CHAPTER 12

CARE FARMS AND CARE GARDENS

Horticulture as therapy in the UK

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Abstract. This paper describes the use of Social and Therapeutic Horticulture (STH) for vulnerable people in the UK. Around 20,000 clients attend STH 'projects' each week. Projects provide activities for people with mental health problems, learning difficulties, physical disabilities, black and ethnic minorities and many other vulnerabilities. The benefits of attending projects include a structured routine and the opportunity for social contact. The natural, outdoor setting is particularly valued and may act as a *restorative environment* within the context of environmental psychology.
Keywords: social horticulture; therapeutic horticulture; hospital farms

A BRIEF HISTORY

In the UK the Victorian era was associated with the building of large new asylums for the mentally ill. These frequently had farms or market gardens which supplied those institutions with fresh produce and gave the inmates an occupation. Activity was considered a useful way of keeping the inmates out of mischief and of providing them with an interesting pastime. Farm work also gave the opportunity for a variety of different activities as the following extract from the Report of the Commissioners of the Scotch Board of Lunacy of 1881 shows:

> "It is impossible to dismiss the subject of asylum farms without some reference to the way in which they contribute to the mental health of the inmates by affording subjects of interest to many of them. Even among patients drawn from urban districts, there are few to whom the operations of rural life present no features of interest; while to those drawn from rural districts the horses, the oxen, the sheep, and the crops are unfailing sources of attraction. The healthy mental action which we try to evoke in a somewhat artificial manner, by furnishing the walls of the rooms in which the patients live, with artistic decoration, is naturally supplied by the farm. For one patient who will be stirred to rational reflection or conversation by such a thing as a picture, twenty of the ordinary inmates of asylums will be so stirred in connection with the prospects of the crops, the points of a horse, the illness of a cow, the lifting of the potatoes, the growth of the trees, the state of the fences, or the sale of the pigs" (Tuke 1882, p. 383-384).

Jan Hassink and Majken van Dijk (eds.), Farming for Health, 147-161.

Although that passage was written over one hundred years ago many of those who are familiar with the use of agriculture and horticulture for people with mental health problems would express similar sentiments today.

The old Victorian asylums were replaced by newer mental hospitals, many of which also had farms and gardens to keep the patients active and to feed the institutions. Farming was not the only outdoor activity associated with hospitals. Gardening work was seen as a way of helping people who were recovering from physical injuries to strengthen and build up damaged bones and muscles. In his book, *The Rehabilitation of the Injured*, Colson (1944) describes different gardening activities that may be used as therapy and lists specific activities to develop movement in particular joints (p. x-xvi). Gardening was used to 'treat' not only the physically injured but also those with mental health problems and learning difficulties. It became one of the 'specific activities' of occupational therapy as the discipline developed in the 1950s and '60s and is still used today. However, the activities used in occupational therapy have tended to vary according to the availability of facilities and changing attitudes and it is not known how many occupational therapists use gardening at present.

As the care and treatment of mental patients changed and the hospital system was restructured and modernized, particularly in the late 1960s and '70s, the hospital farms were gradually closed. Indeed, there had been some disquiet concerning the use of patients as 'labour', not only on farms but in other aspects of the running of the hospitals. Bickford (1963) wrote:

> "That patients should do a little domestic work, to foster a feeling of community and to teach them how to care for their homes, is reasonable. What is unreasonable is the extent to which the hospital is dependent on their work. In fact, without it the hospital could not run and the mental hospital service would collapse" (Bickford 1963 in Szasz 1973, p. 193-194).

Hospital farms faded from the scene and much of the land was sold off. Some of it was used for development and it seemed that agriculture and horticulture would be irretrievably lost as activities for patients and those recovering from illness.

'SOCIAL AND THERAPEUTIC HORTICULTURE'

Hospital farms may have disappeared but the use of horticulture and gardening as a complement to therapy, both associated with hospitals and outside, has grown. In most cases these are organized 'projects' to which clients or patients are referred (or join voluntarily) and which they attend regularly. They are frequently funded (to some extent) by social-services departments and health trusts but often struggle to keep financially solvent and have to find additional funding through grants, commercial activities and other ventures.

