New review of evidence linking the environment and mental health

A NERC-commissioned environmental science and mental health review looks at the growing evidence of the link between environmental issues and mental health.

Mental health is governed by complex, interacting factors including:

- social
- economic
- demographic
- genetic
- experiential
- environmental.

Due to this complex intersectionality, there is a general move to developing a more holistic approach to managing mental health.

The review, led by researchers at the James Hutton Institute, focused on the potential contribution that environmental science can make to mental health research and innovation.

Highlighting correlations

The review found a wide range of research projects have highlighted correlations between adverse environmental factors and mental health issues. For example, a scoping review and series of workshops identified links between:

- oil spills and post-traumatic stress disorder
- aircraft noise and delayed reading ability in primary school children
- air pollution and psychotic episodes in teenagers.

At the same time, other studies have looked at the positive effects of a healthy natural environment on humans, such as:

- how natural river catchment areas and flows are crucial for cultural and societal wellbeing in India
- how natural gardens can alleviate work-related stress.

Conclusions and recommendations

The report concludes that a great deal of research over the years has brought environmental science and mental health studies together. But there remain many gaps in our knowledge and a need to do more.

Among the report's specific conclusions and recommendations are:

- most existing studies have come from the perspective of mental health. There is a clear opportunity to integrate environmental science and mental health research more closely, to improve understanding further
- there has been a greater research focus on mental ill-health than on maintaining or improving good mental health and wellbeing. This would add important insights for decisions about our living environment
- many environmental or wellbeing issues are
complex, and there is a need for more research which involves multiple disciplines, whether biomedical, environmental, social, economic, or psychological.

- establishing causality in mental health research is challenging. Finding new ways for research to work with large data sets, including knowing where they are, linking them and sharing data, could bring major benefits.
- longer-term studies would help us to understand the impacts of environmental issues over time, not just after an incident, as well as causal relationships.

More information: The review is available online: valuing-nature.net/environment … mental-health-review

Provided by Medical Research Council

Connecting with nature

Caroline Culshaw, Head of Healthy Environment at the Natural Environment Research Council (NERC) said: "People have really valued connecting with nature during lockdowns and there are well-documented links between nature and wellbeing, but there are still knowledge gaps in our understanding, for example, what is it about the environment that provides the benefit? It is clear that more integrated cross-disciplinary research is needed if we are to make the right decisions, both for the health of the environment, and the health and wellbeing of the people who benefit from it."

Critical understanding of knowledge gaps

Katherine Irvine, Senior Researcher in environmental psychology and conservation behavior at the James Hutton Institute said: "The review carried out a wide-ranging scoping exercise, looked at other systematic reviews of previous research and over 200 individual studies, and ran workshops which identified 16 case studies showing advances in academic understanding of the nexus between environmental science and mental health. Although there has been a plethora of work considering links between mental health and the environment much of this is piecemeal and focused on specific aspects of the environment or mental health. This review has provided a critical understanding of gaps in the knowledge base to prioritize future action. One of the promising opportunities emerging from the work is for the development of a community of practice amongst researchers, policy makers and practitioners focused on a more holistic approach to environment-mental health connections."

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.