

Under a cloud -- darkness linked to 'brain drain' in depressed people

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A lack of sunlight is associated with reduced cognitive function among depressed people. Researchers writing in BioMed Central's open access journal *Environmental Health* used weather data from NASA satellites to measure sunlight exposure across the United States and linked this information to the prevalence of cognitive impairment in depressed people.

Shia Kent, from the University of Alabama at Birmingham, led a team of US researchers who used cross-sectional data from 14,474 people in the NIH-NINDS-funded REGARDS study, a [longitudinal study](#) investigating [stroke](#) incidence and risk factors, to study associations between depression, cognitive function and [sunlight](#). He said, "We found that among participants with depression, low exposure to sunlight was associated with a significantly higher predicted probability of [cognitive impairment](#)."

This relationship remained significant after adjustment for season. This new finding that weather may not only affect mood, but also cognition, has significant implications for the treatment of depression, particularly seasonal affective disorder".

Kent and his colleagues speculate that the physiological mechanisms that give rise to seasonal depression may also be involved in sunlight's effect on cognitive function in the context of depressive symptoms. Cognitive function was assessed by measurement of short-term recall and temporal orientation. As well as regulating the hormones serotonin and melatonin,

light has been shown to also affect brain blood flow, which has in turn been linked with cognitive functions. The researchers write, "Discovering the environment's impact on [cognitive functioning](#) within the context of seasonal disorders may lead not only to better understanding of the disorders, but also to the development of targeted interventions to enhance everyday functioning and quality of life".

More information: Effect of [sunlight exposure](#) on cognitive function among depressed and non-depressed participants: a REGARDS cross-sectional study, Shia T Kent, Leslie A McClure, William L Crosson, Donna K Arnett, Virginia G Wadley and Nalini Sathiakumar, *Environmental Health* (in press), www.ehjournal.net/

Source: BioMed Central ([news](#) : [web](#))

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