They occupy a similar niche in the provision of health and social care as the European 'care farms'. Indeed, a small number of projects are based on farms and some city farms provide similar care. The 'clients' (although many projects do not use the term 'clients' as it tends to 'medicalize' their activities and prefer to call them 'volunteers', 'project members' or 'workers') come from many different

vulnerable groups, but the greatest number are those with mental health problems and learning difficulties.

The structured use of gardening at projects is often termed 'horticultural therapy' or 'therapeutic horticulture[1]'. Frequently these terms are used interchangeably. They refer to the process of interaction between the individual and the plants or gardens and (in most cases) facilitated by a trained practitioner. The following definitions were agreed by practitioners at a conference on Professional Development organized by the charity *Thrive* in September 1999:

> "*Horticultural therapy* is the use of plants by a trained professional as a medium through which certain clinically defined goals may be met."
>
> "*Therapeutic horticulture* is the process by which individuals may develop well-being using plants and horticulture. This is achieved by active or passive involvement" (Growth Point 1999, p. 4).

Horticultural therapy has a pre-defined clinical goal similar to that found in occupational therapy from which it has developed, whilst therapeutic horticulture is directed towards improving the well-being of the individual in a more generalized way. This can be the attainment of employment, an increased sense of self-esteem or some other perceived benefit. The term 'social and therapeutic horticulture' (STH) probably best describes the process by which horticulture is used to develop well-being since *social* interactions and outcomes play a significant role. From a research point of view it is useful to refer to these activities as 'therapy' since it helps to identify an area of study; however, many of those working in the field avoid using that term because, like the word 'client', it appears to focus on illness or disability rather than the work carried out.

In order to study the extent of activity and interest in social and therapeutic horticulture in the UK a survey was carried out in 2003 as part of the *Growing Together* programme. This is a three-year research project by the Centre for Child and Family Research at Loughborough University in partnership with Thrive. Thrive is the main UK organization which supports garden activities as a means of "tackling disadvantage and improving the quality of people's lives using gardening and horticulture". It was founded in 1978 as the *Society for Horticultural Therapy* by a young horticulturist, Chris Underhill, as a result of his work with people with learning difficulties. The organization has continued to grow and now provides help and advice to a network of projects across the UK.

In 1998 it carried out a survey of known projects and around 1,500 'projects' were identified and logged onto a database. However, it soon became clear that some of the entries in the database classified as 'projects' were not active ones. Some were individuals with an interest in starting new projects while others were projects that had closed down. In 2003 a new survey form was designed and distributed to the 1,500 named individuals with the Thrive-network newsletter. Non-respondents were followed up with an additional form and a telephone call.

A total of 836 active projects responded to the survey by the end of 2003. Their responses showed that the area of STH as a source of service provision for vulnerable people has been steadily building for the past twenty years. The first project still active in the network started in 1955 and 78 new projects were added by

1985. The following years showed a sharp rise in the number of projects starting up which reached its peak in 2002 with 58 new ones in that year. From the mid 1980s there was also an increase in the involvement of local authorities and health authorities with STH projects. Whilst up to 1985, projects were started predominantly by charities, after that year local authorities, health-care trusts and social services were involved in setting up many new projects. For example, in the period 1956 – 1980 only six of the thirty new projects were associated with local authorities or the National Health Service (NHS), but in the period 1996 – 2000 this had risen to 112 of the 209 new projects.

Projects vary in size and capacity. Seventy-eight percent of those in the survey had 30 or fewer clients per week, but 7.2% reported over 50 clients. The mean number of users was calculated as 25.3/project/week and extrapolating this figure to the total number of respondents in the survey suggests that around 21,000 clients attend STH projects in the UK each week. In other words, the projects provide approximately one million client placements per year. It is likely that the total number of *individuals* using STH projects per year is close to the weekly figure since the pattern of use is that of regular attendance and data from interviews suggest that client turnover is low.

