

## Radio waves from mobile phones do not affect cognition: Study

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A World Health Organization-commissioned systematic review finds that radio wave exposure from mobile phones does not affect learning, memory, attention span and other cognitive functions like coordination. The work is <u>published</u> in the journal *Environment International*.

Co-led by the Australian Radiation Protection and Nuclear Safety Agency's (ARPANSA) Health Impact Assessment Assistant Director, Associate Professor Ken Karipidis, the review addresses a long-held community concern.

"One of the motivations for this research was to assess effects on the brain because mobile phones are usually held close to the head during calls," A/Prof. Karipidis said. "One of the challenges of studying the effects of mobile phones on health is that it's hard to separate <u>radiation exposure</u> from behavioral effects from social media and gaming on our cognition. Overall, this <u>systematic review</u> found that radio wave exposure from mobile phones does not affect cognition."

The WHO systematic review was a collaboration between ARPANSA and Monash University. ARPANSA's Dr. Chris Brzozek and Dr. Masoumeh Sanagou also contributed to the study.

This review identified 3,945 papers for consideration, but only five studies were found to have appropriate methods and were included in the final analysis. The authors acknowledge that more high-quality research is needed to address all types of populations, radio wave exposures, and cognitive outcomes, particularly studies investigating environmental and occupational exposure in adults.

The WHO commissioned a series of systematic reviews in 2019 to help them undertake an updated health risk assessment of radio wave



exposure. These reviews will be used to help inform a new Environmental Health Criterion monograph on radiofrequency <u>electromagnetic fields</u> (RF-EMF).

**More information:** Geza Benke et al, The effects of radiofrequency exposure on cognition: A systematic review and meta-analysis of human observational studies, *Environment International* (2024). DOI: 10.1016/j.envint.2024.108779

Provided by Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)

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