The connection with nature as a recreational therapy intervention in mental health

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Abstract: Life in the twenty-first century brings increased urbanization and technological development alongside high levels of depression, anxiety, and addiction. Facilitating a connection to the natural world can be an effective intervention for people with mental illness and addiction. The nature experience presents opportunities for increasing relaxation, stress reduction, spirituality, mindfulness, and grounding. This presentation will explore this connection with nature, and the evidence for its benefits. Specific interventions to utilize in therapy groups will be presented and experienced in this session.

Objectives:

1. Be able to define the nature experience.
2. Be able to cite three studies discussing the benefits of the nature experience pertinent to recreational therapy practice.
3. Be able to identify four outcomes of providing the nature experience in a recreational therapy session.
4. Be able to identify three specific recreational therapy interventions to utilize in facilitating the connection with nature.

- A review of 25 studies relating time outdoors to health benefits
- Concern with children spending less time outdoors
- Educators replied saying children relax more in natural environments, seem calmer, and enjoy exploring nature without hesitation
- **Results:** 77-93% children believed in the benefits of outdoor play in nature, noting that it helps them...
  - think more clearly
  - be more healthy
  - calm down when they are angry
  - learn new things


- Impact of nature on rumination often associated with depression and other mental illness
- Subgenual prefrontal cortex (sgPFC) has been linked to behavioral withdrawal linked to rumination.
- Compared 90 minute walk in a natural setting to 90 minute walk in urban setting.
- 90 minute walk decreased rumination and neural activity in sqPFC, while urban setting walk had no such effects.


- Pilot study of 4 week wilderness camp and the connection to nature and various aspects of well-being in young adults.
- All nature-related measures increased.
- Significant improvement in many health related measures.

**Park et al (2010).** The physiological effects of Shinrin-yoku (taking in the forest atmosphere or forest bathing): evidence from field experiments in 24 forests across Japan.

- *Shinrin-yoku* – taking in the forest atmosphere, or forest bathing – has been studied in Japan.
- Field experiments in 24 forests across Japan.
- In each experiment 12 subjects; 6 sent to forest area on day one, and 6 to city area. On day two, groups were switched as cross-check.
Salivary cortisol, blood pressure, pulse rate, and heart rate variability were measured at different times in the day.

Results: forest environments promote lower concentrations of cortisol, decreased pulse rate and blood pressure, increased parasympathetic nerve activity, and decreased sympathetic nerve activity than do city environments.

**Duvall and Kaplan (2014).** *Enhancing the well-being of veterans using extended group-based nature recreation experiences.*

- “In addition to coping with physical injuries, veterans must deal with mental health issues, including depression, anxiety, and PTSD.”
- **Method:** Assessed participants 1 week before, 1 week after, and 1 month after nature experience.
  - Backpacking
  - Canoeing
  - Whitewater rafting
  - Fly-fishing
- **Results:** Improvements in attentional functioning and emotional tone
  - Increases in positive affect and feelings of tranquility
  - Decreases in negative affect
- These extended group-based nature recreation programs may have bigger effect on veterans most in need of help.


- Synthesize the available empirical literature regarding the contributions of nature to human well-being via nonmaterial connections.
- Explanation of how people experience nature...
  - Perceiving
  - Interacting
  - Knowing
  - Living with
- **Ottosson & Grahn studies**
- **Results:** Extensive evidence demonstrates the multiple effects that viewing, interacting with, and living in natural environments can have...
  - Reducing stress
  - Increasing patience
  - Increasing self-discipline
  - Increasing capacity for attention
  - Increasing recovery from mental fatigue, a crisis, or psychophysiological imbalance

- “Environmental exposure shape the developing and developed brain and affect human health.”
- A review of select neuroscience evidence
- **Findings:** Fast-paced urban environment is enriched in adverse psychosocial influences that may facilitate chronic stress and abnormal neural development in vulnerable individuals.
- **Findings:** Exposure to natural landscapes or their composite features, such as plants and animals, has beneficial effects on a variety of outcomes...
  - Child development
  - Well-being
  - Physical and mental health
  - Mood
  - Morbidity
  - Recovery from illness
  - Mortality
[CDAP staff – please forward completed forms to Bob Raynor’s mailbox]

CONNECTION WITH THE NATURAL WORLD ASSIGNMENT

DUE DATE: Monday, February 15, 2016

(Hand in at 9AM group at same time as Daily Reflections)

