

# Exposure to nature during COVID-19 lockdown was beneficial for mental health

June 17 2021

---



Credit: Pixabay/CC0 Public Domain

A study by the ICTA-UAB and the University of Porto analyses the effects of exposure to green spaces during the first months of the COVID19 pandemic in Spain and Portugal.

A study carried out by the Institute of Environmental Science and Technology of the Universitat Autònoma de Barcelona (ICTA-UAB) and the Instituto de Saúde Pública of the University of Porto (ISPUP), concludes that exposure to natural spaces during the first COVID-19 lockdown in 2020 was beneficial for the [mental health](#) of Spanish and Portuguese citizens.

The research shows that, in Portugal, during the first confinement, people who maintained or increased contact with natural public spaces, such as parks and coastal areas, or who could contemplate these spaces from their homes, presented lower levels of stress, psychological distress and psychosomatic symptoms.

In Spain, those who maintained or increased contact with private natural spaces, such as [indoor plants](#) or community green areas, presented lower levels of stress and psychosomatic symptoms. This could be due to the fact that Spain adopted more restrictive measures for foreign circulation during the period analyzed.

The research *Exposure to nature and mental health outcomes during COVID-19 lockdown. A comparison between Portugal and Spain*, published in the journal *Environment International*, was conducted between March and May 2020.

Dr. Ana Isabel Ribeiro, researcher at the ISPUP and first author of the work together with Margarita Triguero-Mas from the ICTA-UAB says that "we decided to study whether natural, public and private spaces had a beneficial effect on the mental health of Portuguese and Spanish citizens, helping them to better cope with the negative effects of lockdown." For her part, Margarita Triguero-Mas adds that "people around us and ourselves talked about how we missed the park we crossed when we went to the office or the walk on the beach with our dogs, so we wanted to check to what extent contact with natural spaces was an

important factor during confinement."

Several previous articles have also shown the positive impact of exposure to natural spaces on mental health, that is, in reducing stress, anxiety and improving psychological well-being as a whole. "Taking into account what is described in the literature, we wanted to evaluate whether people who enjoyed greater exposure to natural spaces during the first COVID-19 lockdown had better mental health indicators than those who had no contact with natural areas," explains Dr. Ribeiro. At the same time, they wanted to investigate whether exposure to private natural spaces, such as gardens, orchards or plants, was more beneficial among Spanish citizens than among Portuguese, given that Spain applied stricter measures to restrict mobility than Portugal.

To carry out the research, the authors applied an online questionnaire, between March 27 and May 6, 2020, aimed at all citizens aged 18 years old or older, residing in Spain or Portugal. The survey covered aspects related to the frequency and type of exposure people had to natural spaces (public and private), before and during the first confinement; mental health questions to assess levels of stress, mental disorders and somatization symptoms, and sociodemographic issues. Of the more than 3,000 citizens ( $n = 3,157$ ) who answered the questionnaire, 1,638 were Portuguese and 1,519 Spanish.

In both countries, during the confinement, there was a significant reduction in the use of public natural spaces, such as beaches, parks and gardens, and an increase in contact with private natural spaces, such as community gardens, urban gardens and plants, especially in Spain. People living in single-family houses (detached house) and flats located in cities were the ones who least maintained or increased their exposure to public natural spaces in both countries.

In Spain, where the measures during the period analyzed were much

more restrictive and it was forbidden to leave the house and public outdoor spaces were closed, the benefits of exposure to public natural spaces were not as relevant as in Portugal, but it was clear the importance of private natural elements. Among the Spanish citizens who participated in the study, 66% decreased the frequency of exposure to public natural spaces (compared to 54% in Portugal).

In Spain, those who had the opportunity to continue dedicating or increasing the time dedicated to caring for their plants had lower stress levels, while those who were able to continue enjoying or increasing the time of use of community [green spaces](#) had lower rates of somatization. .

In Spain, it is remarkable that the people who least maintained or increased the care of indoor plants were people over 65 years of age, those who lived with several people at home or those who were in a second residence during confinement. In contrast, the people who maintained or increased the care of indoor plants the most were those with children, but without dependent adults.

In Portugal, those who were confined the longest and those who commuted to work were those who least maintained or increased their contact with the natural public spaces. In turn, those who practiced physical exercise indicated greater exposure to these places. Portuguese citizens who managed to maintain or increase their exposure to natural public spaces showed lower levels of stress compared to those who did not. Likewise, those who contemplated natural spaces from their homes obtained improvements in all the mental health outcomes analyzed: stress, mental disorders and somatization.

"This study clearly demonstrates the benefit of [natural spaces](#) for the mental health of the population in a context of public health crisis," says Ana Isabel Ribeiro. "Public authorities and decision-makers could implement measures that facilitate access to natural public spaces, in a

safe and controlled manner, in the context of a pandemic. This is particularly important for the most socially and economically vulnerable population groups, and for those who have little access to these spaces in their private context," she emphasizes.

In addition, Dr. Triguero-Mas adds that "our study is especially important for cities like Barcelona, where new buildings rarely have balconies or community spaces with vegetation. It is important to revalue how building remodeling or new homes can be healthier spaces that promote and prevent deterioration in the [health](#) of the people who inhabit them."

**More information:** Ana Isabel Ribeiro et al, Exposure to nature and mental health outcomes during COVID-19 lockdown. A comparison between Portugal and Spain, *Environment International* (2021). [DOI: 10.1016/j.envint.2021.106664](https://doi.org/10.1016/j.envint.2021.106664)

Provided by Autonomous University of Barcelona

Citation: Exposure to nature during COVID-19 lockdown was beneficial for mental health (2021, June 17) retrieved 17 July 2024 from <https://medicalxpress.com/news/2021-06-exposure-nature-covid-lockdown-beneficial.html>

<p>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.</p>
--