Forest, wellbeing and effects

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Effects of nature and forest

- Two hours a week in nature is associated with good health and wellbeing (White et al 2019)
- Forest bathing
Forest Bathing – Shinrin Yoku

• The medicine of simply being in the forest
• Developed in Japan during the 1980s
• Used as preventive health care and healing in Japan

• Scientific findings
  – Reduced blood pressure
  – Reduced stress
  – Improved mood
  – Increased ability to focus
  – Increased energy level
  – Improved sleep
Why is the forest good for us?

• Evolved in and adapted to a life in nature/forest

• However
  – Today more than 50 % of the worlds population lives in the cities
  – 70 % of the Finnish people lives in the cities

• Spontaneous attention in the forest and nature
  – Few demands
  – Right amount of stimuli
  – The senses/brain can rest on natural shapes, colors, smells, sounds, tastes, and skin sensations
  – The sense of context. Nature is understandable, predictable, manageable, and meaningful

• Directed attention in the city and at work
  – Many demands
  – Many decisions
Nature-Based Research in Sweden

- Gardening therapy together with multimodal treatment improves recovery from stress (Grahn et al 2017)
- Forest walks improves rehabilitation from stress (Annerstedt et al 2010, Sahlin et 2014)
- Virtual forest pictures and sounds facilitate recovery from stress (Annerstedt et al 2010)
- Nature smell more important for stress recovery than sight and sound when tested in virtual environment (Hedblom et al 2019)
Forest and health

• Goal

• To investigate
  – whether and how spending time in the forest can improve human health
  – how forest management can be planned and pursued to promote human health.
Research questions

• Can the forest cure people with exhaustion disorder?
• How should the forest look in order to be curative?
• What do people do in a forest environment?
• Which forest environments are the most popular?
• Is a green outdoor environment better than an indoor environment?
Can the forest cure people with exhaustion disorder?

- 45 minutes in the forest lower the heart rate and blood pressure
- Improves mental state
  - Happier
  - More relaxed
  - Calmer
  - More harmonious
  - More alert
  - More clear-headed
- Improves attention capacity
- Contributed to exhausted people to take charge of their lives
- However, only visiting the forest doesn’t make exhausted people able to get back to work
The healing process

• Frustration in adaptation to nature >
• Choosing a favorite place >
• Peace of mind >
• Reflective thinking >
• Desire to change
How should the forest look in order to be curative?

• Light
• Open
• Have a view
• Awaken a sense of greatness
• Contain large trees
• Offer some protection
Which forest environments are the most popular?
Forest at the lake
Open pine forest
Rocky landscape with scattered trees
What do people do in a forest environment?

• Sit down in a favourite place
• Walk around
Is a green outdoor environment better than an indoor environment?

• An indoor environment with the right qualities and right activities can contribute just as much to recovery as the forest

• A restorative environment should be
  – Coherent
  – Appealing
  – Sufficiently non-demanding

• If the environment Includes non-demanding nature-based activities, an indoor environment can also be restorative
Planning for Forestry and Forest Therapy

- It is possible to have more therapy forests in the forest landscape
  - If therapy forests are "moved around in the landscape" over time.
  - Therapy forest stands can not be left unmanaged and left in the same place
  - Other areas can be shifted to use for therapy.

- With proper planning, the forest can be used for multiple purposes at the same time
Forest Therapy and Integration

- The forest as arena for facilitating integration
- Sponsoring social activities in the forest
- Inclusion in social and cultural contexts
- Improving education
Conclusion

The forest:

• Give the brain the opportunity to restore by spontaneous attention
• Reduce blood pressure and stress
• Improves mood
• Improves health and wellbeing
• Improves recreation, restoration and rehabilitation

Forest is a place to thrive in
Thank you!

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