Make some time this weekend to go outside somewhere and make some observations about the natural world. You can go somewhere away from your home, like the beach, the forest, or a park. Or walk to somewhere in your neighborhood – even your backyard or garden. Cold weather? Put on layers. Rain? Put on a raincoat, use an umbrella, or go out on a porch or gazebo somewhere. Hot weather? Go out early, or at dusk. Write your observations in the sections below. Consider this an exercise in mindfulness. Ignore the activities and works of man and focus on what is happening at that moment in the natural world, and with you. Turn off power to phone, other media during this time. (If you need more space, write on the back).

What I did:

Was it hard to turn off phone/media?

What I noticed about the natural world:

What I noticed about myself:
Connection with the Natural World – Quotes

The best remedy for those who are afraid, lonely or unhappy is to go outside, somewhere where they can be quiet, alone with the heavens, nature and God. Because only then does one feel that all is as it should be and that God wished to see people happy, amidst the simple beauty of nature. Anne Frank

The richness I achieve comes from Nature, the source of my inspiration. Claude Monet

Study nature, love nature, stay close to nature. It will never fail you. Frank Lloyd Wright.

The sun, with all those planets revolving around it and dependent upon it, can still ripen a bunch of grapes as if it had nothing else in the universe to do. Galileo

There is a pleasure in the pathless woods
There is a rapture on the lonely shore
There is society where none existed
By the deep sea and music in its roar
I love not man less, but nature more. Lord Byron

The old Lakota was wise. He knew that man’s heart, away from nature, becomes hard; he knew that lack of respect for growing, living things, led to lack of respect for humans too. Luther Standing Bear

Whatever befalls the earth, befalls the people of the earth. Man did not weave the web of life; he is merely a strand of it. Chief Seattle

Look deep into nature, and then you will understand everything better. Albert Einstein

I was determined to know beans. Henry David Thoreau

Nature will bear the closest inspection. She invites us to lay our eye level with her smallest leaf, and take an insect view of its plain. Henry David Thoreau

A weed is no more than a flower in disguise. James Russell Lowell

Weeding is the gardener’s meditation. Unknown

Let children walk with Nature, let them see the beautiful blendings and communions of death and life, their joyous inseparable unity, as taught in woods and meadows, plains and
mountains and streams of our blessed star, and they will learn that death is stingless indeed, and as beautiful as life. John Muir

There is nothing pleasanter than spading when the ground is soft and damp. John Steinbeck

The day I see a leaf is a marvel of a day. Kenneth Patton

There is a way that nature speaks, that land speaks. Most the time we are simply not patient enough, quiet enough, to pay attention to the story. Linda Hogan

To forget how to dig the earth and to tend the soil is to forget ourselves. Mohandas K. Gandhi

It is a wholesome and necessary thing for us to turn again to the earth and in the contemplation of her beauties to know of wonder and humility. Rachel Carson

Those who dwell, as scientists or laymen, among the beauties and mysteries of the earth are never alone or weary of life. Rachel Carson

Those who contemplate the beauty of the earth find reserves of strength that will endure as long as life lasts. Rachel Carson

When I go into the garden with a spade, and dig a bed, I feel such an exhilaration and health that I discover that I have been defrauding myself all this time in letting others do for me what I should have done with my own hands. Ralph Waldo Emerson

I believe a leaf of grass is no less than the journey-work of the stars. Walt Whitman

To see a world in a grain of sand
And a heaven in a wild flower
Hold infinity in the palm of your hand,
An eternity in an hour. William Blake

If the sight of the blue skies fills you with joy, if a blade of grass springing up in the fields has the power to move you, if the simple things of nature have a message you understand, rejoice for your soul is alive. Eleonora Duse

I have a room all to myself. It is nature. Henry David Thoreau

In every walk with nature one receives far more than he seeks. John Muir
Four outcomes of facilitating the nature experience in a recreational therapy session

- Patient will identify her/his previous nature experience
- Patient will engage in a nature experiential
- Patient will increase her/his awareness of how the nature experience can promote healthy coping
- Patient will identify a desired outcome of interacting with nature.

Some desired outcomes of the nature experience

- Relaxation/calmness
- Stress reduction
- “Get outside of my head”
- Mindfulness
- Spirituality
- Grounding
References