The published literature on STH reports participation by many different vulnerable groups. Indeed, virtually every group appears to be represented and many projects also provide a service to clients from more than one group. Of the projects in this survey only 35.5% worked with one client group, the rest had multiple client groups. Almost half (46.4%) worked with 3 groups or more. Table 1 lists the main groups attending the projects. Almost half of the projects provided a service for people with learning difficulties and mental health needs. This is perhaps unsurprising since these two groups represent the historical core of gardening projects.

Around 30% of the total users of STH projects are women and 20 projects in the network catered for women-only groups. It is unclear why women are under-represented. It is possible that women may be deterred by the perceived physical nature of the work but data from visits to projects show that the gender distribution of project workers and volunteers is equal. Our observations also suggest that the actual physical workload at projects does not appear excessive and is shared between the genders and between people with physical disabilities and those without. Further research is necessary to discover why so few women attend the projects as clients.

It was estimated that around 6.2% of clients came from black and ethnic minorities. This is greater than the estimate produced by Naidoo et al. (2001), who surveyed the same project network. However, their response rate (113 projects) was much lower than that in the present study. The 2001 Census[2] reported that 7.9% (4.6 million people) of the total population of the UK was from black and ethnic minorities although the distribution varied significantly across the country. These data suggest that ethnic minorities are slightly under-represented at STH projects if

Table 1. *Main client groups attending gardening projects*

Main client group	Number of projects
Learning difficulties	407
Mental health needs	339
Challenging behaviours	144
Physical disabilities	141
Unemployed	116
Multiple disabilities	98
Young people	91
Older people	89
Low income	78
Drug and alcohol misuse	74
Rehabilitation	60
Accident / illness	50
Visually impaired	45
Offenders	43
Hearing impaired	39
Black and ethnic minorities	36
Ex-offenders	31
Major illness	30
Homeless and vulnerably housed	20
Women only groups	20
Refugees / asylum seekers	9

the comparison is made purely in terms of percentages of the population. However, the projects provide a service for vulnerable people and those at risk of social exclusion. If these risks are greater among black and ethnic minorities then the degree of under-representation is also greater in real terms. Naidoo et al. (2001) have suggested a strategy for increasing participation by black and ethnic minority groups in STH projects. They identified the barriers to involvement in the projects as being both cultural and organizational, for example:

> "Most interviewees identified cultural barriers to the involvement of BMEGs [Black and Minority Ethnic Groups] in horticultural projects. Cultural barriers included gender roles, especially the presumed reluctance of South Asian women to engage in activities outside the home, and a lack of interest in horticulture, which might be viewed as unimportant or unpaid work rather than a leisure pursuit" (Naidoo et al. 2001, p. 15).

> "The most commonly cited barrier in the questionnaires, the lack of BMEGs living locally, may also be viewed as an organizational barrier, in that the relative invisibility of BMEGs is a perception rather than reality. For many rural projects, there may be few BME people living locally, but for projects located in towns and cities, or taking referrals from towns and cities, it is likely that there are BMEGs in the locality" (Naidoo et al. 2001, p. 18-19).

It is unclear whether the under-representation of women and black and ethnic minorities at STH projects is a feature of UK projects or whether a similar situation

exists in Europe as a whole in respect of care farms and horticulture-based projects. This is an area that should be addressed as other European experiences may be of help in preparing a strategy to promote STH to these groups.

THE 'GARDENS'

Although 'therapeutic horticulture' has its roots (or some of them at least) in the old hospital farms the type of space now used for horticulture projects is varied. These include farms, gardens, allotments, city farms and others. Additionally many projects carry out gardening and conservation work away from their own sites. Table 2 shows the number of projects in each type of site.

