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Positively Legal: How Nature Can Reduce Mental Fatigue

Skills and Professional Development



Every minute of the day we choose to pay attention to some things and ignore, overlook, or withdraw from others. The ability to focus on a task that requires effort is known as directed or voluntary attention. We exert mental energy focusing on projects and work deadlines, and our finite reserves are depleted through our constant use of technology and the pressure to rapidly switch between different tasks.

Even more, directed attention can cause mental fatigue. Daniel Goleman in his book *Focus*, describes the signs of mental fatigue as a “drop in effectiveness and a rise in distraction and irritability,” indicating "that the mental effort needed to sustain focus has depleted the glucose that feeds neural energy.” Attention fatigue has also been associated with poor decision making and lower levels of self-control.

The solution is to mentally rest by switching to involuntary attention, best done when spending time in or around nature. Psychologists Rachel and Stephen Kaplan, through experiments in the 1980s and 90s, proposed the Attention Restoration Theory (ART), which posits that natural settings are a highly effective way of giving our task-focused thinking a rest and restoring our mental energy.

Why are we all so mentally fatigued, and how can nature help?

Urban living can put an additional burden on our cognitive load. Psychiatrist Sue Smith, in her book, the *Well Gardened Mind*, noted the fundamental mismatch of city living. The brain evolved in the context of the natural world, yet we expect it to function optimally in unnatural urban surroundings.

Our ancestors used relaxed and immersive involuntary attention to survive in the wild as this kind of effortless and sustainable attention was ideal for hunting and gathering. Contemporary lifestyles relying on a narrow, focused form of attention often result in overuse and attention fatigue, where the

brain becomes less able to inhibit distracting stimuli.

Within urban environments, we have to use directed attention — trying to read despite the noise of sirens or planes going overhead or sudden noises like alarms and ringing phones. By contrast, natural environments allow for reflection according to ART.

Research has also shown that restoring our attention through nature increases our mental cognition.

- People performed better in demanding mental tasks after 30 minutes walking in nature compared with those who spend the same time walking in an urban environment.
- Interacting with nature improved proof-reading abilities.
- Participants who were shown five pictures of an urban landscape with trees for a total of 100 seconds and were directed to pay special attention to the greenery (trees and plants) improved their directed attention more than a group told to generally observe the environment.
- Natural environments may be as important to flourishing as social environments and people who spend at least 20 minutes outside when the weather was nice had more expansive and open thinking.
- Japanese studies into *shinrin-yoku* (forest bathing) showed that spending time in forest environments promoted lower concentrations of cortisol, lower blood pressure, greater parasympathetic nerve activity than people in urban environments.

What are the stages to restoration?

Kaplan proposed the following four stages for attention restoration:

- **Clearing the mind** – your concerns of worries flow and pass through your mind.
- **Recovery from mental fatigue** – following any activity that required focused and directed attention, the mind returns to normal levels.
- **Soft fascination** – you spend time in an environment that encourages reflection or introspection (for example sitting in a beautiful park), as opposed to “hard” fascination, which is highly stimulating, like watching TV or playing sports.
- **Reflection and restoration** – this most commonly occurs after spending extended time in an environment that is restorative.

What makes an environment restorative?

According to ART, a restorative environment must offer four elements:

- **Being away** – being mentally detached from everyday worries or concerns that are draining your energy and having a change of scene.
- **Fascination** – the environment needs to have features that hold your attention through soft fascination. Studies show that fractal patterns occupy the brain with soft fascination and are found in nature in repetitive patterns like the arrangement of tree branches, clouds, and leaf patterns.
- **Extent** – the environment makes you feel like you are totally immersed in another world.
- **Compatibility** – the environment matches your need to support restoration and provides a feeling of ease. The environment is chosen out of personal preference. Other aspects of compatibility include that the environment is not distracting, there is no danger, and it is

chosen out of enjoyment and the need for restoration rather than out of duty.

Tips for engaging in ART

When trying to restore attention and general health, spend time in nature and turn off your device. Try to focus on something in the environment, like watching the wind rustle through the trees or the sun setting on the horizon. Take a walk or sit in a park at lunchtime. Spend a volunteer day with your team outside planting trees for an environmental cause.

If you can’t get away, look out of the window at a nature scene and focus on the greenery. Or look at pictures of nature — if you have a desk or an office, put up some photos of nature scenes or follow nature and landscape photographer accounts on social media.

Spending time in natural environments is important for well-being, relieving stress and restoring our ability to focus and concentrate.

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She combines technical legal skills with practical business understanding and a love of innovation, project management, and legal technology to improve ways of working within the legal industry. She is a member of the ACC's In-House In-Health and Legal Technology and Innovation Special Interest

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In addition to her legal skills she has a Diploma of Positive Psychology and Wellness and is a freelance writer. Her “Positively Legal” column for the *ACC Docket* focuses on the intersection of neuroscience, positive psychology, and in-house practice by interviewing experts and fellow lawyers and curating up to date quality research, podcasts and books to help lawyers learn to take control of their own wellness and support their careers.

Outside of work, Cavallaro loves traveling, snorkeling, meditating and spending time in nature.