A Phenomenological Study of Community Gardening: An insider's view of the lived experiences of community gardening participants throughout the growing and non-growing seasons

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Submitted to the Institute of Technology, Sligo
2016

Declaration

I hereby confirm that this is all my own work

Signed...Candidate

Signed...Supervisor

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Acknowledgements

I would like to acknowledge that this work would not have been possible without the input of many people. I would like to express my gratitude to my family and friends, with a special thank you to Tracy for her constant support and words of encouragement throughout. I would also like to thank the management and participants at the community garden under study without whom none of this would have been possible. I would also like to pay a special mention to my supervisor Dr Gwen Scarbrough who was a constant source of inspiration and support throughout.

Abstract

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By

Daniel Gaffey

This study was carried out with the help of seven research participants at a community garden in the North-west of Ireland. Although research exploring the experiences of community gardening participants is limited, it is broadly acknowledged that community gardens have the capacity to promote positive, physical, social and mental health related outcomes for participants. However, the short Irish growing season and absence of guidelines concerning dormant season engagement limits the potential for these outcomes to be experienced all year round. In response to this I initiated a process of developing a range of new garden features and horticultural craftwork activities at the community garden under study, which would provide stimulation to its members throughout the whole year. The completion of this process paved the way for the execution of a unique study, one which would capture the experiences of participants throughout both the growing and dormant seasons.This study employed a phenomenological research strategy to explore the 'lived' seasonal experiences of community gardening participants and to establish what 'meaning' can be attached to these experiences. The main findings argue that community gardeners develop a strong sense of connectedness to the garden and to fellow participants and that the social, physical and skills development implications can influence the way participants self-identify. The collaborative efforts involved in developing and maintaining these spaces also fulfil an important function in relation to the promotion of social capital. The findings also demonstrate how dormant season activities can not only complement the growing season experiences in terms of the change of pace, scenery and direction, but also provide real value in terms of the different cognitive and skills development processes involved in carrying out these unique and unfamiliar tasks. This study also explores the transferability of the new dormant season activities to similar settings and provides recommendations for future areas of research.

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Chapter 1: Introduction

It is perhaps fitting that ancient philosopher Aristotle uses a metaphor from the plant world to capture what he describes as living the good life. For Aristotle, a person who was physically, socially and psychologically thriving was said to be 'flourishing' (Charleton 2007 p22). Though Aristotle is not talking specifically about gardening or community gardeners, it is an interesting comparison none the less. Based on my own experiences of gardening within a social care capacity I would like to expand this metaphor by suggesting that the garden can be a sanctuary not just for vegetative growth but for human growth also. During our first winter together while the community garden at the centre of this research was being developed, almost the entire decision making was left in the hands of myself as facilitator. In those early months it seemed as though simply turning up and being here in this busy but unfamiliar environment and making small talk with strangers was enough of a challenge for participants, without being called on to offer opinions or make decisions also. As the winter progressed, levels of participant engagement improved, bringing with it the attainment of new knowledge and skills and increased levels of confidence. By early spring, the participants, like the garden, were beginning to show signs that they were ready to awaken from their sleepy, dormant slumber. By early summer, almost in perfect synchrony with the flowers and plants under their care, they were beginning to flourish. Participants struggling with external life issues took solace in the safety and support that the garden had to offer, allowing them some respite from the traumas and challenges that life throws up, for the short term at least. Come harvest time, the participants had come full circle and were now responsible for almost all the decision making at the project. The social processes that brought about this transformation will be comprehensively illustrated throughout chapter 5.

The purpose of this study is to generate data regarding the 'lived experiences' of community gardening participants and also to explore the potential for community gardens to provide year round interest and activities for participants. The idea to explore the experiences of community gardening

participants throughout the growing and non-growing seasons emerged in response to my concerns about the ability of community gardens to provide dormant or winter season stimulation for participants and the lack of research or guidelines dealing with this issue. These concerns were identified by me while working in my role as a community garden facilitator in Ireland. Drawing from my background and experience as a social care practitioner I could see that the short growing season limited the potential for our community garden to provide year round engagement for participants, thus potentially reducing the therapeutic effectiveness for those involved. The outdoor growing season typically lasts from March to November while the period from November to March is known as the dormant season when less light and lower temperatures slows or stops growth altogether. As a consequence of this, opportunities to carry out normal gardening activities such as sowing, transplanting, watering and weeding were diminished and this raised the question, how are the participants of community gardens stimulated during the long dormant season?