Table 2. *Types of site used for garden projects*

	Number of projects
Garden	321
Nursery / Garden centre	185
Allotment	153
Community garden	117
Outreach	85
Park/open space / country park	56
Farm	44
City farm	20
Other	16
Conservation / woodland	15
Total number of projects	836

'Gardens' and 'community gardens' make up over half of the projects (52%). These encompass a variety of different spaces – private gardens, hospital gardens, gardens created on derelict space. They demonstrate the inventiveness and perseverance of project organizers in securing a space for themselves and their clients and volunteers.

Around 18% of projects are based on allotments. Allotments have had a unique place in the British landscape and culture for many years (see Crouch and Ward 1997). Their heyday came during the immediate post-war years when the food grown on them was most welcome at a time of shortages. As prosperity increased so interest in them dwindled and plots became vacant and were lost to development and building. Although allotments were originally intended to provide land for cultivation by individuals and their families, vacant plots have been taken over by community groups to provide social and therapeutic horticulture. One particular advantage of projects based on allotments is that they are able to interact and integrate with local communities for mutual benefit. Recent research (Phelan and Link 2004) suggests that people's fear of the mentally ill is due to a lack of contact with them rather than as a consequence of observing their symptomatic behaviour.

Integration with local communities, therefore, may help to allay people's fears of the mentally ill and those with learning difficulties. Another useful feature of allotments is that the plots are of a manageable size[3] and are rented individually. As projects expand additional vacant plots can be rented. This not only provides land for the projects but also prevents the allotment site from appearing neglected through many vacant and overgrown plots. In many cases local authorities have offered plots to community groups for STH at reduced or nominal rents in order to increase the occupancy rate. However, UK rents for allotment plots are not expensive – usually £25 - £30 (ca €37 - €44) per year for a 250m^2 plot.

A few projects in the survey (8%) were based on farms and city farms. Some of the farms have turned their focus from straightforward agricultural production to providing training for vulnerable people. This includes horticultural training, the use of machinery, animal husbandry and even computing and information technology. These skills may help trainees to find employment in the agricultural sector, they may also enable them to form social firms and cooperatives and so be part of productive units.

City farms encourage the involvement of local urban communities with gardening, farming and food production. The Federation of City Farms and Community Gardens lists almost fifty city farms in the UK which are open to the public. The farms also provide training places in land-based subjects including horticulture and crafts such as woodwork for people with learning difficulties. The Federation estimates that around 2,500 such places are provided each year by community gardens and city farms. In addition to horticulture, city farms offer an opportunity for people living in an urban environment to be involved with the care of a variety of domestic and farm animals. The therapeutic benefits of contact with animals is widely recognized and the practice of 'animal-assisted therapy' or 'pet therapy' is well established in the US. However, the extent of the use of such therapies in the UK is not known. All 20 of the city farms in the survey, and 34 of the 44 farms (77%), offered animal care as one of their activities. Additionally, a further 52 projects were involved with animal care (a total of 106 projects). However, it is likely that many other individuals and organizations using animal-assisted therapy in the UK operate outside of organized garden projects. For example, the charity 'Pets as Therapy' has around 4,000 volunteers, who together with their pet dogs and cats, visit patients and residents in hospitals, hospices and care homes. It estimates that approximately 100,000 people each week receive a visit from their volunteers. The rising level of interest in this field has led to the launch of a new course at Myerscough College, UK leading to the 'Professional Certificate in Animal Assisted Therapy' for the accreditation of practitioners. There is also active research in the use of these therapies, encouraged by the 'Society for Companion Animal Studies' which aims "to advance the understanding of relationships between people and companion animals and to disseminate information about human/companion animal relationships" through its multidisciplinary network. It has a membership which includes health- and social-care practitioners, researchers and interested members of the general public, and it produces a journal and holds regular meetings. Additionally, a new programme of research has recently begun at Anglia Polytechnic University in the UK to explore

the benefits of ‘ecotherapy’ – the use of nature and wildlife as a form of therapy for people with disabilities. Burls (2004) has suggested that the benefits of nature are more pronounced in people with disabilities and those who are socially marginalized:

> “The preliminary findings indicate that although people generally experience a sense of wellbeing when in contact with nature, the effect is much more pronounced for disabled and marginalized people, helping them to become less socially excluded. As well as experiencing positive physical and psychological health improvements, they also reconnect with their communities, some reaching a higher level of socio-political identity” (Burls 2004).

