

“Engaging with Parks, Enhancing Health - Volunteering in Nature Benefits Humans & Ecosystems”

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The environmental determinants of health:

- Two aspects of environment affect health:
 - Its quality – ‘environmental degradation’
 - Its accessibility – ‘environmental deprivation’



Health effects of environmental degradation:

- Pollution → a range of physical health impacts incl. gastro-intestinal & respiratory disorders, allergies, cancers & cardio-vascular disorders (e.g. Kelishadi, 2012)
- Environmental degradation → poor mental health (Speldewinde, Cook, Davies & Weinstein, 2011)
- In 2009, the UN estimated climate change was causing 300,000 deaths per year worldwide (Mawle, 2009)



Health effects of environmental deprivation:

- Humans are dependent physiologically on nature (Boyden, 1992)
- Humans are also dependent psychologically on nature - the 'biophilia hypothesis' (Wilson, 1984; Kellert & Wilson, 1993)
- Separation from nature → 'nature deficit disorder' (Louv, 2005), increased obesity, Vitamin D deficiency, mental health problems (Moss, undated), ...



Humans need nature!

- ‘Everybody needs beauty as well as bread, places to play in and pray in where nature may heal and cheer and give strength to the body and soul’

(John Muir, 1912)



But nature also needs humans!

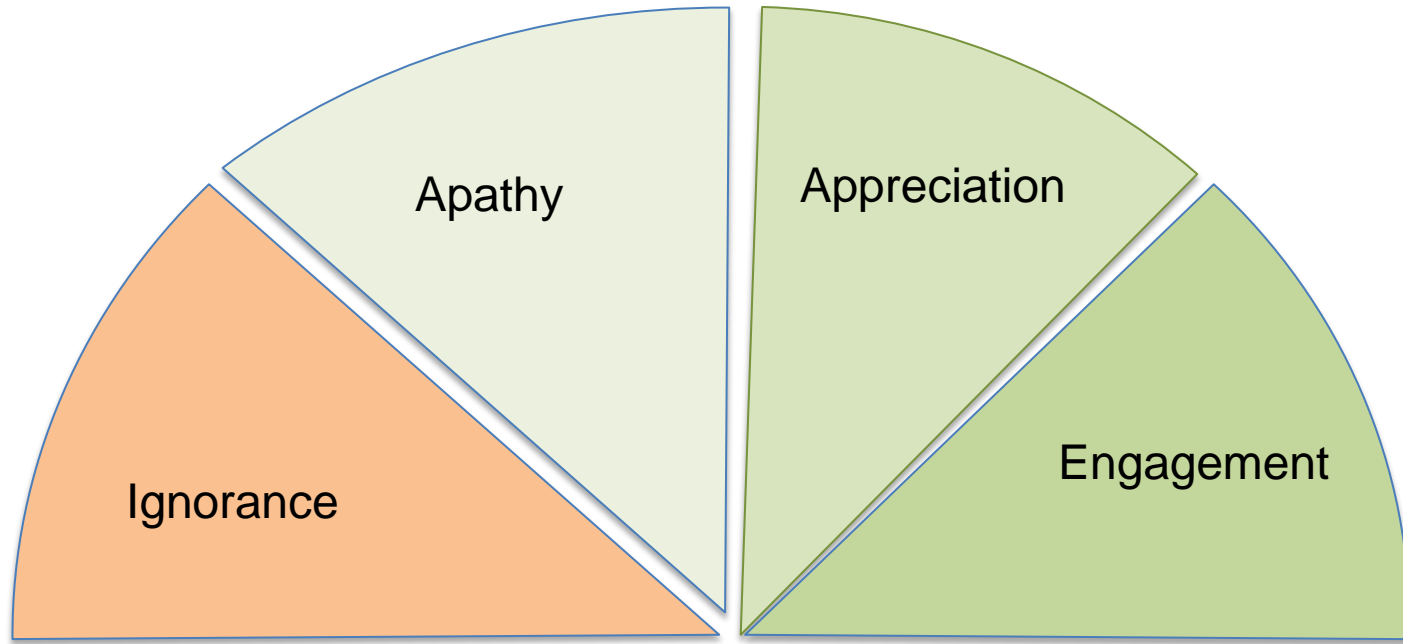
- “Voluntary inputs to conservation projects and surveys are essential to the delivery of the England Biodiversity Strategy.”

