>
<td>Volunteer ecotourism holiday</td>
<td>0.28***</td>
<td>0.30***</td>
<td>0.34***</td>
<td>0.17**</td>
<td>-0.36***</td>
</tr>
<tr>
<td>Sun and surf beach holiday</td>
<td>-0.23***</td>
<td>-0.24***</td>
<td>-0.26***</td>
<td>-0.13*</td>
<td>0.12</td>
</tr>
<tr>
<td>Luxury resort holiday</td>
<td>-0.27***</td>
<td>-0.34***</td>
<td>-0.36***</td>
<td>-0.16*</td>
<td>0.37***</td>
</tr>
<tr>
<td>Nightlife, gaming and shopping holiday</td>
<td>-0.35***</td>
<td>-0.36***</td>
<td>-0.43***</td>
<td>-0.21**</td>
<td>0.46</td>
</tr>
</tbody>
</table>

* p<.05, ** p<.01, *** p<.001

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Relationships between value types

- Moderately strong negative relationship between biospheric values and egoistic values $r = -.63, p= .000$ ($N = 258$) as predicted by theory and the results of previous research.

- Moderate negative relationship between socio-altruistic values and egoistic values $r = -.50, p = .000$ ($N = 258$), again consistent with past research results.

- Makes sense in terms of values theory - both biospheric values and socio-altruistic values contain value items from Schwartz’s self-transcendent values cluster and focus on issues beyond self. In contrast, egoistic values include value items from Schwartz’s self-enhancement values cluster focus primarily on issues of self-interest.

- However, the relationship between biospheric values and socio-altruistic values, while positive, is weak at $r = .15, p = .017$ ($N = 258$)
Values and general interest in ecotourism (EI) vis-à-vis other tourism activities

<table>
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<th>Egoistic values</th>
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<td>Ecotourism interest EI</td>
<td>.47 ***</td>
<td>.16 *</td>
<td>-.37 ***</td>
</tr>
<tr>
<td>sun and surf</td>
<td>-.06</td>
<td>-.03</td>
<td>.00</td>
</tr>
<tr>
<td>shopping</td>
<td>-.24 ***</td>
<td>-.06</td>
<td>.17 **</td>
</tr>
<tr>
<td>gambling</td>
<td>-.13 *</td>
<td>-.04</td>
<td>.13 *</td>
</tr>
<tr>
<td>exciting nightlife</td>
<td>-.17 **</td>
<td>-.21 **</td>
<td>.24 ***</td>
</tr>
<tr>
<td>power boating and 4-wheel driving</td>
<td>-.02</td>
<td>-.13 *</td>
<td>.09</td>
</tr>
<tr>
<td>wine and food tasting</td>
<td>-.01</td>
<td>.13 *</td>
<td>-.01</td>
</tr>
<tr>
<td>historical sites and museums</td>
<td>.23 ***</td>
<td>.12</td>
<td>-.21 **</td>
</tr>
<tr>
<td>learning about other cultures</td>
<td>.22 ***</td>
<td>.15 *</td>
<td>-.29 ***</td>
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<table>
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<tr>
<th>Agreement with</th>
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<tr>
<td>As a tourist I believe that I am entitled to travel anywhere and anyhow I choose as I have paid for the personal experience. (C)</td>
<td>- .18**</td>
<td>- .15*</td>
<td>.19**</td>
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<td>As a tourist I feel I am entitled to use as much water/power/resources during my visit as I think fit for my own enjoyment. (C)</td>
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<td>I prefer leisure activities and tourism experiences where I can just have fun, relax, and spend money on doing what I like how I like. (C)</td>
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<td>As a tourist it is very important to me that tourism products, services and venues are part of a &quot;green&quot; accreditation system.</td>
<td>.52***</td>
<td>.22***</td>
<td>- .40***</td>
</tr>
<tr>
<td>I would choose a tourism product or service which adopts a &quot;green&quot; accreditation over one that does not if the choice is available.</td>
<td>.47***</td>
<td>.15*</td>
<td>- .39***</td>
</tr>
<tr>
<td>I believe I should definitely consider my impact on earth and other cultures when I make my travel choices.</td>
<td>.32***</td>
<td>.17**</td>
<td>- .28***</td>
</tr>
<tr>
<td>I support closure to the public of some national parks and wilderness areas to protect the environment from harm due to human activity.</td>
<td>.20**</td>
<td>.13*</td>
<td>- .19**</td>
</tr>
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*p < .05  ** p < .01  *** p < .001

Note: (C) = Consumptive attitudes

Values and tourist attitudes

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**Spearman's Rho correlations between behaviours and the three value orientations**