These recent developments suggest that interest in nature and animal care as a form of therapy is growing alongside the use of horticulture.

Commercial enterprises such as garden centres and nurseries are also involved with STH although few, if any, make an economic profit from these activities. Like all other projects they are reliant on grants and fees paid by social services and health trusts. They do provide an environment in which their clients are able to engage in sheltered work and in some cases prepare themselves for employment outside. The productivity of these enterprises reinforces the perceived role of the client as a ‘worker’ and not as someone purely engaged in a form of therapy.

Table 3. *Organizations connected to garden projects*

	Number of projects	Percent
Hospital	119	14.2
College	99	11.8
Residential home	77	9.2
Community centre	46	5.5
School	39	4.7
Therapeutic community	37	4.4
Rehabilitation centre	36	4.3
Garden centre / commercial	33	3.9
Secure unit	25	3.0
Special school	20	2.4
Hospice	11	1.3
Prison	9	1.1
University	3	0.4

(554 respondents - percentages of 836 respondents)

Over half of the projects in our survey were connected or associated with an educational or care establishment or institution (see Table 3). The largest single grouping was that connected to hospitals (14.2%) showing the continuing association of hospitals with horticulture. These gardens have been created by occupational-therapy departments and provide training for patients and also opportunities for relaxation for staff and sometimes visitors. Twenty-nine projects

were located in prisons or secure psychiatric units. This is certainly an underestimate of the level of horticulture and agriculture activity that is carried out in those settings. Grimshaw and King (2003) identified 101 projects within prisons and secure units. Even this figure may not reveal the true extent of activity as they only had a 30% response to their survey.

Although we refer to these projects as 'horticulture' projects many of them also offered other activities such as building and construction work, art and crafts and more. One hundred and fifty-seven projects in the survey reported that they had craft workshops. During our visits to 25 projects we observed examples of art forms such as sculpture, wood carving, painting and mosaics; crafts such as ironwork, woodwork, wood-turning; conservation and landscaping. All of these activities can come under the umbrella of gardening since they are used to decorate or improve the garden space. This engenders a sense of 'belonging' and a sense of place. Clients who were engaged solely, for example, in slab-laying or bricklaying still considered themselves 'gardeners' because they were working for the benefit of the garden.

Many different skills and activities are needed to create and maintain a garden – just like the variety of jobs on a farm referred to in the first passage of this chapter. STH projects, therefore, offer the opportunity for variety and the hope that there will be *something for everyone* to do.

FUNDING AND FINANCE

Projects obtained their funding from a wide variety of different sources. Around ten percent made a charge directly to their clients whilst over half (54%) received fees for clients from local authorities and health trusts. Sometimes the fees were paid on a *per capita* basis for named individuals but at times a 'block' fee was paid to the projects to provide a service for a set number of clients. Our interviews with project organizers suggested that in many cases projects took on more clients than had been paid for because they did not wish to turn away potentially vulnerable people.

Additional funding was obtained through grants and payments from local and central government (excluding fee payments), public fundraising and sales of arts, crafts, plants and produce. Where a charge was made (either to the client or authority) the average fee was £27 (ca €40) per session although this varied from as little as fifty pence (ca €0.74) to £137 (ca €203). However, 86% of projects charged between £10 and £60 (ca €15 to €89).

Having produced an estimate of the number of sessions per year and with the knowledge of projects' annual budgets it was possible to estimate the mean cost of an individual client session - £53.68 (ca €79). This is higher than the average client fee of £27 (ca €40) and suggests that projects are undercharging for their services and as a result are having to find additional funding through grants, sales etc. Interestingly, the cost of a session at a horticulture project is similar to that at a National Health Service (NHS) or local-authority day centre - around £54 (ca €80) per session but dependent on the client group (see Netten et al. 2001, p. 57, 58, 73, 74).