(<http://archive.defra.gov.uk/evidence/statistics/environment/biodiversity/24-volunteer-time.htm>)

- “Volunteers play a key role in natural resource management...” (Measham & Barnett, 2007)
- Volunteers “produce practical environmental improvements at a relatively low cost” (McCulloch & Moxon, 1994 p. 16)



Human-nature relationships:



Engagement with nature:

- Viewing nature
- Being in nature
- Caring for nature, via:
 - Pet care
 - Gardening
 - Environmental volunteering



Environmental volunteering defined:

Volunteering = “an unpaid activity where someone gives their time to help a not-for-profit organisation or an individual who they are not related to” (Volunteering England Information Team, 2006)

Environmental volunteering = “the engagement of volunteers to achieve environmental gains” (Scottish Government, 2007)

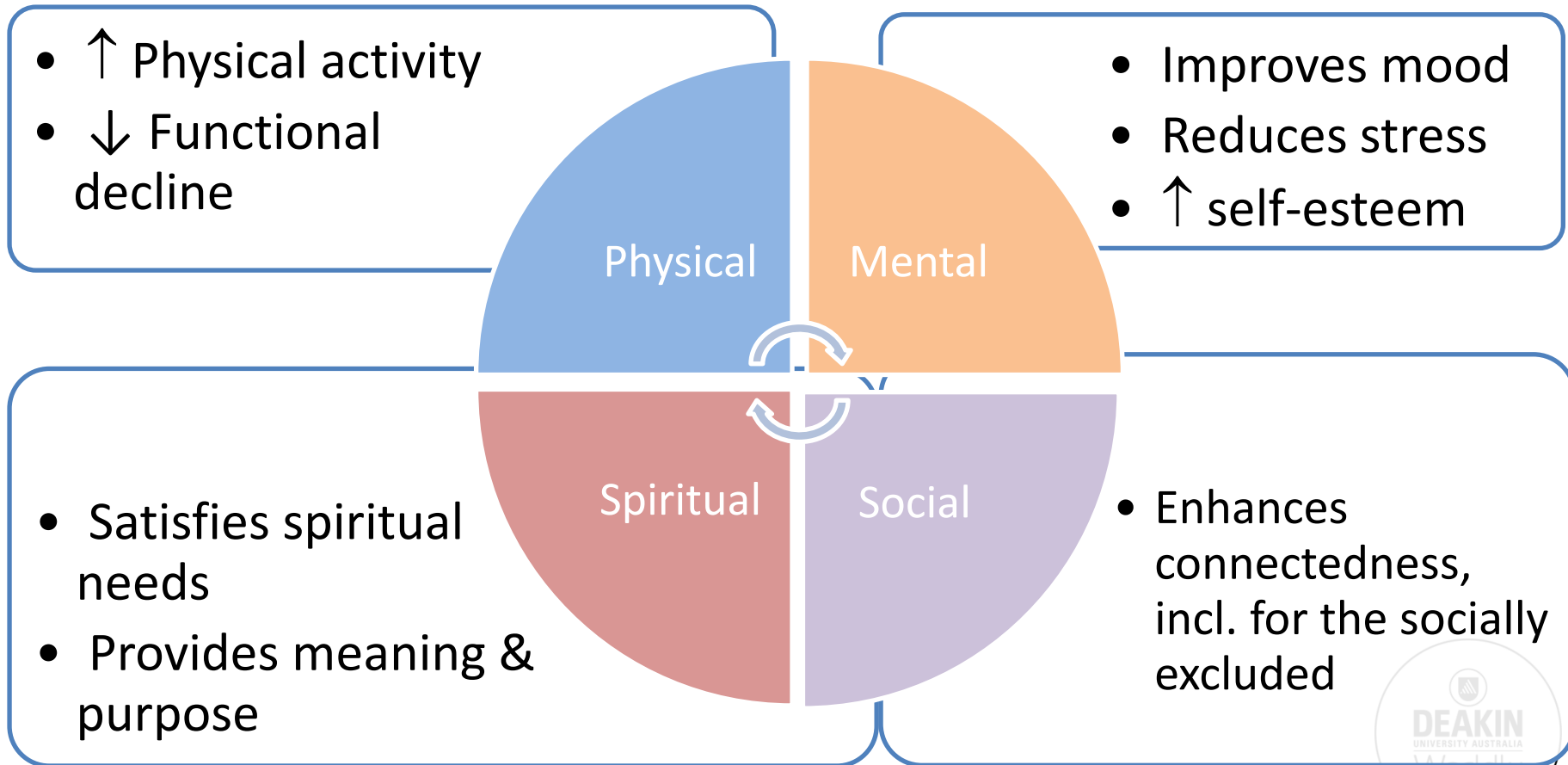


Ecological outcomes of environmental volunteering:

- “Volunteers’ data can be used to change housing development plans (Bathe, 1993; Key, 1993), to protect livelihoods ..., to prosecute environmentally neglectful governments ..., and to change policy” (Evans et al., 2000).
- “volunteers are transformed in their outlook toward the environment, becoming more likely to landscape with native plants, more apt to want to protect natural areas and more attached to local natural areas” (Ryan, Kaplan and Grese, 2001 p. 644).



