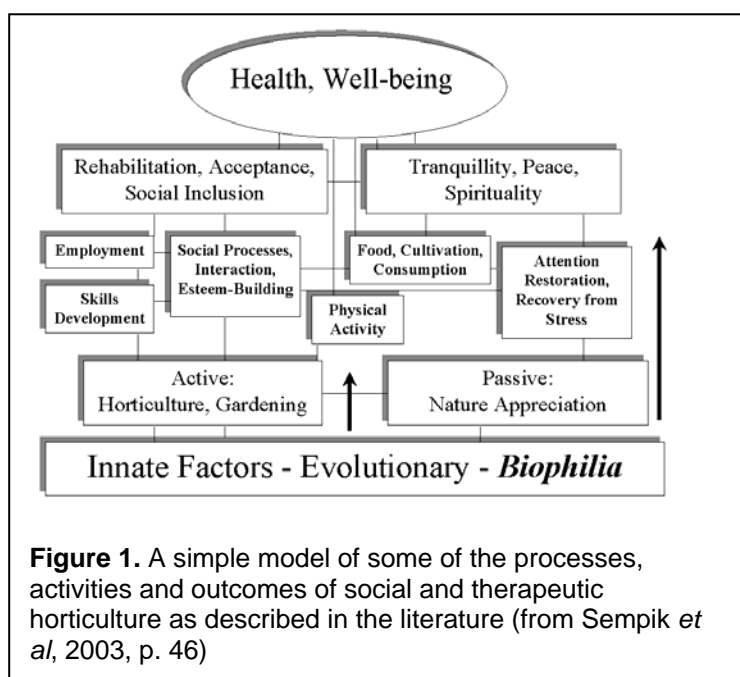


## Conceptual and Theoretical Frameworks in Green Care; explaining the benefits of social and therapeutic horticulture and the evolution of a conceptual model

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### A model of social and therapeutic based on published literature

In our review of the literature (Sempik et al, 2003) on social and therapeutic horticulture (STH) we presented a model which summarised the processes involved in providing health and well-being as a result of either participating in STH or by experiencing the natural environment in which such activities took place. This model was based on information from the published literature and is shown in Figure 1 below.



At the base of the model lay the mechanisms which determined the inherent appeal of the natural environment. This provided the context for both the passive appreciation of landscape (and the garden environment) and the active participation in horticulture and gardening. Active gardening was associated with a number of outcomes, such as the development of skills, social processes and possible employment. This in turn led to acceptance, inclusion and rehabilitation. Passive appreciation of nature was associated

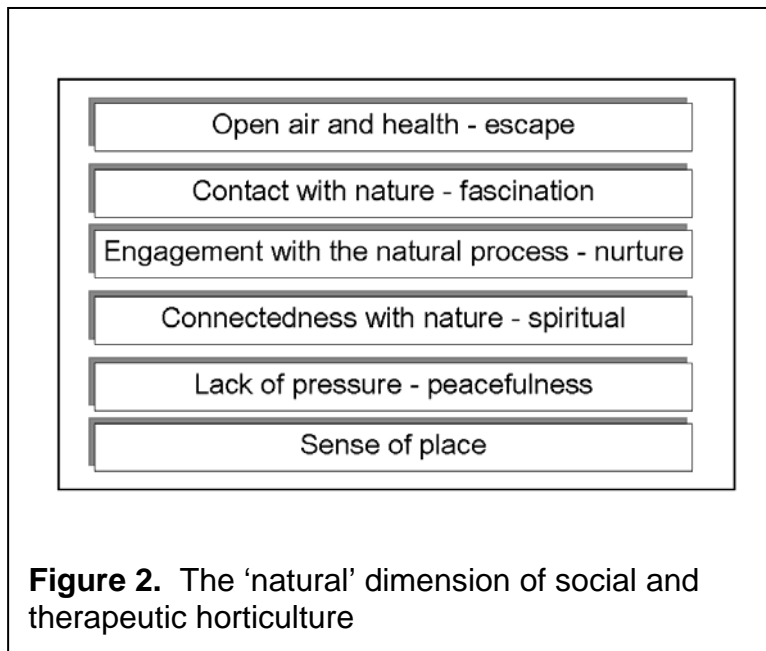
with tranquillity, peace and spirituality. However, all of these steps were interconnected and pointed to health and well-being at the summit of the model (see Sempik *et al*, 2003, pp. 47-48). What is particularly interesting about this model is its multidimensionality, although STH provides ‘health and well-being’ at the peak of the model a number of different processes are involved. Our subsequent research (and the reading of the literature) suggests that clients attend STH projects in order to fulfil a variety of different needs, for example, the need for meaningful occupation, the desire for a sense of identity, the need for social interaction and so on. Different clients may have different needs but there is also some overlap. STH projects provide a variety of processes and benefits which meet those needs, for example, they provide opportunities and the stimuli for social interaction, the opportunities and environment for meaningful occupation and purpose; and training and encouragement for clients to develop their potential and expertise and so to become ‘gardeners’ rather than patients. We can see the STH projects as delivering a mosaic of effects which address the relevant items in each individual’s ‘mosaic of needs’.

In the model shown in Figure 1, we refer very broadly to the natural environment as “*innate factors – Evolutionary – Biophilia*”; our reading of the literature showed that references to the natural environment, in the context of STH, appeared in many forms and were taken to provide the backdrop which facilitated the restorative experience through mechanisms such as attention restoration and recovery from stress.

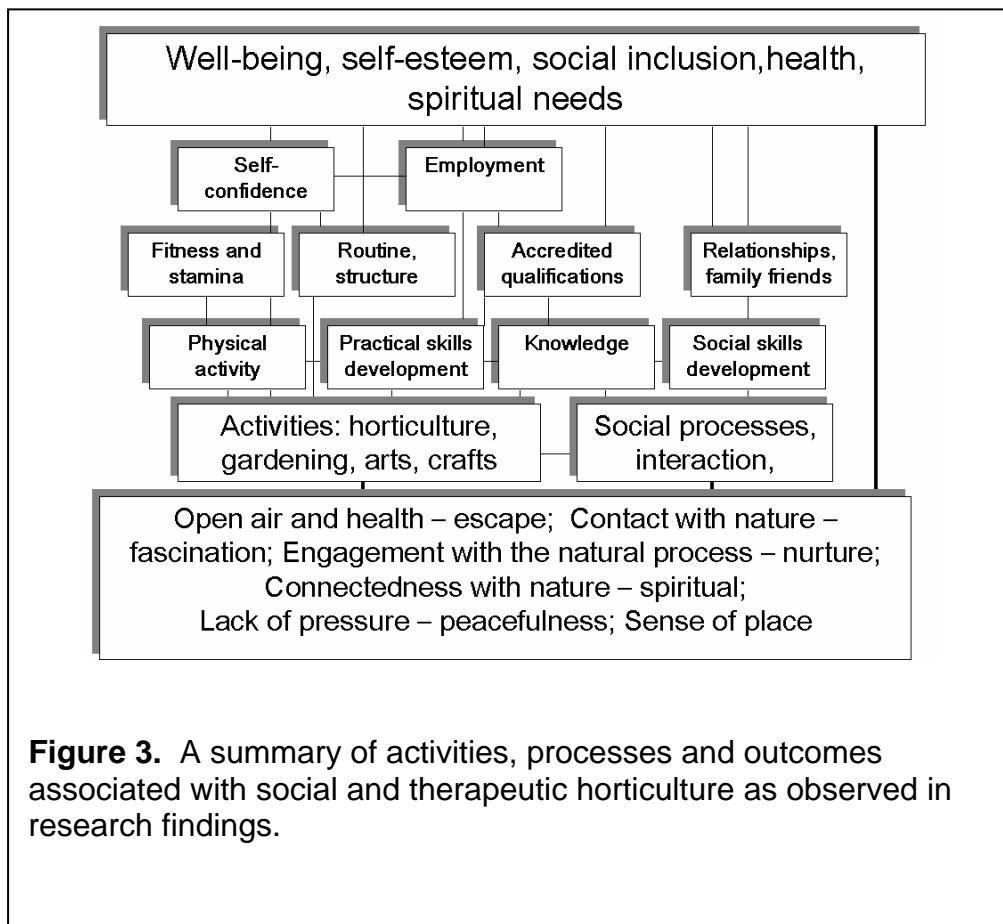
### **A conceptual model based on our research findings**

Results from our research (Sempik *et al*, 2005) suggest that the natural component of the model contains a number of broad dimensions; these recurred as themes throughout interviews with study participants.

For example, project participants gave a number of reasons for their enjoyment and appreciation of the natural environment associated with the theme of ‘being outside’. These included an escape from an inferior environment (related to the ‘*being away*’ component of the restorative environment), the association of open air with health, a sense of place with regard to the garden project site, fascination with nature itself and a desire to engage with natural processes by nurturing plants and a connectedness with nature or spiritual bond. These dimensions are summarised in Figure 2 and form the base layer of the new model which is shown in Figure 3 (taken from Sempik *et al*, 2005, p 122)

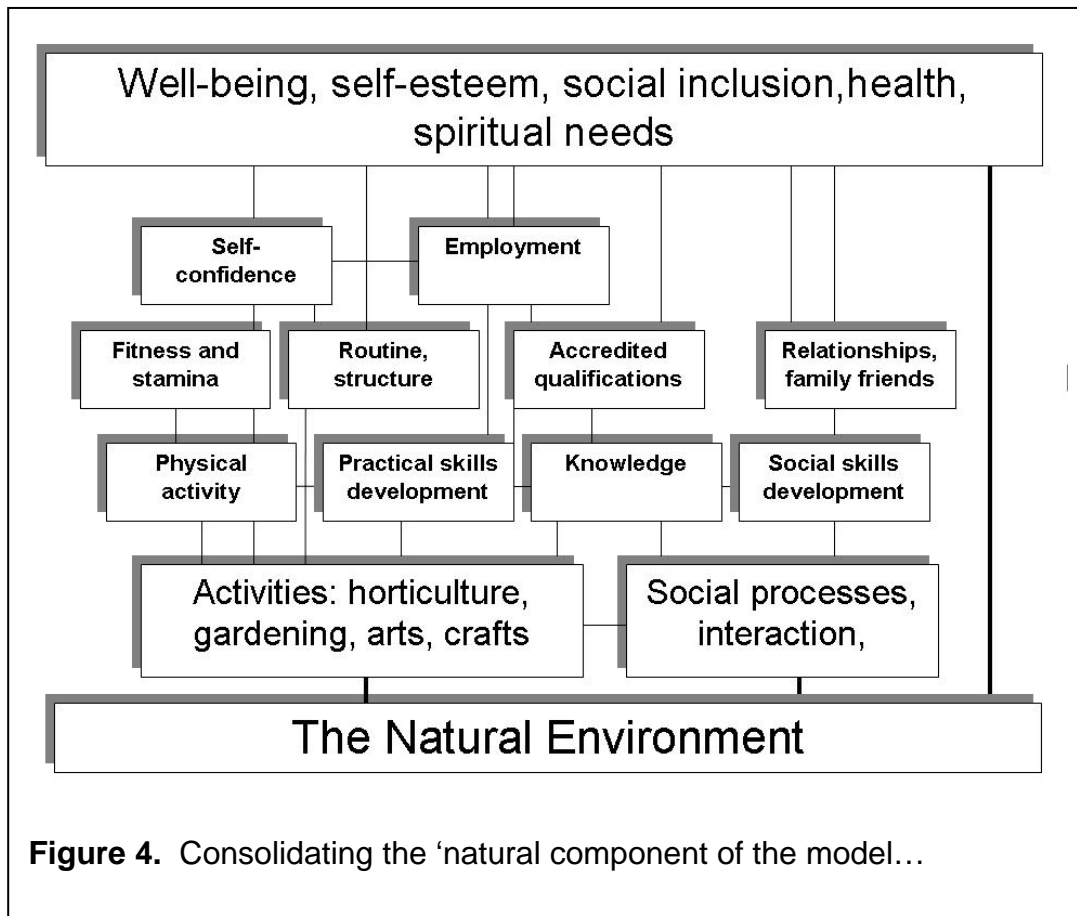


The model in Figure 3 is very similar to that shown in Figure 1, but there has been a slight change in emphasis and arrangement of the components. For example, the dimensions of 'routine' and 'relationships' have been added to the new model, and that of 'spirituality' has been subsumed into both the lowest and highest levels of the original model.



**Figure 3.** A summary of activities, processes and outcomes associated with social and therapeutic horticulture as observed in research findings.

To simplify the model in Figure 3 we have again hidden the multidimensionality of the 'nature component' (Figure 4) to produce a simplified model.



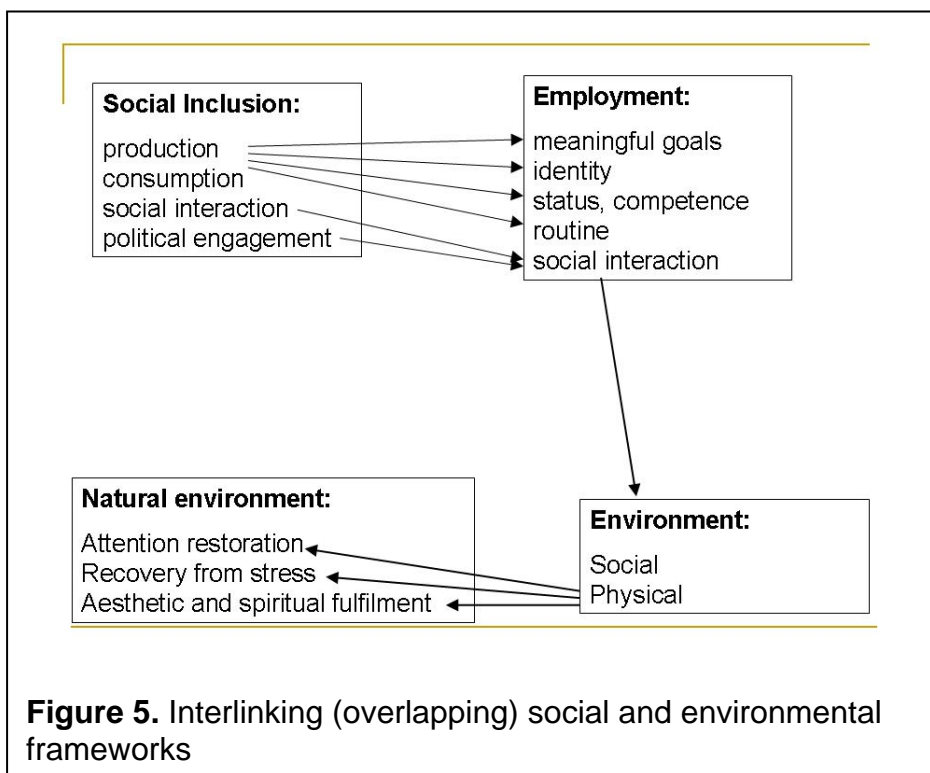
### Developing the model further...

Two particular frameworks were used in discussion of the results from the study – social inclusion and employment. The framework of social inclusion was that proposed by Tania Burchardt *et al* (2002) which contains the dimensions of *production, consumption, social interaction* and *political engagement*. We suggested that social and therapeutic horticulture was able to address and promote social inclusion through those dimensions. For example, attending a garden project enabled participants to be *productive* i.e. they were engaged in meaningful and purposeful employment which had a goal, an end product and which was commissioned by the gardens’ owners or managers (so distinguishing it from ‘*therapy*’).

We also proposed that attending a social and therapeutic horticulture brings with it many of the *latent* benefits of employment (those other than income), such as the sense of

identity and purpose, routine, structure and so on. The framework of employment has many overlaps and similarities with that of social inclusion, indeed, social inclusion is often discussed in primarily in terms of employment and income. Yet it is important to remember that the majority of those attending garden projects have no employment and no income other than benefits.

We have illustrated the links between these frameworks in the diagram below (Figure 5) and have also included reference to the social and physical environments in which the processes take place.



One additional dimension to that may be included in a definitive model of social and therapeutic horticulture (or green care) is the ‘*Model of Human Occupation*’ (MOHO) proposed by Gary Kielhofner (see Kielhofner, 1995). This is an important conceptual framework because it seeks to explain aspects of healthy occupation and the changes that occur as a result of illness or disability. This model is used by many occupational therapists as a framework for rehabilitation, including also that involving therapeutic horticulture. It addresses the motivation for occupation, the routine of occupational behaviour, the nature of skilled performance and the influence of environment on

occupation. These dimensions can be seen as additional ways of explaining (and exploring) the dimensions of social inclusion and employment and thereby enabling the inclusion of those with disabilities or medical or social problems. The elements of MOH proposed by Kielhofner are as follows:

- Volition, composed of *Personal causation, values, interests*, is a pattern of thoughts and feelings relating to the occupation
- Performance Capacity, which explores both subjective and objective elements of systems which enable occupation.
- Habituation, composed of *habits* and *roles*, addresses issues relating to routines and behaviours associated with occupation.

The MOHO can be integrated into an inclusive model of green care or social and therapeutic horticulture along with the frameworks displayed in Figure 5. Such a model will seek to explain the benefits of green care, and social and therapeutic horticulture in particular, in a multidimensional way. The production of the ***inclusive model*** is the next task that to which we have directed our efforts.