The majority of projects operated on an annual budget of less than £10,000 (ca €14,800) and 71.7% on a budget of less than £50,000 (ca €74,000). Projects with larger budgets supported more clients but the relationship between mean client numbers and budget size was not linear (see Table 4). If the number of clients is doubled it is necessary to increase the size of the budget by up to tenfold. It is interesting to consider why economies of scale appear to work in the reverse for STH projects. It may be that as projects expand they are able to offer more, and more expensive services, or that staffing needs grow disproportionately to client numbers.

***Table 4**. Annual budget and number of clients at projects*

Total annual budget		Mean number of clients
GBP	Euro (approximately)	
Less than £10,000	Less than €14,800	15.1
£10,000 - £50,000	€14,800 - €74,000	26.6
£50,000 - £100,000	€74,000 - €148,100	32.6
£100,000 - £500,000	€148,100 - €740,300	41.5
Over £500,000	Over €740,300	50.0

(Data from 546 projects)

The data obtained in the survey also show a difference in costs between services for people with mental health problems (£38.92 per client session, ca €58) and those with learning difficulties (£56.57, ca €84). This may reflect salary costs since the mean number of staff at STH projects which provide a service only for people with learning difficulties was greater (2.5) than that for projects providing services for people with mental health problems (1.6). Session costs are in proportion to staffing levels.

Finally it was possible to estimate the total budget for this sector of care at around £54.5 (ca €81) million per year.

THE BENEFITS OF SOCIAL AND THERAPEUTIC HORTICULTURE

In order to examine the benefits of STH twenty-five projects were examined in depth and 137 clients and 81 project workers and carers were interviewed. The significance of the projects in participants' lives was compared with that of paid employment. Employment is not only a source of pay but a source of social and psychological benefits. Morse and Weiss (1955) were the first to show that money was not the only motivation in employment and that the majority of working men (80%) would continue to work even if they inherited sufficient money to live comfortably without working. A similar study carried out almost twenty-five years later (Vecchio 1980) showed that although this percentage had fallen the vast majority (72%) would still choose to work. A substantial literature has grown up around the benefits of employment and these have been likened to 'vitamins' for mental health. Jahoda (1979) has argued that employment and the working

environment provide a latent support i.e. unintended consequences of work for the employed in the form of five key dimensions, namely:

> "employment imposes a time structure on the waking day … employment implies regularly shared experiences and contacts with people outside the nuclear family … employment links an individual to goals and purposes which transcend his own … employment defines aspects of personal status and identity … employment enforces activity" (Jahoda 1979, p. 313; for a review and critique of the literature on unemployment see Fryer and Payne 1986).

Our observations of STH projects suggest that they also provide benefits in these key dimensions. They impose a structure and a daily routine on clients' time similar to that seen by people in paid employment. More than half of the clients (50.4%) attended a project for three days or more each week and spent around 5.5 hours there. They viewed their activity as 'work' and rarely as therapy. They spoke of themselves as '*gardeners*' or '*workers*'. They recognized, however, that there was considerably less pressure on them to be productive than in a commercial environment. The lack of pressure probably contributed to their enjoyment and well-being but when an increased effort was necessary they appeared content to join in:

> "That went on forever and it, like, we were all out there, and it was just like a chain gang. I mean, it was all funny … It was hard work, it was good. You know, it was hard work, so, in that sense, it was exercise, it was good. And it was funny, because we were all out there just laughing at each other".

Few, however, found paid employment. A year after our initial visits to the project less than ten percent of those we interviewed were in full-time work. Project managers and organizers did not see the move to employment as necessarily desirable. Many clients were not ready for employment and a push towards it could be particularly damaging for vulnerable people. Individual client progress within projects (and towards goals outside, if appropriate) was seen as important and clients were encouraged through training, individual targets and through the use of supported volunteering and supported work schemes.

