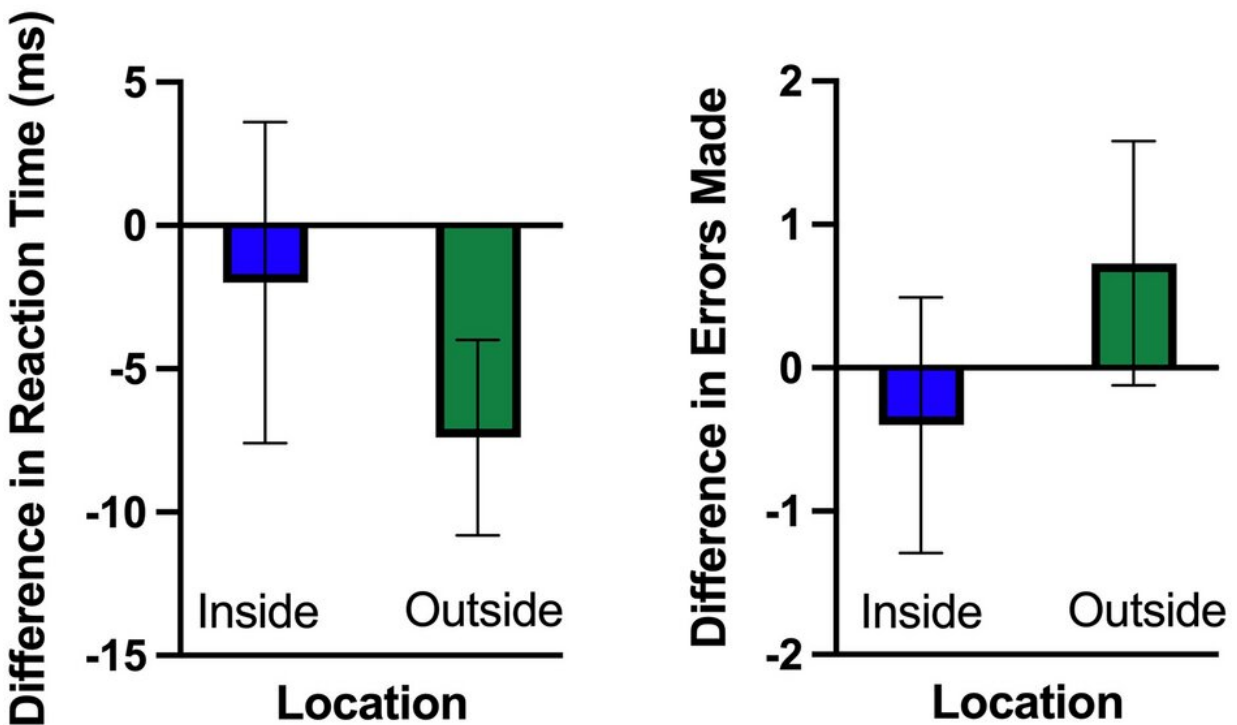


Going for a walk outside found to have more mental health benefits than walking indoors

January 24 2023, by Bob Yirka



The difference in reaction time and accuracy on the oddball task between pre- and post- indoor and outdoor walk. Value on plot = post walk score – pre-walk score. Therefore, negative values indicate improved performance. Error bars reflect 95% within-subject confidence intervals. Credit: *Scientific Reports* (2023). DOI: 10.1038/s41598-022-26093-2

A team of researchers at the University of Victoria, working with a

colleague from York University, both in Canada, has found that going for a short walk outdoors provides people with more mental health benefits than going for a same-length walk inside. In their study, published in the journal *Scientific Reports*, the group asked volunteers to walk indoors or outdoors and tested them before and after their walk.

Prior research has shown that [regular exercise](#) can provide both mental and physical health benefits for most people. But as the researchers with this effort note, little research has been conducted to find out if exercising in some environments compared to others is more or less beneficial. To address this gap, the researchers designed and carried out a study that involved 30 college student volunteers.

Each of the volunteers took two 15-minute walks, either inside or outside. Each also had electroencephalography exams before and after each walk. During the EEGs, the [volunteers](#) performed a standard visual oddball task on an iPad to measure [brain activity](#) linked to memory and attention. To assess whether walking had any impact on [mental performance](#), the researchers used grades on the oddball task and changes in amplitude of neural response measured using the electroencephalography exams

The researchers found improvements in response time on the oddball task after walks regardless of where they occurred. But they only found changes in amplitudes, which measure neural response, in those people who had walked outside. All such changes were represented by increases, which prior research has shown indicates heightened attention and better memory skills.

The researchers suggest that people gain more [mental health benefits](#) (cognitive function) if they go for a short walk outside rather than a walk indoors. They do acknowledge that their study was limited and suggest that larger experiments might confirm their findings. They also note that

it is still not clear if such differences might exist for longer walks or when engaging in more strenuous exercise.

More information: Katherine Boere et al, Exercising is good for the brain but exercising outside is potentially better, *Scientific Reports* (2023). [DOI: 10.1038/s41598-022-26093-2](https://doi.org/10.1038/s41598-022-26093-2)

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