Pandemic related stress: the benefits of gardening and connecting with nature

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E.O. Wilson defined biophilia as a love of living things. The concept encompasses our attachment to life.

‘Urgent Biophilia’ in the form of gardening and tree planting is frequently observed during and after wars and following natural disasters. (Tidball)

Pandemic seed buying and sowing became a recognised phenomenon this Spring.

Seeds have the future ready built into them. This is psychologically sustaining when the future is otherwise dominated by fear and anxiety.
The anti-stress effects of green nature are mediated by the autonomic nervous system. They include lowering of HR and BP as well as cortisol levels.

Immersive activities associated with hunter-gatherer lifestyle such as hiking, bird-watching, fishing and gardening are associated with feelings of calm and revitalisation. They also reduce rumination through mindful focus.

In contemporary life we overwork the brain’s capacity for focused attention. Attention restoration and improved cognitive performance have been demonstrated in numerous studies following short amounts of time in natural settings.

Biodiversity: complexity and variety contribute to the restorative effect.
Gardens in healthcare settings

• Patients who have a view of nature require less pain relief post-op, have lower levels of stress, more positive mood and are discharged sooner. (First demonstrated by Ulrich and replicated in subsequent studies.)

• Development of ICU gardens eg: Derriford hospital in Plymouth and King’s College Critical Care Centre.

• Hospital gardens help to reduce levels of stress in patients, staff and relatives.

• Trees, plants, flowers, birds and other life in the garden provide a consoling form of companionship (Harold Searles). In a garden you can be alone but are not isolated. Nature can fulfil emotional needs. An important effect during lockdown for people in isolation at home.

Photos courtesy of Spinal Injury unit at Salisbury District Hospital (Horatio’s garden charity)
The First World War and the origins of horticultural therapy

• My grandfather Ted May was taken PoW in Turkey. Post-war, he spent twelve months on a horticultural rehabilitation scheme which marked a turning point in his recovery.

• Flower gardens were created by soldiers in the trenches right on the frontlines.

• ‘Victory gardens’ were established for growing food at home.

• Post-war follow-up study of servicemen suffering from shellshock and neurasthenia found that the adaptation to life afterwards was markedly improved in men engaged in working with the land. (Norman Fenton)
• Gardens create a feeling of safety. The first step of any trauma treatment is ‘regaining a sense of safety’ (Herman). A feeling of security can enable a reattachment to life.

• The human preference for landscapes that combine ‘prospect’ with ‘refuge’. Eg: a combination of trees and other vegetation found in many gardens and parks. Likely to have arisen during the course of evolution because of survival needs.

• Negative emotions such as anger, grief and frustration can be channelled creatively through physical work of gardening. A form of sublimation.

• Working with the cycle of life in the garden can help to put other losses in a natural context.

• Trauma is associated with an overwhelming experience of powerlessness. There is a need to restore a sense of physical efficacy as a biological organism (van der Kolk)

• Working with the natural growth force provides an accessible form of creativity. Producing food and beautiful flowers is empowering and can boost self-esteem.
Stress and burnout

- Multidisciplinary programme pioneered at the Alnarp rehabilitation garden in Sweden (Adevi).
- Connecting to nature through the senses helps people reconnect to their body and their feelings. The importance of water, stones and trees.
- A feeling of unconditional acceptance in nature can be therapeutically helpful and provide relief from the complexity of interpersonal relationships.
- Caring for plants can help promote a more nurturing attitude to the self.
Creating more sustainable communities

- The pandemic has given rise to a heightened awareness of social inequalities.
- The most socially deprived areas in cities have the least green space. CRESH study found that inequalities in mental health associated with low income could be reduced through proximity to green space by as much as 40%. (Mitchell et al).
- Green space around social housing helps to reduce violence and increase neighbourliness. (Kuo and Sullivan)
- Urban farms and community gardens: the beneficial effects of growing and sharing food. Gardens can function as ‘a social bridge’ (John Hopkins Center report).
Some key references:


Buck, D. (May 2016). Gardens and health: implications for policy and practice. The Kings Fund, report commissioned by the National Gardens Scheme


Van der Kolk The Body Keeps the Score Penguin 2014