In the past, the participants of our community garden responded to this question by ceasing to visit the garden for the duration of the non-growing season. Indeed, this is exactly my own response to the seasonal nature of gardening activities. I am a passionate gardener but spend very little time in the garden during winter when there is much less work to do. Although I miss spending time in the garden and look forward to spring when garden activities resume, I am reasonably happy to endure this winter break as it provides an opportunity for me to catch up with other family, work and study obligations. I began to wonder if the participants at our community garden were also happy or content to just sit it out until spring when they could return to the garden, but I suspected that the situation might be a bit more complex than this, considering the socially isolated lifestyles of some of those involved. My suspicions were confirmed when I discussed this issue with the participants. One participant described experiencing feelings of dread every time she thought of the garden closing and expressed fears that she would be stuck in the house without seeing anybody for the whole winter. Another participant who had been diagnosed with depression explained how the

garden was sometimes the only reason he had for bothering to get up in the morning, while a recently retired participant who became involved in the community garden due to the inactivity of retirement had grave concerns with regards to how he would occupy his time during the winter months. While I suspected that the participants might be despondent at the prospect of the garden closing for winter, the acute sense of dread and desperation as articulated by the participants was most unexpected and led me to question what I, as an experienced community garden facilitator actually understood about the real 'meaning' of community gardening for participants.

So, in outlining the natural history of the development of my research it should be explained that while my initial objectives were focussed on bridging the noticeable gap in the research with regards to the question of participant engagement during the winter months, from this point on I now had a further clear objective which was to ascertain what it means to be a community gardener from the point of view of the participants. Closer inspection of the available research provided further justification for this approach. It quickly became apparent to me that while the findings of previous academic studies provide a useful guide regarding the implications of community gardening on quality of life issues, it is difficult to attach any richer meaning to the outcomes identified. There is often a lack of ethnographically rich insight into the personalities involved and with the social processes and emotions involved in achieving identified outcomes. This absence will be articulated in greater detail throughout the literature review.

In relation to the deficit of guidelines and research concerning dormant season engagement, one can only speculate. This gap might be explained by the limited potential for gardening activity engagement during the dormant season as less light and colder temperatures brings growth to a standstill, with the assumption being that diminished work opportunities equals diminished research opportunities also. Only Hale et al's (2010) study draws attention to this falling off of gardening commitments but fails to state whether this is viewed as a problem or not. Neither do the authors offer any recommendations on how this lack of engagement might be addressed. That

it does constitute a problem is beyond question as the testimonies of my own participants, and the messages emanating from the literature review extolling the quality of life and well-being implications for community gardening participants will testify. If these qualities can be accessed during the growing season surely it must be acknowledged as desirable to extend these outcomes to the dormant season also.

Aims and objectives of this study

This study uses ethnographic and auto-ethnographic research methods within a phenomenological research framework to explore the experiences of community garden participants from the point of view of an 'insider'. This methodology was chosen as it provides the scope necessary to reflect upon my previous and evolving knowledge and understanding of community gardening to interpret and analyse data. My rationale for adopting this position was that I was strongly of the view that drawing from and reflecting on my own previous experiences to interpret data would facilitate the production of a rich, evocative dialogue which would greatly enhance our understanding of the community gardening experience The key questions which are central to this research project are;

1. What are the lived experiences of community gardening participant's during the growing season?

2. Are there other activities that can be used to convey these experiences during the dormant season when growth slows down and work becomes scarcer?