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<tr>
<td>practise recycling</td>
<td>.16 *</td>
<td>.06</td>
<td>-.13 *</td>
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<td>use public transport to minimize car use</td>
<td>.15 *</td>
<td>-.02</td>
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<tr>
<td>conserve energy</td>
<td>.20 **</td>
<td>.02</td>
<td>-.13 *</td>
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<tr>
<td>conserve water</td>
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<tr>
<td>use energy or water efficient household devices</td>
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<td>make special effort to buy products that are environmentally friendly</td>
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<td>.12</td>
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<tr>
<td>make special effort to buy recycled paper and plastic products</td>
<td>.29 **</td>
<td>.15 *</td>
<td>-.19 **</td>
</tr>
<tr>
<td>boycott companies with poor environmental record</td>
<td>.36 **</td>
<td>.17 *</td>
<td>-.25 **</td>
</tr>
<tr>
<td>vote for candidates with green platform</td>
<td>.43 **</td>
<td>.15 *</td>
<td>-.30 **</td>
</tr>
<tr>
<td>sign environmental petitions</td>
<td>.34 **</td>
<td>.17 *</td>
<td>-.27 **</td>
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### Relationship between value orientation and willingness to pay and willingness to sacrifice to protect the environment

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<tbody>
<tr>
<td>I would be willing to contribute extra 5% of cost for conservation of wildlife</td>
<td>.42 ***</td>
<td>.10</td>
<td>-.31 ***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td>I would be willing to contribute extra 10% of cost for conservation of wildlife</td>
<td>.39 ***</td>
<td>.04</td>
<td>-.29 ***</td>
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<td></td>
<td></td>
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<tr>
<td>I would be willing to pay much higher prices for many goods and services in order to protect the environment</td>
<td>.43 ***</td>
<td>.08</td>
<td>-.29 ***</td>
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<td></td>
<td></td>
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<tr>
<td>I would be willing to accept cuts in my standard of living in order to protect the environment</td>
<td>.41 ***</td>
<td>.05</td>
<td>-.28 ***</td>
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Note: (C) - Consumptive attitudes

**LCN and tourist attitudes**

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## Love and care for nature and pro-environmental behaviour

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<td>.37***</td>
<td>.29***</td>
</tr>
<tr>
<td>boycott companies with poor environmental record</td>
<td>.51***</td>
<td>.36***</td>
</tr>
<tr>
<td>vote for candidates with green platform</td>
<td>.48***</td>
<td>.43***</td>
</tr>
<tr>
<td>sign environmental petitions</td>
<td>.44***</td>
<td>.34***</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01, ***p < .001

H. Perkins 2009
### Love and care for nature and willingness to pay or make sacrifices

<table>
<thead>
<tr>
<th>Item</th>
<th>Love and care for nature LCN</th>
<th>Biospheric values</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would be happy to contribute an extra 5% of cost of a tourism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>package towards conservation of wildlife and the natural environment</td>
<td>.43***</td>
<td>.46***</td>
</tr>
<tr>
<td>I would be happy to contribute an extra 10% of cost of a tourism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>package towards conservation of wildlife and the natural environment</td>
<td>.37***</td>
<td>.39**</td>
</tr>
<tr>
<td>I would be willing to pay much higher prices for many goods and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>services in order to protect the environment</td>
<td>.61***</td>
<td>.44***</td>
</tr>
<tr>
<td>I would be willing to accept cuts in my standard of living in order</td>
<td></td>
<td></td>
</tr>
<tr>
<td>to protect the environment</td>
<td>.58***</td>
<td>.41***</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01, *** p<.001

H. Perkins 2009
Predicting willingness to incur much higher prices in order to protect the environment

- When **biospheric values, pro-environmental beliefs, and love and caring for nature** were used together as predictors for willingness to pay much higher prices for goods and services to protect the environment, all three predictors accounted for a significant 38.3% of the variance in willingness to pay $F (3, 242) = 50.08, p = .000$, but **love and caring** made the **only significant unique contribution** $\beta = .52, p < .001$. 

H. Perkins 2009
Importance of love as predictor of willingness to pay much higher prices for the environment

Summary of regression predicting willingness to pay much higher prices for goods and services in order to protect the environment (N = 245)

<table>
<thead>
<tr>
<th>Variable (predictor)</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-.55</td>
<td>.67</td>
<td></td>
</tr>
<tr>
<td>Biospheric value orientation</td>
<td>.16</td>
<td>.17</td>
<td>.07</td>
</tr>
<tr>
<td>NEP</td>
<td>.02</td>
<td>.01</td>
<td>.12</td>
</tr>
<tr>
<td>Love and care for nature LCN</td>
<td>.74</td>
<td>.09</td>
<td>.52***</td>
</tr>
</tbody>
</table>

Note: $R^2 = .383$

*** $p<.001$

NB: Collinearity statistics of Tolerance and VIF were well within acceptable limits.