A small number of the projects (65) provided paid sheltered employment. Others were able to offer small amounts of money as expenses, attendance allowance or as a share of profit in a cooperative commercial venture. This 'pay' was seen as important and was instrumental in raising the status of the participant from that of *client* to that of *worker* even when the actual monetary value of the pay was small. The project participants were able to buy simple luxuries – cigarettes and magazines – with money that they had earned.

Another theme associated with work that emerged during interviews was the use of tools and machinery. In our study work with tools was seen by some as particularly enjoyable. Tools may define work; and the worker who is able to use them as a skilled and useful person. Morse and Weiss (1955) noted:

> "Working class occupations emphasize work with tools, operation of machines, lifting, carrying, and the individual is probably orientated to the effort rather than the end. Therefore life without working becomes life without anything to do".

In the modern age it is not just 'working-class occupations' that are defined by the tools they use – doctors, for example, are inextricably linked to their

stethoscopes and businessmen to their laptops and mobile telephones. Leisure activities are also associated with tools – the DIY enthusiast with his (or her[4]) array of power tools; gardeners with their spades. The access to tools and machinery and the ability to use them puts project participants in the same 'class' as other users. It empowers them.

SOCIAL OPPORTUNITIES

Participating in an STH project provides an opportunity for clients to develop new social contacts, to extend established networks and to indulge in social activity with friends and acquaintances. The projects also offer clients the chance to mix with new acquaintances with whom they share common interests and who often also have the same or similar health problems or vulnerabilities. In our experience this does not appear to be a chance to sit and complain about mutual woes but a genuine exchange of help and advice.

The desire for regular contact with others and the opportunity to make new friends is also a key factor in clients' attendance at projects. Most of those we interviewed said that they had made a number of friendships at projects and many also reported that they had made friends who had become particularly important to them. Some friendships extended beyond the project although the number of clients who socialized with other clients outside project hours was not high. Just under half of respondents said that they socialized 'sometimes' or 'quite often' with fellow project members. However, the other half 'rarely' socialized or not at all; for these respondents the projects may represent the main, if not the only opportunity for social contact, as one man with mental health problems remarked:

> "And it's helped tremendously, just getting me out of myself and, mixing with other people, because apart from that, I don't socialize at all. I don't have any friends and these are the only people that I mix with".

FRESH AIR

Many of those we interviewed said that they liked '*to be outside*' or enjoyed '*the fresh air*'. These two constructs are linked to a sense of freedom, a perception of health, contact with the natural environment and a notion of physical exercise. Our interviewees expressed all of these themes. To some being outside was clearly an opportunity to be free from the constraints of an indoor environment:

> "Um, being outside is very nice, enjoyable, I mean I've had jobs and I've worked in factories and stuff before now and it's just nice to be in the open, be a bit like, free".

Whilst for others the outdoor environment enabled a connectedness to nature itself:

> "The garden itself has been fantastic in terms of being outside, and just the beauty of this place, and the beauty of gardening, getting me more switched on in terms of gardens and, you know, plants, and, you know, the natural world".

Some clients particularly enjoyed looking after plants – taking responsibility for them and nurturing them from a seed or seedling to a mature plant. Research in environmental psychology suggests that the natural environment promotes recovery from stress (Ulrich et al. 1991) and helps to restore the ability to focus attention once it has become fatigued either through prolonged concentration or illness – an effect termed 'attention restoration theory' (see Kaplan and Kaplan 1989). The natural environment is often therefore referred to as a '*restorative*' environment (see Sempik et al. 2003). Two specific dimensions of the restorative environment have been termed *fascination* – the ability for something to hold attention without the use of effort, and *being away* – the sense of escape from a part of life that is ordinarily present and not always preferred. The natural environment provides these dimensions although they may be present in different measures for different people and 'being outside' may have a different meaning and significance to different individuals.