3. What meaning can be attached to these experiences?

This study will scrutinise the processes involved in gardening collectively in an effort to further our conceptual understanding of community gardening as a whole. Key topics which will be explored include;

- Sense of connectedness to the garden and to fellow participants
- Social identity construction and the ways in which the garden influences how participants self-identify

- Social capital, particularly in relation to collective efficacy, work ethic and toiling with the hands as caretakers, craft makers and producers

- Physical, social and psychological well-being implications emerging from the relationships and dynamics associated with garden membership

- The ways in which weather, ground conditions, aesthetics and the rhythm of the seasons impact upon the overall community gardening experience

A comprehensive review of literature associated with community gardening is located within chapters 2, 3 and 4. Chapter 2 initially provides an overview of the different types of gardens associated with social and therapeutic horticulture before focusing more specifically on community and allotment type initiatives. Chapter 2 also provides an in-depth analysis of the origins and evolution of these types of initiatives within a historical context. Chapter 3 indicates the scope of the research which has already been conducted within the modern community garden, paying particular attention to claims that these types of gardens are capable of addressing a broad range of social and psychological issues, including having the capacity to engage with a wide spectrum of socially excluded and marginalised groups in society. Chapter 4 explores the implications of working with ones hands in a creative and meaningful way and will provide some justification for the types of horticultural and non-horticultural craftwork activities which are being used to ensure that there is year round work for the participants of our community garden. Where appropriate, I will identify the relevance of the selected literature to the research questions.

Chapter 5 of this dissertation outlines the development process whereby the research facility was transformed to facilitate dormant season activities. This chapter also outlines the methods of design, sample selection, data collection and analysis that were used to carry out this research. In relation to sample selection, the reader will be introduced to each of the participants and their motivations for becoming involved with the project. Data is gathered using ethnographic and auto-ethnographic research methods within a

phenomenological research framework to explore the experiences of community garden participants from a lived perspective. This involved the researcher becoming immersed in the research setting and 'living' the interactions, relationships, actions and experiences over a two year period and this will be discussed in great detail here. By becoming immersed in the research process the researcher was well positioned to interpret this data from the perspective of a participant. This chapter will also outline the ethical issues that were considered prior to and during the course of this research.

The main focus of the findings will be on the 'lived experiences' of the participants and these are set out in chapter 6. The first theme to be explored will be the influence of community gardening in relation to the construction of social identity. I will examine the ways in which internal and external social connections and supports have been developed as a direct result of community gardening participation. This social identity construction theme is developed further by examining the roles and responsibilities of community gardeners in areas such as teamwork, decision making, problem solving, fulfilling obligations, hard work and perseverance.

Chapter 6 then changes tack by exploring the lived relationships and sense of connectedness between the garden and the body. The initial focus will be concerned with the physical implications of community gardening in the shape of exercise and diet, meeting physical challenges and experience of weather. Physical strength, endurance, perseverance and robustness are some of the concepts which are explored here. This data helps to shed light on the motivations and rewards associated with engaging in physically demanding and often unpopular tasks. The narrative goes on to examine the psychological well-being and cognitive implications for community gardening participants. Ideas relating to knowledge, learning and skills development are discussed here. I will also examine the role that the garden can play with regards to providing participants with a sense of purpose and of the importance of this in relation to self-esteem and positive mental health. The potential of horticultural and craftwork activities in relation to promoting relaxation and alleviating stress is discussed here also.

The final section of the findings will discuss the differences and similarities between growing and dormant season activities, paying particular attention to the physical and cognitive processes involved, and to the ways in which these processes are experienced. This section will demonstrate the very different but compatible role that craftwork, both horticultural and non-horticultural, can play during the dormant season when work might otherwise be scarce. I will also explore the potential transferability of these types of activities to similar social horticulture settings.

I have chosen to present my findings in a very descriptive way. By illustrating the lived events at the project as they unfold in a descriptive style, it is hoped that a picture of the experiences, interactions and events at the project will be formed in the readers mind. The inclusion of a selection of photographs will further enhance and illuminate these descriptions. Where it is deemed to be helpful, the findings will be linked to other research which has been conducted around the area of community gardening.

The concluding chapter of this dissertation discusses the main issues identified in the findings and outlines the conclusions that can be drawn from the project. This chapter demonstrates how my work contributes to the existing body of research and outlines the potential influence of this study from both a theoretical and policy perspective. This chapter highlights the limitations of the research and makes suggestions concerning related issues that might benefit from future research.This dissertation also includes a comprehensive bibliography and selected appendices including a participant information sheet and consent form.

Chapter 2: The origins and evolution of community gardening and its position in relation to other 'therapy' related horticulture approaches

Introduction

Chapter 2 unravels the quagmire of garden types and approaches associated with social and therapeutic horticulture in an attempt to ascertain whether community gardening is regarded as a therapeutic initiative, a recreational activity or, as the name suggests, a resource for growing food collectively. This chapter also delves into the origins of community gardening in Britain, the United States and Ireland within a historical context spanning more than a century and explores the motivations behind the establishment of these early community food projects. This chapter will outline how community gardens were first established as a practical resource linked to food shortages but later evolved due to environmental concerns about commercial food production and an increased recognition for the social, recreational and potential therapeutic values of these types of initiatives. This chapter should be read as a prelude to chapter 3 which explores the outcomes of participation in greater detail.

Social and therapeutic horticulture approaches

To begin with it might be useful to explore some related definitions in an attempt to highlight the different types of gardens and gardening approaches associated with social and therapeutic horticulture. Firstly, let us focus on gardens and approaches which are more traditionally affiliated with 'therapy'. According to the *American Horticulture Therapy Association* (AHTA) a therapeutic garden is:

> 'A plant-dominated environment purposefully designed to facilitate interaction with the healing elements of nature. Interactions can be passive or active depending on the garden design and users' needs. There are many sub-types of therapeutic gardens including healing gardens, enabling gardens, rehabilitation gardens, and restorative gardens' (American Horticulture Therapy Association 2012 p1).

It should be noted that the AHTA does not include community, allotment or home gardens in its sub-types of therapeutic gardens. Perhaps this is because horticulture therapy is perceived as a more disciplined process as can be implied from the following definition:

> 'Horticulture therapy is a formal practice that uses soil, plants, horticulture activities and the natural environment to promote wellbeing for participants. Horticulture therapy is goal orientated with defined clinical outcomes and assessment procedures. Horticulture therapy is administered by professionally trained horticulture therapists' (American Horticulture Therapy Association 2012 p1).

Therapeutic Horticulture bears some similarities to Horticulture Therapy in that it also uses soil, plants, horticulture activities and the natural environment in order to promote wellbeing for participants. However, goals are not clinically defined or documented but the facilitator should be trained in the use of horticulture to promote well-being (American Horticulture Therapy Association 2012).

The above literature would seem to suggest that the main differences between the two approaches are that Horticulture Therapy is essentially a treatment plan administered by a trained horticulture therapist while Therapeutic Horticulture is not a treatment plan but requires that facilitators have training in the use of horticulture to promote 'well-being' as opposed to 'therapy'. Both approaches might typically be found in healthcare, rehabilitative and residential settings. A sample of therapeutic horticulture and adaptive gardening techniques is located at Appendix C. Many of these techniques were implemented at the community garden under study.

Non-'Therapy' related horticulture approaches

According to horticulture therapy advocates, community gardening differs from H.T. in that no treatment goals are defined and no therapist is present. Instead, community gardening is considered to be, albeit rather unfairly perhaps, more of a leisure or 'recreational activity' involving the production of food rather than 'therapy' (American Horticulture Therapy Association 2012 p1). In terms of formal definitions, the Community Garden Reference Guide defines a community garden as follows;

'any piece of land, public or private where plants are grown and maintained by a group of individuals in the community' (William Mitchell College of Law 2012 p2) .

Allotment gardens differ from community gardens in that allotments are maintained individually with the produce grown for individuals rather than the group as a whole although it is acknowledged that allotment gardening is still viewed as a collective undertaking (Campbell & Campbell 2013).

While these definitions may help to provide the reader with some insight in a practical sense, they do little to capture the imagination from a social care perspective, as despite the fact that there are no treatment goals and no therapist present, studies suggest that the physical and social qualities of community gardening can promote positive health related behaviours and improvements to overall health (Zick et al 2013; Litt et al 2011; Hale et al 2011; Teig et al 2009; Share 2006; Lee 2002; Armstrong 2000 & Waliczek et al 1996). Consider for a moment the language used to describe the global movement known as 'Men's Sheds', which bear many similarities to community gardens. These are described as;

'safe, friendly and inclusive environments where the men are able to gather and/or work on meaningful projects at their own pace, in their own time and in the company of other men and where the primary objective is to advance the health and well-being of the participating men' (Irish Men's Sheds 2014 p1).

Perhaps the field of community gardening would benefit from a revised definition, one which captures not only its 'practical' or food related implications, but also its potential for addressing a broad range of social issues including having the capacity to engage with a wide spectrum of socially excluded and marginalised groups in society.

Historical Context

Community and allotment gardens have their origins in the United States where they were first established to provide food for those on low incomes with the first gardens appearing in Detroit in the 1890s. The Mayor of Detroit at the time, Hazen Pingree, began to promote the idea of unemployed people growing crops on vacant land and called on land which was being held by speculators to be used for this purpose. In its first year, 450 acres of land was cultivated by 975 participants. The movement became known as the

Vacant–Lot Cultivators Association and was deemed very successful spreading to thirty other cities in nineteen states (Sheppard 2014).

As well as providing access to land for unemployed workers in large cities, these early gardens were also used to teach civic duty and good work habits to young people. Social and educational reformers played a major role in the early development of these spaces (University of Missouri 2009). The numbers of these types of gardens escalated in the following years, particularly during times of economic hardship such as the Great Depression and First World War. During these traumatic periods of American history, efforts to combat food shortages became a matter of patriotic duty as the U.S Government actively began to promote Community Gardens in order to supplement and expand the domestic food supply (Waliczek et al 1996).

Similar efforts materialized in the U.S and Britain during the Second World War when gardening allotments became known as 'Victory Gardens' (Ginn 2012 p296). The government at the time repeatedly promoted the idea that the war might be won or lost on food supplies. Following the launch of its 'Dig for Victory' campaign in autumn 1939 the number of allotments in Britain rose from 930,000 before the war to 1.7 million by 1943. In addition to this, the number of private gardens growing vegetables rose from 3 to 5 million during this period (Ginn 2012 p296).

In the US, the World War Two 'Food for Freedom' campaign was also deemed a great success 'everyone was growing vegetables or knew someone who was' (Hayden-Smith 2006 p12). As well as making a significant contribution to the nation's war efforts, the campaigns goal to improve the health of the American public was also realized. 40% of all the fruit and vegetables consumed during the war years were grown in victory gardens and according to some research, 'at no time before or since have Americans consumed as many fruit and vegetables' (Hayden-Smith 2006 p12). However, efforts to produce food at home decreased and many of the victory gardens established during the war years vanished once the patriotic need to provide food ended (Lee 2002).

Scepticism concerning the ways our food is produced and an increasing acknowledgement of the health and well-being implications associated with interacting with nature in a social horticulture capacity, as well as financial hardships borne out of the recent global recession has brought about renewed interest in community and allotment gardening. This new demand has gone some way towards arresting the chronic decline of allotments in the previous decades. During the 'Dig for Victory' campaign of the 1940s there were 1.7 million allotment plots but as mentioned previously, these numbers declined dramatically after the war when the patriotic obligation to produce food ceased and by the late 1970s there were only 500,000 allotments remaining (Ginn 2012). With little demand for vegetable growing during the 1980s and 1990s, councils sold off a further 200,000 allotments and by 2009 there was an estimated total of 300,000 allotment plots remaining (Smithers 2009). A study carried out by the National Allotment Society showed that by January 2013, 78,827 people had their name on a local authority waiting list for one of these plots (Campbell & Campbell 2013 p2).

In relation to the origins of allotment gardening in Ireland, a series of British laws was introduced which provided a statutory basis for allotment provision. The *Local Authorities (Allotment) Act* introduced in 1926 included a clause which allowed local authorities to lease land to voluntary associations interested in allotment gardening. These voluntary association workers formed the *United Irish Plotholders Union* and later the *Irish Allotment Holders Association* and became largely responsible for driving the movement, setting up branches throughout Dublin and its suburbs (Kettle & Corcoran 2013). The *Acquisition of Land (Allotments) Amendment 1934* replaced the 1926 act and provided for making allotments available to unemployed people at reduced or nominal rates. A key element of the scheme was that plot holders were permitted to sell surplus vegetables tax free thereby profiting financially from the fruits of their labours. (Sheppard 2014). However, with the surge in development and growth in the capital from the 1960s onwards it became increasingly difficult to acquire land for vegetable allotments as sites previously earmarked for this purpose were

now being used for housing and other infrastructure developments (Kettle and Corcoran 2013).

Similarly to the way events unfolded in the U.K. increasing environmental and health awareness concerning food production, consumption and practices as well as the economic crisis from 2007 onwards has sparked a revival of interest in vegetable growing in Ireland. In Dublin, the first community garden was opened on a plot of squatted waste land in the Dolphins Barn area of the city in April 2005 (Baynes 2005). Since then, with the support of a number of civil services advocacy groups, including, *Grow it Yourself, Get Ireland Growing* and *Irish Seedsavers,* the numbers of these gardens has been steadily increasing. By 2013, there were more than 50 community gardens in Dublin City alone (Kettle and Corcoran 2013 p2). At a more local level, Sligo Institute of Technology and the Organic Centre in Rossinver have been at the forefront of promoting community gardening in the northwest of Ireland. The variety of communities that have participated in these community food projects include socially excluded men, women's groups, disability groups and cross border/cross community projects (The Organic Centre 2011). It is also worth noting that the first community garden at an Irish 3rd level institution was established at Sligo Institute of Technology where I myself am based (Institute of Technology Sligo 2010).

In conclusion, chapter 2 distinguishes between the different types of social and therapeutic horticulture approaches and establishes where community gardening sits within the spectrum of these types of initiatives. The literature would seem to suggest that in some circles, community gardening is not viewed seriously as a therapeutic initiative but rather, in the words of the American Horticulture Therapy Association (2012) more of a leisure or recreational activity involving the production of food rather than therapy. The selection of literature explored in chapter 3 will challenge this assertion.

Chapter 2 also explores the history of community food projects within a British, American and Irish context. This section establishes how these early community food projects were initially formed out of necessity because of food shortages particularly during times of civil and social unrest.   The

literature shows how these projects evolved to capture the imagination of gardeners harbouring environmental concerns about how their food was produced. The appeal of these spaces was broadened further following increased recognition for the social, recreational and potential therapeutic values that they offered and an increasing acknowledgement that gardening and working outside is healthy. These ideas will be explored in greater detail in chapter 3.The literature also shows how community gardening has come full circle as a result of the recent recession as food poverty once more dominates the agenda.

Chapter 3: Assessing the impact of Community gardening on quality of life

Introduction

There is a growing body of research which suggests that the renewed interest in community based food projects can be attributed to a recognition that these initiatives are capable of promoting a host of positive social and psychological outcomes amongst participants and that characteristics such as age, race, gender, and socio-economic status present no barriers to entry or participation (Hale et al 2011; Teig et al 2009; Share & Duignan 2005; Lee 2002 & Armstrong 2000). Chapter 3 will examine a broad selection of research from the U.S, U.K and Ireland, which explores the experiences of community gardening participants. Implications relating to physical and social health and well-being, cognitive functioning and mental health are amongst the issues explored here. It is worth noting here that none of the research in this chapter sheds any light on the issue of participant engagement during the dormant season. As previously suggested, it may be that this is not regarded as problematic or perhaps it is just accepted that gardening must cease once the dormant season kicks in. Either way, the range of positive physical, social and psychological implications associated with community garden involvement as outlined in this chapter, provides justification for exploring ways of prolonging the season and extending the time that these types of gardens are in use.

Physical Health

Perhaps the obvious place to start a review exploring the quality of life implications of community gardening is to examine the physical and nutritional health outcomes associated with participation in these types of initiatives. Much of the research suggests that access to fresh, healthy food seems to be the hook with which many participants become attracted to community gardens in the first place (Share 2006; Lee 2002; Armstrong 2000; & Waliczek et al 1996). This section will explore a selection of compelling evidence which suggest that community gardening has the

capacity to promote positive, physical health related behaviours such as regular physical exercise and increased fruit and vegetable consumption.

