

MENTAL HEALTH

How nature nurtures: Amygdala activity decreases as the result of a one-hour walk in nature

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Since living in cities is associated with an increased risk for mental disorders such as anxiety disorders, depression, and schizophrenia, it is essential to understand how exposure to urban and natural environments affects mental health and the brain. It has been shown that the amygdala is more activated during a stress task in urban compared to rural dwellers. However, no study so far has examined the causal effects of natural and urban environments on stress-related brain mechanisms. To address this question, we conducted an intervention study to investigate changes in stress-related brain regions as an effect of a one-hour walk in an urban (busy street) vs. natural environment (forest). Brain activation was measured in 63 healthy participants, before and after the walk, using a fearful faces task and a social stress task. Our findings reveal that amygdala activation decreases after the walk in nature, whereas it remains stable after the walk in an urban environment. These results suggest that going for a walk in nature can have salutogenic effects on stress-related brain regions, and consequently, it may act as a preventive measure against mental strain and potentially disease. Given rapidly increasing urbanization, the present results may influence urban planning to create more accessible green areas and to adapt urban environments in a way that will be beneficial for citizens' mental health.

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COVID-19: impact on mental health and psychosocial support

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COVID-19: impatto sulla salute mentale e supporto psicosociale

A pandemic is not just a medical phenomenon, but it affects individuals and society and causes physical, psychological, social and economic distress. This is because it is a type of event capable of demonstrating, often in a very violent way, the vulnerability and fragility of our social systems and our psychological structure, and how often our technical-scientific, socio- community and personal. In this article we have elaborated a review of the literature in order to understand the possible psychological consequences of the pandemic in progress, looking for material from three possible sources of information: situations with characteristics similar to those of the pandemic in progress (e.g. with social distancing), events previous epidemics (e.g. SARS and MERS) and research carried out this year on the Sars-CoV-2 pandemic. From the information gathered, it emerged that the psychological consequences can also be very serious (e.g. Depression or Post-Traumatic Disorder), occur quickly and last long after the events that produced them. Furthermore, it emerged that, despite the information and awareness gained in past or similar situations, not enough was done to prevent and deal with such adverse psychological consequences

The Practice of Play with Dr. Stuart Brown

<https://youtu.be/C9mEyuZ6lr8?list=PLA38DCA66A0AEDE6F>

https://youtu.be/OsMirOSp_C4

Play behavior is one of the most important parts of being human. It is also part of the natural instincts that children possess. There are certain components of the environment that seem to evoke natural glee, and parents, caregivers, or teachers can observe what naturally and spontaneously evokes that natural reaction in children. For example, if a child actively and routinely seeks interaction with other children, and that produces gleefulness, we should encourage that child to socialize with other children and even seek employment in that arena as adults because that is what they really enjoy. If on the other hand, an introverted kind of joyfulness occurs; don't force that child into something that is not necessarily comfortable, but let them follow innate curiosity. If we observe and encourage actions that produce natural glee, it helps children learn, and become happy adults. As the founder of the National Institute for Play, Dr. Stuart Brown's work is focused on the effect and importance of play in our lives. His research indicates that play is as basic a natural phenomenon as sleep, and, like sleep, many of us aren't getting enough of it. A life devoid of play faces major health risks, such as depression, a decreased immune system, and

stress-related diseases. On a larger scale, a culture devoid of play may even experience higher rates of interpersonal violence and crime. By incorporating more joyful, non-repetitive activities in our lives, Dr. Brown argues, we are able to replace these health and societal risks with a greater sense of well-being for ourselves and our communities.

There a strong connection between the practice of play and the emotional and cognitive development of the brain. So not only will engaging in play-which could include physical activity or sports, a creative practice such as painting, or simply giggling with your child-improve your physical and emotional wellbeing, it can reinforce patterns in your brain and optimize the learning process.

Nature-based outdoor activities for mental and physical health: Systematic review and meta-analysis

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Mental health problems are associated with lower quality of life, increased unscheduled care, high economic and social cost, and increased mortality. Nature-based interventions (NBIs) that support people to engage with nature in a structured way are asset-based solutions to improve mental health for community based adults. However, it is unclear which NBIs are most effective, or what format and dose is most efficacious. We systematically reviewed the controlled and uncontrolled evidence for outdoor NBIs. The protocol was registered at PROSPERO [CRD42020163103]. Studies that included adults (aged ≥ 18 years) in community-based settings with or without mental and/or physical health problems were eligible for inclusion. Eligible interventions were structured outdoor activities in green and/or blue space for health and wellbeing. We searched ASSIA, CENTRAL, Embase, Greenfile, MEDLINE, PsycINFO, and Web of Science in October 2019; the search was updated in September 2020. We screened 14,321 records and included 50 studies. Sixteen studies were randomised controlled trials (RCTs); 18 were controlled studies; and 16 were uncontrolled before and after studies. Risk of bias for RCTs was low to moderate; and moderate to high for controlled and uncontrolled studies. Random effects meta-analysis of RCTs showed that NBIs were effective for improving depressive mood -0.64 [95% CI: 1.05 to -0.23], reducing anxiety -0.94 [95% CI: 0.94 to -0.01], improving positive affect 0.95 [95% CI: 0.59 to 1.31], and reducing negative affect -0.52 [95% CI: 0.77 to -0.26]. Results from controlled and uncontrolled studies largely reflected findings from RCTs. There was less evidence that NBIs improved physical health. The most effective interventions were offered for between 8 and 12 weeks, and the optimal dose ranged from 20 to 90 min. NBIs, specifically gardening, green exercise and nature-basedpr.