CONCLUSION

This chapter has briefly described the state of practice of social and therapeutic horticulture in the UK and has examined some of the benefits associated with it. Researchers working in the field of social and therapeutic horticulture are frequently asked what it is about gardening projects that is beneficial. A brief answer could be that these projects provide similar social and psychological benefits as paid employment – social opportunities, a sense of identity and status, engagement with an interrelated set of activities that has purpose and coherence; the activities take place within a garden space that has been created and defined and this engenders a sense of belonging and a sense of place; and they take place within a natural environment which enables the *restorative* experience.

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NOTES

[1] Training in 'therapeutic horticulture' in the UK leading to the certificate or diploma is provided by Coventry University in conjunction with Thrive.
[2] UK 2001 Census data available from National Statistics: http://www.statistics.gov.uk/
[3] By law the maximum size of a UK allotment plot is 40 'poles'. This is equivalent to 1,210 square yards or 1,012 square metres (1 pole = 30 ¼ square yards; the terms 'rod', 'pole' and 'perch' are interchangeable). In practice the usual size of a 'full-sized' plot is 10 poles i.e. 253 square metres.
[4] Because of the relatively small number of women in the study we have not been able to explore the link (if any) between gender and the use of tools and machinery on garden projects.

REFERENCES

Burls, A., 2004. Ecotherapy in practice and education: paper 00067. *In: Proceedings of the open space: people space, an international conference on inclusive outdoor environment, Edinburgh, UK, October 2004*. Open Space. [http://www.openspace.eca.ac.uk/conference/proceedings/PDF/Burls.pdf]

Colson, J.H.C., 1944. *The rehabilitation of the injured*. Cassell, London.

Crouch, D. and Ward, C., 1997. *The allotment: its landscape and culture*. Five Leaves Press, Nottingham.

Fryer, D. and Payne, R., 1986. Being unemployed: a review of the literature on the psychological experience of unemployment. *In:* Cooper, C.L. and Robertson, I.T. eds. *International review of industrial and organizational psychology*, Vol. 1. Wiley, London, 235-278.

Grimshaw, R. and King, J., 2003. *Horticulture in sesure settings: prisons and secure psychiatric facilities*. Thrive/King's College, the Centre for Crime and Justice Studies, Reading/London.

Growth Point, 1999. Your future starts here: practitioners determine the way ahead. *Growth Point*, 79, 4-5.

Jahoda, M., 1979. The impact of unemployment in the 1930s and the 1970s. *Bulletin of the British Psychological Society*, 32, 309-314.

Kaplan, R. and Kaplan, S., 1989. *The experience of nature: a psychological perspective*. Cambridge University Press, Cambridge.

Morse, N.C. and Weiss, R.S., 1955. The function and meaning of work and the job. *American Sociological Review*, 20, 191-198.

Naidoo, J., De Viggiani, N. and Jones, M., 2001. *Making our network more diverse: black and ethnic minority groups' involvement with gardening projects*. Thrive/University of the West of England, Reading/Bristol.

Netten, A., Rees, A. and Harrison, G., 2001. *Unit costs of health and social care 2001*. Personal Social Services Research Unit, Canterbury. [http://www.pssru.ac.uk/pdf/UC2001/UnitCosts2001ALL.pdf]

Phelan, J.C. and Link, B.G., 2004. Fear of people with mental illnesses: the role of personal and impersonal contact and exposure to threat or harm. *Journal of Health and Social Behaviour*, 45 (1), 68-80.

Sempik, J., Aldridge, J. and Becker, S., 2003. *Social and therapeutic horticulture: evidence and messages from research*. Thrive with the Centre for Child and Family Research, Loughborough University, Reading.

Szasz, T.S. (ed.) 1973. *The age of madness: a history of involuntary mental hospitalization, presented in selected texts*. Anchor Books, Garden City.

Tuke, D.H., 1882. *Chapters in the history of the insane in the British Isles*. Kegan Paul and Trench, London. Reprinted by E.J. Bonset, Amsterdam in 1968.

Ulrich, R.S., Simons, R.F., Losito, B.D., et al., 1991. Stress recovery during exposure to natural and urban environments. *Journal of Environmental Psychology*, 11 (3), 201-230.