Sustainability | Individual communication

IC - (21123) - NATURE UNPLUGGED OR CONNECTED? SMARTPHONE USE AND VIRTUAL SOCIAL INTERACTION IN NATURAL AND URBAN ENVIRONMENTS

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Background and objectives

Modern lifestyles have led to what some researchers have described as an ''extinction of experience'' for younger generations, a lack of interaction with the natural environment on which life in the biosphere depends. Indeed, evidence suggests that youth today spend less time in nature than previous generations, with implications for planetary health and human well-being. Scholars have recently suggested that mobile devices may both curtail time in nature and disrupt restorative nature encounters, yet only scarce self-report evidence exists in this setting. Meanwhile, “green time” is increasingly prescribed to young adults as a digital detox for excessive screen time, despite a dearth of empirical backing.

Process and methods (for empirical research)

Here, we analyzed ~2.5 million minute-level observations of smartphone screen use, texting, calling, and environmental exposures for 701 young adults over two years. We employ a within-person fixed effects specification that enables us to estimate the relationship between environmental exposures and within-person changes in smartphone use while controlling for unobserved individual factors and other time-varying confounding factors.

Main results (or main arguments in the case of critical reviews)

Participants’ weekly smartphone screen-time was over double their green-time. The relationship between exposure to greenspace and smartphone activity differed by exposure dose, type and mobility state. Virtual social activities such as calling and texting increased during short recreational greenspace visits while all smartphone use declined over the first three hours in nature areas, suggesting that visiting less-programmed nature may support digital impulse inhibition in-situ. Those with elevated baseline screen-time or green-time significantly reduced device use in nature, indicating that parts of the biosphere may provide a reprieve from the cybersphere for highly connected young adults.

Implications for research and practice/policy | Importance and originality of the contribution

Urban areas and recreational green spaces may be characterized by not only a higher density of stimuli in the physical environment but also in the digital environment. By contrast, nature areas may provide respite from digital demands.

Palavras-chave : Attention, Restoration, Smartphones, Greenspace, Nature, Mobile Device Use