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Durations of Contact with Nature, Stress Recovery, and Attention Restoration Across Cultures

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Abstract:

Modern environments and lifestyles deplete people's directed attention and cause people to feel stressed. Fortunately, recent findings suggest that being in a natural environment, such as parks and open spaces, can help alleviate stress and restore attention more effectively. However, researchers do not know the extent to which culture and the duration of being in contact with nature influences stress recovery and attention restoration. These gaps prevented designers and decision makers from making evidence-based designs and policies that positively impact human's well-being.

This study invited participants from United States, Taiwan, and Thailand to fill these gaps. Participants are invited to their local laboratories and complete stressful and attention depleting tasks. They are then randomly assigned to view one of six simulated environments consisting of urban and natural environments for 1, 5, or 15 minutes. Their attention levels are tested with Digit Span Test, and their stress levels are tested with heart rate variability. The attention restoration and stress recovery results will be compared between groups.

The investigation is currently paused due to the outbreak of COVID-19 and will resume shortly. The researchers expect that the groups with longer duration in nature simulation will have higher improvements in their stress and attention levels, and there will not be differences between cultures. This research will help improve the understanding in the relationship between human and the natural environment.