# The Effects of Green Exercise in Mental Health

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### Background

The term "Green Exercise" (GE) is defined as the physical activity taking place in natural environments or greenspace [1]. In the last decade, there is a growing number of studies evidencing the mental health benefits of GE [2-4]. Moreover, outdoor nature-based interventions improve mental health across all populations, including the elderly with long-term conditions and adults with common mental health problems, as well as healthy adults [5] and adolescents [6]. These outcomes seem significant during the COVID-19 epidemic period as this epidemic has created a stressful environment for the majority of people around the globe [7]. Generally, contact with nature can help prevent poor mental health in such stressful times, or at least, not make it worse [8].

### Purpose

This review aims to explore, summarize and evaluate the benefits of GE in mental health.

### Methods

A search was conducted in five major databases (PubMed/Medline, Scopus, Web of Science, GreenFile, and Ovid) for articles published between January 2011 and December 2021. The databases were searched for articles that used outdoor physical activity in greenspace and investigated the mental health effects.

### Results

A total of 1042 articles were retrieved but only 38 studies met the inclusion criteria and were summarized. Most studies provide a beneficial impact of green exercise on improving and promoting mental health. It is observed that GE reduces depression, stress and increases mood, self-esteem and wellbeing.

### Conclusions

It would be beneficial if Public Policies and healthcare professionals focus on GE, as it is considered an effective and inexpensive way to promote mental health globally.

Keywords: Greenspace; Green Exercise; Nature-based intervention; Mental health

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