

an ecological framework for community wellbeing

Conceptual frameworks are explicit representations of the hypotheses, theories, concepts and assumptions that underpin scientific investigation of complex systems.

No overarching conceptual framework for community wellbeing exists, despite communities being our most complex systems. This is the first iteration of a conceptual framework for understanding and studying community wellbeing. It draws upon i. Established determinants of health and wellbeing from the **Dahlgren and** Whitehead (1993) Socio-environmental model of the determinants of health and wellbeing, and ii. 180 outcomes/indicators of wellbeing observed in a review of the impact of heritage-based interventions (Pennington et al., 2018).

Inspired by James Lovelock's 'Gaia' hypothesis (1979), this conceptualisation views community wellbeing as a whole living organism, nourished by external factors (wellbeing determinants), and comprising an interlaced system of individual organs, each part of the whole but with subtly different functions.

Wellbeing-related indicators/outcomes are represented by leaves, organised into 5 domains or 'capitals' of community wellbeing. Determinants of wellbeing are represented by the 5 environmental components of the sun, air, soil, bedrock, and cloud. Each is essential for the survival and flourishing of the 'tree' / community.

Like all living organisms trees are capable of **homeostasis** (regulation of internal environments). Communities are, therefore, perceived as active (reactive and proactive) agents in their own fate and not merely passive recipients of external resources.

Like trees in a forest, different species have different forms – their physical appearance the result of different systems of leaves and branches, consequent upon different environmental conditions.

The appearance and shape of the 'tree' can offer insights into the concept represented – how the 'leaves' cluster and overlap, where there are gaps (where we have few indicators of a particular domain of wellbeing) and where the indicator highlights underlying problems.

The central metaphor can be extended so that a forest of trees/communities represents a nation.

Wellbeing as an organism: The Gaia hypothesis views the earth as an organism, constituted of a biosphere of

plants and animals as the human body is constituted of organs and cells. Conceptualisation of community

wellbeing as a tree envisions the leaves and branches as interrelated subunits of the whole; integral to the

identity of the whole, but also, individually, open to analysis and study in their own right.

Different patterns: This particular tree illustrates community wellbeing, and is based on indicators used in a review of the contribution of historic places and assets (physical heritage) to our wellbeing. Different analyses (using indicators in the fields of heritage, employment, education) will yield differently shaped trees – with different patterns of 'leaves' and 'branches'. Just as a forest has a variety of trees, our wellbeing, collectively,

Communication: In obvious and subtle ways, trees in a forest communicate. All are influenced in different ways by environmental factors. Our wellbeing is, similarly, affected by commonly experienced environmental conditions – poverty, disadvantage and inequality, in particular. Trees in a forest communicate, through mycorrhizal (fungal) connections. What affects one will, therefore, affect another. Humans are social animals, communicating at the individual and community level. One 'tree' communicates with and influences another.

Gaps and patterns: Arboriculturists identify the health of trees, and decide how to respond, in part by looking at the patterns of vibrant or wilting or absent leaves. We can do the same here: gaps in the pattern of 'leaves' (or even over-exuberant clusters unbalancing the canopy) or indications of specific problems can help to identify either problems in the way in which wellbeing is being assessed, or problems in the real-world determinants of wellbeing in a community (or both).

Homeostasis: Organisms have evolved the ability to self-regulate, homeostasis. In circumstances of drought, trees adjust their metabolism... and communities respond to austerity (not necessarily in healthy ways).

Decay and death: Trees live a long time, but they aren't immortal. It might be extreme to talk about the 'death' of a community, but we might be wise to be concerned if we can observe a community whose wellbeing is represented by only a few, problematic, poorly-distributed, indicators.



may be considered similarly a community of trees.