Ways in which environmental volunteering influences human health:



'Feel Blue, Touch Green' (FBTG):

- Pilot study - 10 participants with mental health problems:
 - 'Single-case design' (participants = own controls)
 - 10+ hours of nature-based activities over 6-12 weeks
 - Activities supported by Angair volunteers
 - Evaluation using a range of scales plus in-depth interviews

(Townsend & Ebdon, 2006)



Findings from FBTG:

- Emotional State Scale (ESS) indicated a positive emotional change in all participants

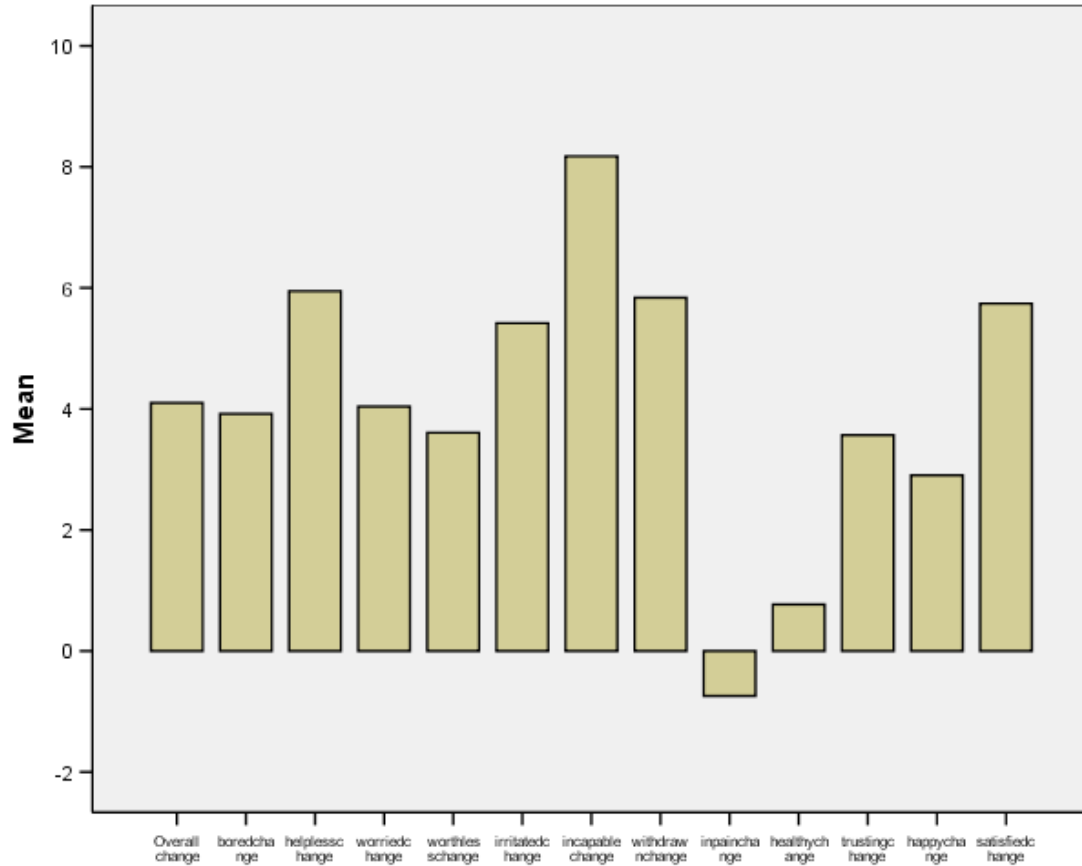


Other benefits:

- Building social connections:
 - “good for people who may not have the courage to get involved ... People were accepting & this broke down the stigma”
- Developing skills, taking risks & confronting challenges:
 - “I developed new skills & acquired knowledge in [plant] propagation and in [identifying] noxious weeds”
- Improving mental health, confidence & self-worth
- Managing depression & depressed mood



Forestry UK research project:



- Increased pain for some volunteers, but overall positive change
- volunteers felt more capable, more in control, more satisfied and sociable



A model of environmental volunteering:

