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‘Cultivating health’: therapeutic landscapes and older people in northern England

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Abstract

While gardening is seen, essentially, as a leisure activity it has also been suggested that the cultivation of a garden plot offers a simple way of harnessing the healing power of nature (The therapeutic garden, Bantam Press, London, 2000). One implication of this is that gardens and gardening activity may offer a key site of comfort and a vital opportunity for an individual’s emotional, physical and spiritual renewal. Understanding the extent to which this supposition may be grounded in evidence underpins this paper. In particular, we examine how communal gardening activity on allotments might contribute to the maintenance of health and well being amongst older people. Drawing on recently completed research in northern England, we examine firstly the importance of the wider landscape and the domestic garden in the lives of older people. We then turn our attention to gardening activity on allotments. Based on the findings of our study, we illustrate the sense of achievement, satisfaction and aesthetic pleasure that older people can gain from their gardening activity. However, while older people continue to enjoy the pursuit of gardening, the physical shortcomings attached to the aging process means they may increasingly require support to do so. Communal gardening on allotment sites, we maintain, creates inclusionary spaces in which older people benefit from gardening activity in a mutually supportive environment that combats social isolation and contributes to the development of their social networks. By enhancing the quality of life and emotional well being of older people, we maintain that communal gardening sites offer one practical way in which it may be possible to develop a ‘therapeutic landscape’.

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Introduction

‘Growing older has been seen to represent a period of increased dependency, as physical strength, stamina and suppleness decline, and the individual has to cope with chronic and long-term conditions’ (DoH, 2001, p. 107). Yet chronic illness and disability are not inevitable consequences of aging. In the UK, the National Service Framework for Older People (2001) notes that integrated and preventative strategies aimed at promoting good health and quality of life amongst older people can have significant benefits for both the individual and society, increasing the quality of life of older people and

compressing the period of time in which they can find themselves living in a state of dependence and morbidity. The challenge is thus to develop programmes aimed at ‘developing healthy communities which support older people to live lives which are as fulfilling as possible’ (DoH, 2001, p. 107).

The promotion of gardening activity, we suggest, represents one way in which the goals of healthy aging may be successfully achieved. The data on social and leisure trends not only indicate a steady rise in those adults participating in gardening activity in the UK over the last 20 years or so (GHS, 1997) but also indicates that as many as 61% of those in the 60–69 age group garden at least once per month (MINTEL, 1999). It is unclear from this national survey data just exactly how gardening has been defined: whether this incorporates light pruning (light motor involvement), heavy digging

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(aerobic motor tasks), pushing or simply sitting on a lawnmower. Nevertheless, the explosion of radio and television programmes, magazines, and books all devoted to gardens and gardening activity attest to a growing national interest in gardening as a leisure activity.

Interest in the cultivation of gardens has a long and respected history—ranging from the ancient Hanging Gardens of Babylon to the small city gardens of contemporary suburbia. However, while gardening has been seen by individuals as, essentially, a leisure activity, it has also been suggested that the cultivation of a garden plot may offer a simple way of harnessing the healing power of nature (Norfolk, 2000). One implication of this is that gardens and gardening activity may offer a key site of comfort and a vital opportunity for individuals' mental, physical and spiritual renewal.

Though there is a significant literature that addresses the issue of horticulture and health (e.g. Gallagher & Mattson, 1986; Lecchese, 1994; Lemaitre et al., 1999), as Patterson and Chang (1999) note, those studies that focus on the specific health benefits of gardening tend to focus, in the main, on physical activity interventions, examining their importance in reducing specific chronic or life-threatening conditions. While a few researchers have pointed to the general health benefits of regular gardening activity (e.g. Galloway & Jokl, 2000; Galgali, Norton, & Campbell, 1998; Lecchese, 1994), work has tended to focus largely on the more specific benefits to physical health. So, e.g. Lemaitre et al. (1999) have looked at the role of gardening in reducing the risk of cardiovascular disease, whilst others have considered its role in reducing HDL cholesterol levels in elderly men (Bijnen et al., 1996); in improving diabetes care (Armstrong, 2000a); and reducing the risk of gastrointestinal haemorrhage (Pahor et al., 1994). Additional studies have examined the benefits of gardening as a means of assessing and improving dexterity and the coordination skills of in-patients in hospital settings (e.g. McBey, 1985). Though studies of this nature are important in highlighting the health benefits of gardening activity for specific conditions, their singular focus means they do not address the wider psychological and social factors of gardening activity that can have a major impact on people's health status.

Anecdotal evidence suggests that there may be a direct correlation between gardening activity and mental well being. As noted in one newspaper article: *'I arrive, most often, feeling stressed. I leave—slugs permitting—refreshed, with a new sense of well being and (on a good day) chard and borlotti beans, raspberries and rocket'* (Fowler, 2002). Brown and Jameton (2000, p. 28) support this view, noting that, 'recreational gardening has been observed to be a way to relax and release stress'. The work of Patterson and Chang (1999) in Australia also points to a possible causal association

between physical activity, such as gardening, and reduced anxiety and depression. Moreover, it has been suggested that in addition to promoting improvements in physical and mental well being, gardening, as a therapeutic activity, may also provide opportunities for empowerment and increased competence, building bridges to naturally occurring supports and resources within the broader community (Myers, 1998; Armstrong, 2000b).

There is little published research, however, that focuses specifically on the health benefits of gardening for older people (though see Wells, 1997) and even less on the benefits for their mental well being. This omission is a surprising one, given the extent to which older people participate in this activity. Even more surprising, given the attention geographers have devoted to increasing our understanding of the importance of space and place in influencing health outcomes (see e.g. Jones & Moon, 1987; Curtis & Taket, 1996; Kearns & Gesler, 1998; Gatrell, 2002) is the lack of geographical work in this area. While geographers such as Crouch (see Crouch & Ward, 1997) have emphasised the importance of allotment gardening in urban environments, the focus has been on its history and culture rather than its role in improving the health of older people. In this paper, we go some way toward redressing these gaps by building on, and extending, the somewhat limited evidence base surrounding the role of landscape and gardening activity in promoting healthy aging. In doing so, we endeavour to lay down a foundation for future geographical research and a guide to policy makers on the scope for using gardening activities to improve the health and well being of older people. We do so by examining, empirically, the role of landscape, gardens and gardening activity in improving the health and well being of older people living in Northern England.¹

Cultivating the concept: the 'therapeutic landscape'

Drawing on the early geographical work of Appleton (1975), studies in landscape perception and environmental psychology have argued that the relationship between humans and the natural environment is an evolutionary one. Individual feelings and cognitions related to preferences for environments provide features of either 'prospect' (having an overall grand view of the landscape, with potential for discovering resources) or 'refuge' (offering a place to hide from danger or threats) and arise in response to stimuli and circumstances in ways that promote the performance of the most adaptive responses at the time (Mealey & Theis, 1995, p. 248).

¹The study on which this paper is based was funded by the Department of Health (former North and Yorkshire region) as part of the Healthy Aging Initiative.

Given that responses are contingent on an individual's perception of the immediate circumstances, they argue, landscape preferences will be related to emotions and mood. Such an approach, however, is somewhat limited. Rather than viewing the relationship between humans and the natural environment as a simple binary one, the geographical literature has been concerned to draw out the complexity of this relationship (see e.g. Meinig, 1979; Cosgrove, 1984; Burgess, 1988, 1996; Duncan & Ley, 1993; Bingley, 2003). Hence, geographers have drawn attention to the intricate intermingling of the physical, biological and cultural features of our surroundings. Meinig, in particular, wrote not only of the relational link between landscape and humankind, but also of the individuality of this relationship, where textures, sights, sounds and smells create a subtly unique 'feel' to places that are of immense importance to life. As Tuan (1979, p. 89) put it, 'Landscape is a construct of the mind and feeling' and as such, we respond in automatic and subconscious ways. Such a view insists that our individual lives are affected in myriad ways by the particular places in which we live, linking us as individual souls and psyches to the wider world.

Of particular importance to our study is the more recent geographical work of Gesler (1992, 1993) on the notion of 'therapeutic landscapes'. Gesler suggests that certain environments promote mental and physical well being and that these landscapes are not necessarily 'natural' but can be created. Gesler's concept suggests that specific landscapes not only provide an identity, satisfying a human need for roots, but can also act as the location of social networks, providing settings for therapeutic activities. This is based on an understanding of the ways in which environmental, societal and individual factors can work together to preserve health and well being. Hence, place is understood as being relational, influenced not only by the physical environment, but also by the human mind and material circumstances—reflecting both human agency (through intentions and actions) as well as the structures and constraints imposed by society (Williams, 1999). The concept of the 'therapeutic landscape' is thus concerned with a holistic, socio-ecological model of health that focuses on those complex interactions that include the physical, mental, emotional, spiritual, societal and environmental (Williams, 1998).

Discourse around the concept, however, has been largely confined to the abstract and historical, taking singular, famous and/or one-off events or places such as spas, baths, national parks and hospitals as the focus of concern (e.g. Gesler, 1996, 1998; Kearns & Barnett, 1999; Palka, 1999). While this discourse has been of considerable importance in developing our understanding of the role of place in contributing to health and well being, to date it has largely ignored the differing scales at which therapeutic landscapes are manifest and experi-

enced. In particular, it has tended to overlook those ordinary everyday places that are less easy to map in the traditional manner (Wilson, 2003). Williams (2002) further argues that, while the literature points to the use of therapeutic landscapes in the healing and recovery process, they can also be used in the maintenance of health and well being. It is these two particular aspects of the therapeutic landscape that our work seeks to address. We do so by examining how common, dispersed, everyday places such as domestic gardens and allotments can facilitate the maintenance of health and mental well being amongst older people.² Further, we suggest that while much of the existing work around therapeutic landscapes focuses on how existing or historical places might be characterised as health promoting, our work extends the concept to consider how therapeutic landscapes might be pro-actively constructed. That is, by drawing on those aspects of places that are seen to promote health and well being, our study illustrates how it might be possible to develop everyday places that promote the physical and mental well being of older people.

Particularly pertinent to our work is Palka's study of wilderness national parks and their role as places of healing. In Palka's view, a 'therapeutic landscape' can be seen as a place that 'promotes wellness by facilitating relaxation and restoration and enhancing some combination of physical, mental and spiritual healing' (1999, 30). Hence, the goal becomes one of providing therapeutic environments for people who have experienced physical or mental ill-health or to serve as a preventative measure in our modern, high-stress society. A more subtle reading of Palka's work highlights two key elements that underlie the concept: firstly, the therapeutic effects of direct physical engagement with the environment (being in or on the landscape); and secondly, the aesthetic and therapeutic benefits of mentally engaging with the environment (i.e. through sensory experiences and people's sense of place). Whilst neither of these elements is mutually exclusive, they do, nevertheless, illustrate two distinct ways in which the landscape can be experienced. In terms of the therapeutic effects of gardening this reflects a space in which the act of cultivation becomes a form of literally 'mixing with the earth' (Bhatti & Church, 2000) in a haven removed from the wider public world in which most social activities are performed. Such activity involves a unique personal engagement with nature that derives from the sights, sounds and smells generated within the garden environment.

² Allotments refer to small pieces of land rented (usually from local authorities) for the purposes of cultivation. In non-UK settings these may sometimes be referred to as community gardens.

Of particular interest to our study is the way in which the interrelationships between gardeners and their environment may be seen to contribute to an improved quality of life and mental well being. Should this be the case, it highlights one practical way in which it may be possible to develop a ‘therapeutic landscape’.

Methods

The study was undertaken in Carlisle, a city in the Northwest of England where 23% of its population is aged over 60 years of age and which has some of the most deprived neighbourhoods in northern England (ONS, 2001). As such, it faces some significant challenges in meeting the needs of its older people and promoting healthy aging. A key aspect of the study was to investigate the potential benefits of gardening activity for older people, and in particular, to examine the extent to which communal gardening activity on allotment sites may be beneficial to the health and mental well being of older people.³

The study recruited participants for the project through General Practitioner lists. The only inclusion criteria were that potential participants were aged over 65, not mentally confused and had some physical mobility (i.e. they were able to walk at least 100 yards without support). Though 30 participants were initially recruited to take part in the gardening activity, 10 dropped out in the first few weeks of the project due to either their own ill-health or that of their partners. This emphasises the problem of high levels of attrition when undertaking longitudinal research with older people—an issue we discuss in a forthcoming methodological paper.⁴ One further participant withdrew due to personality differences between himself and other participants in the project. Hence our discussion is based on data gathered from those 19 participants who took an active part in communal gardening. Thirteen of these participants were male and six were female, with ages ranging between 65 and 79 (median age—70 years). Three further participants withdrew approximately 3 months into the project due to: (i) personal ill-health; (ii) spousal ill-health; and (iii) personality differences. During a 9-month period (between March and November 2002), the participants gardened on two allotment sites, provided free of charge by Carlisle City Council,

with the support of a full-time, qualified gardener (employed by the project).⁵ The gardener played a key role in setting up and facilitating the development of the group, providing initial leadership, advice and support, and also acting as an arbiter in minor disputes until the group began to cohere. The gardener’s role was entirely distinct from that of the researchers’.

The allotment sites covered a total of approximately 450 m². The choice of site was based on proximity to the participant’s own home. All equipment, seeds and plants were provided by the project, though participants made their own decisions about what they would prefer to grow. Participants could also choose whether to garden communally with others on the allotment site or to subdivide the allotment into smaller, individual plots. In fact, most opted to garden communally, though a few participants also chose to garden small individual plots (the size of these individual plots was entirely of their own choosing).

The study used a mixed methodology with the key emphasis on ethnography. Prior to the beginning of the gardening project, we undertook a focus group with 10 participants, followed by semi-structured interviews with 10 additional participants. Here, we were concerned to explore participants’ self-assessment of their physical and mental health status and how older people define health and well being. We were also concerned to explore what kinds of factors appeared to have affected their health and well being as well as the extent of their physical and mental activities (including gardening), and their social networks. Finally, we explored the extent to which nature, natural landscapes and the local environment affected their everyday lives. At the end of the project, we conducted a second phase of focus group and interviews. Here, we were concerned to discuss the experience of communal gardening and extent to which this activity may have impacted on the health and well being of our participants. Over the 9-month period of the project, we also gathered longitudinal data about participants’ activities and factors affecting their health and well being through the completion of standard weekly diaries. The diaries asked three structured questions about their health and well being over the course of the week, with additional unstructured space in which participants were encouraged to discuss: (i) events over the course of the week that may have impacted on their health and well being; and (ii) their thoughts and perceptions about their gardening activity. The diaries were supplemented by regular visual and observational data gathered by the project researcher

³This paper draws on a larger study that considers the impact of different types of activity for the health and well-being of older people. In this paper, we focus specifically on issues that relate to the role of landscape, gardens and the gardening activities on those participating in the study. The impact of different types of activity and comparisons between them are addressed elsewhere (contact authors for details).

⁴Contact corresponding author for further details.

⁵It is worth noting that while the gardener’s support was vital in facilitating the development of a cohesive group of older gardeners, at the end of the 9-month project, despite the withdrawal of the gardener’s support, many of the participants have continued to garden communally on the allotment site.

along with regular verbal and written reports from the gardener in relation to the gardening activities. All data were transcribed in full and analysed using a grounded theory approach with Atlas/ti qualitative software.

As with many studies that focus on the health of older people, we experienced initial problems of recruitment and attrition due to poor health.⁶ Despite these problems, we gathered a vast amount of rich data surrounding participants' activities over a 9-month period. These data yielded some important insights into the ways in which the landscape and gardening activities contribute to the health and well being of older people.

Landscape and healthy aging

Our experience of landscape through the senses is inseparable from the social and psychological context of that experience. As Rohde and Kendle (1994) maintain, however, older people respond differently to aspects of the outdoor environment than do young people. Understanding how older people experience landscape is crucial if we are to have a clearer insight into how we might create environments conducive to their physical and mental well being.

There is a deep-rooted notion in contemporary western society that contact with the nature and the natural landscape affords humans a range of personal, social and health benefits (Parry-Jones, 1990). Herzog and Barnes (1999) point to two clear restorative benefits of the natural landscape. First, it is seen to provide a site for reflection, where the pleasure taken from the aesthetic beauty of the natural environment provides a setting in which it is possible to think through immediate and unresolved problems. Second, the natural landscape is viewed as offering a setting for attentional recovery from the fatigue of those demands placed upon the individual by the everyday environment. These natural settings are seen as distinct from the everyday lived environment of the urban dweller in that they are rich and coherent ecosystems to both observe and explore. That is, they give a sense of order and relatedness at both perceptual and conceptual levels such that they 'put pieces together in a meaningful whole' (Parry-Jones, 1990, p. 8) encompassing both the imagined as well as the surveyed scene. Such landscapes offer an array of roles that relate to the setting, from walking and climbing, to observing or peaceful meditation. Hence, not only might older people gain physical health benefits from their active engagement with the landscape, they may also derive considerable psychological benefit from their passive involvement with nature (Ulrich & Addoms, 1981).

Knopf (1987) points to four potential benefits of the natural landscape: nature restores; it facilitates competence building; it carries symbols that affirm the culture or self; and it offers a pleasing diversion. These themes were evident in our participants' responses to the natural landscape and its impact on their mental well being. In particular, such landscapes were associated with feelings of peace and tranquillity, or exhilaration. As Florence (73)⁷ explained, '*I think if you get to the top of a mountain it's very exhilarating... You've a wonderful feeling. You can't really explain it.*' Inevitably, only limited number of participants were physically fit enough to climb mountains, yet this in no way diminished their emotional attachment to the landscape. For some, the landscape was experienced passively—internalised as a scenic gaze that impacted on their emotional psyche in ways that were both positive and beneficial. As Avril (73) puts it, '*I enjoy, you know, seeing the acorns and the different seasons, and when you see the first green shoots, the snowdrops starting, and you have the berries on the trees*'. Such responses illustrate the positive impact that growth and renewal of the natural landscape can have on an individual's sense of well being. For others, the natural landscape was intimately linked to the development of new hobbies—such as painting and photography—that participants had begun to explore on retirement as a means of 'getting out' and enjoying the peace and calm of the countryside.

Natural landscapes were also intimately linked to older people's social interactions in ways that can be central to relieving the stresses of everyday life. As Ted (69) explained, '*Most mornings I take the dog for a walk out. There's a clique of us, we meet up by the river... I go for a walk, maybe three or four miles—it's a leisurely walk, you know? And we put the world to rights—it's a good stress reliever I would say.*' Ted went on to emphasise the importance of the natural landscape in contributing to his sense of well being, noting, '*Around the river is definitely better, yeah. Along the streets, that would be no fun at all—particularly with the traffic. I very rarely come up town.*' In this way, the landscape is seen to be experienced in a relational sense, where the aesthetics of a pleasing and tranquil environment form a significant element of the therapeutic qualities of the social encounter. The restorative effects of the landscape are thus enhanced by the presence of natural features (Parry-Jones, 1990).

In contrast, many urban settings are deficient in restorative features. The positive association between natural landscape and mental well being, as expressed by our participants, contrasted sharply with responses to the built urban and often deprived localities in which they were resident. In particular, they noted the negative

⁶Methodological issues associated with undertaking a study of this kind are addressed in a further paper.

⁷Figure in brackets following a participant's pseudonym represents his/her age at the time of research.

effect on older people's sense of well being and safety of neighbourhoods where rubbish, graffiti and youth crime were the norm. As Annette (74) commented, '*They've brought people in from Raffles⁸ and different parts who don't appreciate your garden, you know. And they bang at your door and throw things at your windows and cars are broken into a lot up here...I wouldn't go out on my own at night—never! The buses come up Lightfoot Drive and they throw stones at them, sticks—anything—I wouldn't trust them not to hit me.*'

The overall impact of these deprived urban areas on participants—in particular, female participants—was one of retreat from the local urban landscape, particularly at specific times of the day or year. Both men and women also highlighted their avoidance of public transport around those times when school children were likely to frequent these services. Early darkness or poor weather further reduced opportunities for social interaction outside the home space unless door-to-door transport was available.

Older people and domestic gardens—haven or heartache?

Bhatti and Church (2000, p. 185) maintain that 'the garden provides a lens for understanding the creation of micro-social worlds that are an important part of an individual response to tensions and conflicts in wider society'. This was reflected in the way in which participants described the urban landscape as depressing or threatening to older people, and emphasised the extent to which the domestic garden was seen to play an important role in their lives. In particular, individuals highlighted the importance of having some private space that they could 'step out to' to enjoy the peace and tranquillity of nature that was removed from the often poor local environments in which their homes were situated. This signals the importance of not only the active components of interaction with the domestic garden (e.g. gardening activity) but also the passive engagement that may involve simply sitting, looking or walking in it. As Alma (79) put it, '*Just being on my own, [in the garden] sort of, the quietness, and seeing everything sprouting, seeing the flowers come out and the daffs come out. I think it's just lovely.*'

Tuan (1990) identified the importance of gardens in the construction of a domestic 'sense of place'. We would go further, supporting the notion that for some older people, the garden represents a place of ontological security, reinforcing the notion of the 'home as haven'—a safe space to which older people can retreat from the conflicts and perceived threats of the urban landscape (Saunders, 1986; Dupuis & Thorns, 1998; Bhatti, 1999). As Annette (74) explained, '*Your home is*

quite important, you know, to have a bit of space at the back and so on.' The experience of the garden itself was variously described as creating feelings of relaxation, peace and tranquillity—so contributing to those feelings of well being characteristic of the 'therapeutic landscape'. As Godfrey (65) puts it, '*I think the garden's quite important because it's the environment we look to give us a bit of relaxation*'. This is further illustrated in the brief interview excerpt with Tilly (73) below:

I: We talked about things that make you feel calm and contented—how does the garden make you feel?

R: Just like that—if the sun shines you can just sit—I have nice little sitting places...

I: How would you feel if you didn't have a garden?

R: Err, I don't know, lost.

Tilly's response illustrates the importance of being in the garden, a lived experience which is a form of emplacement from which the individual engages with the world (Bhatti, 1999). Of particular significance is the sensory engagement with the garden and nature; as illustrated by the following quotes, participants made numerous references to importance of colour, smells, flowers, birdsong, etc.:

The garden's filled with bluebells when the bluebells are out. Just now its absolutely filled with snowdrops and there'll be the daffodils...sometimes I grow beans, they're decorative, you know, they've got lovely red flowers [Florence (73)]

I love perfume and all flowers, but I love the perfume. I like any rose [Ethel (80)]

I've got southernwood, that's beautiful...when you touch it, it smells beautiful [Ralph (72)]

I love nature, we have got loads of birds in our garden. The thrush was singing this morning [Tilly (73)]

In this way, gardens can be seen to offer powerful settings for human life, reflecting our own sensual and personal experiences.

For others, activity in the garden was less associated with a place to relax and be content and more as a place of social interaction between neighbours and passing members of the local community. As Avril (73) noted, '*If I wasn't going out an afternoon, you could have quite a nice time hoeing away. If I was at the front, people would be commenting and talking...the social side is important with the garden*'. Here, while the boundaries between the home and the wider urban landscape are clearly delineated, the social encounter experienced by being in the domestic garden further illustrates that dynamic interconnection between public space and the private space of the home that geographers (e.g. Tivers, 1987;

⁸A district of the city with a local reputation for crime and vandalism.

Massey, 1996; Hardill, Green, & Dudleston, 1997; Milligan, 2000) have been concerned to explore.

Hence, the domestic garden is valued by older people as offering a secure space, away from the perceived threats of the wider urban landscape, that can be experienced in both an active and passive ways. Within the garden, individual, environmental and societal factors can be seen to combine to facilitate relaxation and the restorative effects characteristic of the ‘therapeutic landscape’.

Adapting for older age—the ‘half hour garden’

While domestic gardens were almost universally seen by participants as conducive to their mental well being, there was also an acknowledgement that advancing age could limit their capacity to cope with the garden, which in turn can lead to frustration and/or depression with negative impacts on an individual’s mental well being. As an extension of the home, importance is attached to the ability to maintain a neat and tidy garden. As Sefton (80) commented, ‘*I like to keep it tidy, keep the grass short, keep a good appearance*’—a factor that in turn may be viewed as a reflection of the ability to manage the home itself. For some participants, an unmanageable garden was a cause of distress and concern that had two possible outcomes:

- (i) the inability to cope with the upkeep of the garden would either render the older person reliant on a family member or neighbour for help in the heavier gardening tasks—so reducing his/her independence (a factor that was almost universally seen by the participants as critical to their definition of health); or
- (ii) the inability to cope with the garden would result in the older person having to move from his/her present home to sheltered housing, a flat or similar dwelling with no garden to upkeep.

Other people within our study, however, were actively engaging with the knowledge that the aging process could bring with it a decline in their physical abilities by ‘preparing for old age’. These individuals were adapting their garden spaces to minimise the physical activity required for some forms of gardening—eliminating vegetable crops and shrubs that required significant levels of upkeep and replacing with tubs, hanging baskets, lawned or paved areas that required minimal upkeep. This process of adaptation was neatly summarised by Ralph (72), who commented:

I’ve got it [the garden] slabbed and it’s in squares right the way round. I’ve done this about four years ago, when I knew this [old age] was coming on and I said, well I’m going to get it done and make it my ‘half hour

garden’. I’ve got my greenhouse and I’ve got plants in it coming through and then they’re just to plant out. Once they’re planted out, the garden bit’s done. That’s the way I look at it like.

For those with the financial resources to do so, engaging a gardener for a few hours a week may provide an alternative option—enabling them to retain their garden without the need to redesign it. However, only one of our gardening participants engaged hired help for the garden, indicating that this is a limited option for older people who may be living in deprived areas and/or surviving on very limited incomes.

For those older people whose garden has become an increasing problem to manage, communal gardening may provide one solution to maintaining the mental, physical and social experience of gardens and gardening activity. Hence, in this last section we examine the extent to which communal gardening on allotment sites has the potential to contribute to the health and mental well being of older people.

Cultivating health: allotment gardening for older people

Gardens (and hence gardening activity) are not limited to our homes but expand across our towns and cities to become part of the neighbourhood encompassed in the form of public and corporate gardens, parks and allotments or community gardens. Recent changes in the role of allotment gardening have seen it shift from being a post-war form of social welfare provision to a type of leisure activity (Wiltshire & Azuma, 2000). Wiltshire and Azuma argue that the increasing popularity of allotment gardening can be seen as a growing reaction to the privatisation of public life and the need for spaces that support social contact and active participation. In this respect, the promotion of allotment gardening can be seen to meet a multiple agenda. Not only might it provide a means through which to promote the health and well being of older people; but where allotment officers actively encourage a mix of abilities on available sites, the benefits arising from the social interaction inherent within such communal gardening activity also have a powerful potential to address the UK government’s social exclusion agenda. One further benefit of communal gardening activity is its direct contribution to the promotion of neighbourhood renewal and active citizenship. However, while both the UK government and the Local Government Association recognise the potential contribution of allotments to both the government’s sustainable development agenda and increased social capital (Cmd 199798, 1998), there is also potential conflict arising from government commitment to build on brownfield rather than greenfield sites; hence urban

allotments are increasingly coming under pressure from those wishing to develop these sites for housing or commercial uses. Nationwide, there has been a steady reduction in the number of allotment plots since the second world war, from 1.5 million to 30,000 in 2001—a third of which have been lost since 1978 (Arnot, 2001).

Communal gardening versus the 'lone gardener'

In the Carlisle study, one of the most important elements of the allotment gardening activity was the development of a peer group that worked communally, sharing knowledge and skills and benefiting from enhanced social interaction. While many older people may be keen or interested gardeners, declining physical fitness can render them unable to undertake the heavier tasks associated with gardening activity. Hence, gardening communally offered an opportunity to bring together a peer group that enabled each individual within the group to maximise his or her skills and abilities to the benefit of the group as a whole. As Paul (66) puts it, *'some of them couldn't manage a full allotment on their own, but within the group we've got people who can dig and some who go down for a chat a get a little fork and take some weeds out and water some things'*. While some participants initially set out as 'lone' gardeners intent on developing their own segregated plot, it quickly became evident that if the club was to facilitate the needs of all its members, it would require participants to work together, undertaking communal gardening activity in which each participant gardened according to their level of ability. As Terry (69) puts it, *'There was one lad there...he started his little plot on his own, but then there was a lot of people who weren't really physically fit enough to do the work. So then it was just a matter of helping them, so everybody just ended up piling into the plot, and that seemed to work. It was communal, everyone helped each other. We carried some through who've never done gardening before on the vegetable side, so we passed that on a bit.'* Evidence of the group's supportiveness was also demonstrated through individuals' commitment to collective activity and decision making—participants regarded others as being valuable members of the team irrespective of their level of ability and each was seen as having something positive to contribute to the group dynamic.

Of course not all individuals find it easy to function as a member of a team, and in our study, two individuals left the group as a result of the difficulties they faced in working communally. As Terry (69) explained, *"the difference with 'Nigel' was he wasn't a team member and it had to work as a team, definitely. Even 'Fred', he was a loner to start with, but now he's become a team member, you know? The other lad—well there was no way he was ever going to be a team member."* Yet despite the group's decision to work the allotment communally, it was still

able to facilitate those who preferred to garden alone, or who wanted some space of their own to express their individuality. While on the whole this approach worked, it was not always without setbacks. Alma (79), in particular, noted in her diary that, *"In my absence 'Fred' filled my prepared flower beds with plants from his garden, which was most disappointing. He wasn't there to see my shocked face. So I started to clear a new plot and make it ready for planting so I could put in plants of my own choice"*. Whilst acknowledging that Fred (77) was 'only trying to be helpful', Alma went on to say, *'I like putting them [plants] into the earth...doing it myself...I felt quite possessive about it'*. This possessiveness was evident in the considerable pains she took to individualise and define her new plot by installing low fencing and planting up 'her patch' with flowers of her own choice. Despite her wish to 'garden alone', however, Alma also stressed the importance of being able to work near the group and 'enjoy the banter'.

An important aspect of the communal gardening activity has been the development of social networks. As Stuart (66) noted, *'apart from the enjoyment of the allotment and the trips out, we have gained new friends. There have been a number of situations where members have helped each other in activities outside the club work.'* Social networks can act as buffers to stressors, providing a structure for acquiring skills and enhancing a person's sense of self. Their efficacy lies in being based on norms of supportiveness and reciprocity, where such reciprocal relationships and support mechanisms are of the individual's own making (Nolan, 1995; Langford et al., 1997). As Paul (66) explained, *'I've chosen to stay with the group because if I want to go away for a week someone else will do it...you can go in and do some work and bring some stuff away or you can stop away for a bit'*. Indeed, Becker et al. (1998) maintain that there is a positive link between reduced hospitalisation, enhanced quality of life and the supportiveness of social networks. Given that allotments are widely available and inexpensive to rent, we would argue that, as sites of communal gardening activity for older people, they not only offer settings for the location of social networks and activities that promote wellness (Gesler, 1993; Palka, 1999), but also a potential route into mainstream social networks that can have an inclusive, protective and preventative function.

The effects and experience of gardening

While there are clear benefits to be gained for the health and well being of older people from communal gardening activity, there is also a deeper meaning to gardening to be found in the gardener's direct engagement in gardening activity and his or her responses to its progress (Lewis, 1995). Gardening activity requires both an intimate and direct involvement by the individual.

Planning, digging, planting, watering and harvesting are not passive activities and cannot be undertaken without some level of emotional commitment. Participants in our study commented both on ‘the marvel of nature’, in particular, their pleasure at witnessing the daily changes in the growth of the plants on the allotment, the creativity involved and the ‘satisfaction of the work’, enjoying ‘the hands on thing’, so expressing both the tangible and intangible personal rewards gained from their gardening activity. In particular, they expressed great pleasure and satisfaction in planting, seeing things grow and witnessing the results of their communal labours. As Avril (73) commented, ‘*I was amazed at how the crops have grown at our allotment since my last visit—delicious potatoes and lovely fresh lettuce*’, Alma (79) also remarked, ‘*I came away with potatoes and lettuce, onions and mint—all our own home-grown produce*’. Alma further commented, ‘*I know I’m very limited in what I can do, but I think getting the results gives you a boost...I take pride in the results*’. By responding to care or neglect, plants can be seen to bestow non-discriminatory rewards on their carer, offering an immediate reinforcement of a sense of personal agency, but without the burden of an interpersonal relationship (Stoneham, 1999).

While plants require nurturing in order to grow and remain healthy, the group also acted to nurture those less able. As Avril (73) noted, ‘*two hours was enough for me...I was tired then and they’d get a chair out and say ‘sit down Avril’ and they’d have a chair and sit down as well*’. Stuart (66), who experienced a wrist injury during the course of the project also explained, ‘*I have found the other members of the group very helpful while I have been slightly handicapped. This is something I have found from the start. All the group get on very well together and help each other.*’ The reciprocal support offered by the group enabled members to ensure the plants were nurtured and the allotment was maintained despite individual breaks from the activity caused either by illness, injury or holidays. Group support amongst older gardeners may thus help to prevent the feeling of being overwhelmed by the garden during periods of poor health or extended absence from the home and facilitate their ability and desire to return to the garden at a later date.

The beneficial effect of communal gardening as social, emotional and experiential activity is perhaps best summed up by Avril (73) who noted, ‘*I think it [gardening] is therapeutic...when I’ve been round and seen all the things that are growing and talked to other people, I feel better when I come back [home].*’

Profiling the older gardener

In their work on gardening activity amongst middle-aged women in New Zealand, Kidd, Pachana, and

Alpass (2000) distinguish three distinct groups of gardener profiles:

1. ‘Happy healthy gardeners’ who are well educated with few physical limitations and who work long hours outside of the home. These people love gardening, but as hobby rather than as primary focus of life. Such gardeners have learned the art of relaxing in the garden;
2. ‘Even-keeled gardeners’ who take a balanced approach, mixing both active and passive gardening behaviours and who gain an average score on health measures; and
3. ‘Introspective gardeners’ who have lower educational levels and more physical limitations and who work fewer hours outside of the home. These people take on worries but are less willing to share them and are often open to depression. For many of this group, gardening is viewed as a ‘lifesaver’—an essential way of preserving their mental stability.

These gardener profiles offer some useful insights into those whose gardening activity is undertaken as a lone occupation. However, not all gardening occurs as a lone activity, hence, there is a need to develop this framework further to account for those whose gardening takes place as a group activity and whose ‘profile’ is mediated by the group dynamic. Based on our study, we would suggest that age creates an additional dimension to the gardener profile that increases the complexity of this framework. We would also point out that additional factors such as gender, culture and ethnicity are also likely to complicate attempts to develop gardener profiles, though further work would be required to explore these issues.

Based on our study of gardening amongst older people, we would identify a fourth ‘gardener profile’—that of the ‘communal gardener’. Within this profile, strands of the ‘happy healthy’, ‘even-keeled’ and ‘introspective’ gardeners can be identified, but each are mediated by both age and the communal gardening experience. So, e.g. while ‘introspective gardeners’ could clearly be identified within our gardening group, growing physical limitations arising from the aging process had been critical in their decision to participate in the communal gardening activity. Here, they felt they would benefit from the support of the group in ways that would enable them to continue gardening. Despite working within the group, these individuals tended to clearly demarcate their own ‘patch’, but as the following interview excerpt illustrates, often as the most knowledgeable of the gardeners, they found themselves drawn into the group activity as others sought their expertise and advice:

Interviewer: *What was the attraction of the gardening group for you?*

Fred (77): *It's getting to meet people and share ideas and whatever, you know?*

Barbara (67): *And passing some advice on, because we got quite a few tips from 'Fred' didn't we, over the summer?*

Feeling useful and needed was an important element of the group dynamic and was seen to contribute to an increase in the levels of satisfaction achieved from the group activity by some of the 'introspective gardeners'.

Two other traits were clearly identifiable within the broader communal gardener profile. The 'first time gardener' had little gardening experience and was keen to learn from more knowledgeable peers. These individuals were happy to garden as part of a group, feeling 'safe' and supported in undertaking a relatively new activity whilst benefiting from the pooled knowledge of the wider group. In addition, we identified what we refer to as the 'collective gardeners', those individuals who had been used to gardening as part of a team (largely with a spouse or other family member) and who, as a result, had few problems in adapting to gardening as a group activity. The 'communal gardener' is thus characterised by an internal fluidity that facilitates a shift between gardener profiles as individuals become influenced by the group dynamic.

Discussion

Oh, it's been great. I think if I hadn't had that to look forward to I'd have been much more depressed and weary than I've been... It's been my main activity since I've had to give things up through being limited [Avril (73)].

In considering how landscape, gardens and gardening activity may contribute to the health and mental well being of older people, we have turned to the concept of the 'therapeutic landscape'. Based on our discussion of landscape, gardens and gardening activity amongst older people in northern England, we have illustrated that the concept can be seen to acting at various scales in three specific ways.

Firstly, older people experience natural and built landscapes in very different ways. While the natural landscape was seen to contribute positively, in both active and passive ways, on their mental well being, the experience of the everyday built landscapes in which our participants were resident closely reflected the findings of other geographical studies which point to a heightened 'fear of crime' amongst older people (Pain, 1997). One outcome of this was the importance attached to the home and the domestic garden as a site of relaxation and ontological security—the echoing those

restorative features characteristic of the 'therapeutic landscape'.

Secondly, allotments, as sites for the development of communal gardening activity, were seen to contribute to the social inclusion of older people in that they offered a means of combating social isolation and promoting the development of their social networks. Allotments are, thus, seen as relational spaces in which gardening, as a social activity, acts as a mechanism for overcoming social exclusion.

Thirdly, there is a deeper meaning to communal gardening activity, one that operates at an emotional and experiential level. Not only did participants gain a sense of achievement, satisfaction and aesthetic pleasure from their engagement with nature, but where communal gardening activity occurred the qualities required to successfully nurture their plants were also evident in nurturing those less able members of the group. The reciprocity at work here also enabled the group to support even the more experienced gardeners, preventing them from feeling overwhelmed by the allotment during periods of illness or absence.

We acknowledge that because our work is based on an intervention, it deviates from the accepted empirical norms of therapeutic landscape research. Nevertheless, we argue that if we are to facilitate a greater understanding of the beneficial qualities of common, dispersed places for the health and well being of people in contemporary society, it is with precisely this kind of activity that health geographers, using the concept, should be concerned. Rather than continuing to identify the specific and unique, we should begin to focus on how understandings of those aspects of place that contribute to health and well being (and vice versa) can be used in positive ways to develop therapeutic landscapes and places that actively promote health and well being.

At a policy level, the physical shortcomings often attached to the aging process means that while older people continue to enjoy the domestic garden and gardening activity, they increasingly require support to continue doing so if the garden is to avoid being viewed as a depressing burden rather than a healthy pleasure to be enjoyed. Declining physical ability to manage the garden in later life, combined with the negative impacts on an individual's mental well being are important issues that need to be taken into account by policy makers when considering the development of programmes aimed at supporting older people and facilitating healthy aging.

Our study has also highlighted the potential benefits of communal gardening activity for older people, which, when approached sympathetically, can meet the needs of gardeners with a significant range of abilities and personal expectations. Communal gardening has particular benefits over and above the contribution of the more traditional 'lone' gardening to physical health. In

particular, we have illustrated its potential for developing the social networks of older people and offering a place to share skills while at the same time contributing to an improvement in the local environment. Allotments are widespread across the UK, and where available, are relatively inexpensive. Sensitively developed, they have the potential to make a significant contribution to the healthy aging agenda through communal gardening.

While gardening may offer a useful tool for improving the physical health and mental well being of older people, there is also a need for sensitivity and flexibility in how this is approached. It is clear that communal gardening will not suit all; hence healthy gardening interventions for older people need to be sensitively tailored to individual need. That is, offering not only communal spaces for gardening, but also support within the home—e.g. through adaptive gardening that will enable older people to continue to care for existing gardens, or through the development of small dedicated spaces within the home (or indeed sheltered housing) in the form of raised beds, with occasional support either from a dedicated gardener, or from other older (fitter) people. The introduction of flexible ‘supported gardening’ schemes aimed at maintaining older people’s ability to continue to garden within their homes, or through the provision of small domestic garden plots within sheltered accommodation may provide some alternative ways in which healthy and active aging can be promoted.

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