H. Perkins 2009
Predicting willingness to incur cuts in personal living standards in order to protect the environment

A similar pattern was evident using the biospheric values, beliefs, and love and caring for nature, as combined predictors of willingness to accept cuts in one’s standard of living to protect the environment. Again all three variables accounted for a significant 34.2% of the variance in willingness to accept cuts in living standard $F (3, 242) = 41.89, p = .000$, but as before love and caring made the only significant unique contribution $\beta = .49$, $p < .001$. 

H. Perkins 2009
Importance of love as predictor of willingness to incur cuts in personal living standards for the environment

Summary of regression predicting willingness to accept cuts in one’s standard of living to protect the environment (N = 245)

<table>
<thead>
<tr>
<th>Variable (predictor)</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-.06</td>
<td>.68</td>
<td></td>
</tr>
<tr>
<td>Biospheric value orientation</td>
<td>.19</td>
<td>.17</td>
<td>.08</td>
</tr>
<tr>
<td>NEP</td>
<td>.01</td>
<td>.01</td>
<td>.09</td>
</tr>
<tr>
<td>Love and care for nature LCN</td>
<td>.69</td>
<td>.13</td>
<td>.49***</td>
</tr>
</tbody>
</table>

Note: $R^2 = .342$

*** $p<.001$

NB: Collinearity statistics of Tolerance and VIF were well within acceptable limits.
Conclusions

- An ecological worldview - stronger nature specific biospheric values and love and caring for nature significantly influences pro-environmental attitudes, behaviours, and choices (pro-environmental altruism) including preferences for ecotourism type experiences over mainstream tourism experiences.

- Ecological worldview appears to influence general green consumer choice, political action, and environmentally responsible behaviour, as well as leisure preferences and interests such as tourism. These consumers may represent an environmentally sensitive and responsible consumer and traveller.
Conclusions

- When analysed *separately, socio-altruistic values*, in the main do **not** appear to influence pro-environmental altruism or preferences for green tourism – generally **no relationship** – perhaps simply **not** activated, as value items are not nature specific.

- The **opposite worldview** to an ecological one is **an egoistic worldview** - relatively stronger egoistic values and lower levels of love and care for nature – this worldview predicts **more consumptive type attitudes, less likelihood of pro-environmental behaviour and more interest in mainstream tourism over ecotourism type experiences.**
Conclusions: What’s love got to do with it?

- Love and care for nature is possibly the **most important** psychological component of an ecological worldview - greater **direct influence** on pro-environmental behaviours and willingness to make sacrifices to protect the environment **than either values or beliefs.**

- Love and care for nature **fully mediated** the effect of biospheric values on pro-environmental altruism when levels of effort and personal sacrifice were **higher** - e.g. willingness to incur much higher prices and incur standard of living cuts to protect the environment.
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ECOLOGICAL WORLDVIEW

SELF TRANSCENDENCE

LOVE AND CARING FOR NATURE

BIOSPHERIC VALUE ORIENTATION

SOCIO-ALTRUISTIC VALUE ORIENTATION

ECOTOURISM preferences and interests

PRO-ENVIRONMENTAL attitudes, behaviours, behavioural intentions, willingness to pay

SELF ENHANCEMENT

EGOISTIC VALUE ORIENTATION

ECOLOGICAL WORLDVIEW

MAINSTREAM TOURISM preferences and interests

CONSUMPTIVE attitudes

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Love and visceral contact

“...we cannot win this battle to save species and environments without forging an emotional bond between ourselves and nature as well – for we will not fight to save what we do not love (but only appreciate in some abstract sense). So let them all continue – the films, the books, the television programs, the zoos, the little half acre of ecological preserve in any community, the primary school lessons, the museum demonstrations, even ... the 6:00AM bird walks ... Let them continue and expand because we must have visceral contact in order to love. We really must make room for nature in our hearts” (Stephen J. Gould, 1991)
Fostering love ...

- “Love and responsibility for the earth cannot only be thought about cerebrally; they must be felt emotionally, with the heart” (Seamon, 1984, p. 769)

- These philosophers and others believe that humans will only act to protect what they love, and if this view is accepted then enhancing levels of love and care for nature may increase the likelihood of more appropriate individual responses to the current environmental crises facing humankind.
Evaluation tool..

- 15 item Love and Care for Nature scale LCN – means of **evaluation** of environmental education programs, and the effect of what Gould calls “visceral contact” with nature through tourism and other nature based leisure activities – easy to administer and analyse.
Where to from here?

- **Experiments** on the effect of direct experiences in nature – change in values and particularly feelings – LCN evaluation tool?

- **Volunteer “ecotourists”** – more in depth study of what motivates them – significant potential market; drive social change through example? – opportunity for niche providers as well

- **LOHAS consumers** – lifestyle of health and sustainability consumers

- **Design and evaluation** of environmental education programs – emotional engagement – LCN evaluation tool?

H. Perkins 2009
Questions?

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