Litt et al (2011) carried out a survey of 436 North American households located within one mile of a community garden. Of the household representatives surveyed, 43% were non gardeners, 48% were home gardeners and 9% were community gardeners. The study found that 56% of the community gardeners met the national recommendations to consume fruit and vegetables at least 5 times per day compared with 37% of home gardeners and 25% of non-gardeners. The study does acknowledge that educational attainment, physical activity, social involvement and perceptions of neighbourhood aesthetics can also influence fruit and vegetable consumption. It should also be pointed out that this study is indicative rather than definitive.

A study carried out by Zick et al (2013) which examined body mass index (BMI) data of community gardening participants in comparison to their neighbours, siblings and spouses also lends weight to the argument that community gardening can promote positive dietary health. This Salt Lake City study found that community gardeners have lower BMI's than their same gendered and same aged non-gardening neighbours. Women gardeners had an average BMI 1.48 lower than their female neighbours and were 34% less likely to be obese or overweight. Male gardeners had an average BMI that was 2.52 lower and were 36% less likely to be overweight or obese than their male neighbours. In relation to their siblings women gardeners were 45% less likely to be obese or overweight than their sisters and had a -1.88 BMI (Zick et al 2013). The authors of the study believe that the sibling comparison takes on increased significance when one considers the shared genetic predispositions for weight and family of origin influences on diet and exercise.

In the first of two evaluations of community food projects in the Northwest of Ireland, Share and Duignan (2005) found that knowledge of food production and preparation, and making healthier eating choices were important aspects of the overall experience. Participants felt that their cooking skills improved as a result of being involved in the projects. Participants also became

accustomed to cooking more fresh food and were also more inclined to buy organic produce. It should be pointed out that developing cooking skills and food nutrition knowledge were important components of these projects.

Many of these original findings were supported by a second evaluation carried out by Share (2006) which found that the participants had greater access to fresh organic vegetables which they might otherwise be unable to afford and that they felt healthier as a result. The researchers also found that participants enjoyed the physical challenges and identified gardening tasks as being an important source of physical exercise. This finding was also identified by Armstrong's (2000) study. This study involved 63 community gardens and was carried out to identify the physical and social health benefits available to participants. Many participants reported improved fitness levels gained from keeping active through gardening as an important motivating factor regarding participation.

In a study exploring the perceived community garden benefits among American born and immigrant gardeners (Lee 2002), participants reported feeling healthier as a result of eating their own produce. Community gardening was found to be of particular importance to immigrant gardeners as it allowed them to grow vegetables which were traditional to their cultural backgrounds but which were not freely available in local shops. These participants expressed the views that growing these vegetables made them feel closer to their homeland. Armstrong's (2000) participants also valued being able to access fresh produce as did Waliczek et al's (1996) participants who believed that their produce was of a superior quality than shop bought produce. To conclude, in addition to the positive physical health implications associated with community garden involvement, this section also highlights the potential for these types of initiatives to promote cultural diversity and awareness.

Social implications

The next selection of research shows how the positive social connections experienced by community gardening participants can help to nurture and

support a strong sense of community and social capital and also has the potential to fulfil an important function in relation to constructing and bolstering social identity. Share and Duignan's (2005) and Share's (2006) evaluations lend weight to the argument that the community garden is an important place with regards to making social connections. Participants described meeting people and the sense of camaraderie from working with each other in shared gardening activities as one of the best things about their involvement. The studies also found that the community garden was a good place to meet like-minded people from different cultural backgrounds and that gardening activities helped them to get along with others. Learning about cultural influences on gardening and friendship building among various ethnic groups were features of Lee's (2002) study also. These findings are very interesting and suggest that gardening is a good medium within which cultural and language barriers can be negotiated and overcome.

Share's (2006) study also suggests that accessing social opportunities is an important motivating factor when choosing to become involved in a project of this type in the first place. These participants felt a sense of community through their involvement with their project and enjoyed being able to socialise and do things together and for each other. This finding is supported by a study carried out by Teig et al (2009), which explored the levels of collective efficacy amongst community gardeners in Denver, Colorado. The research indicated that strong social ties can be developed within the garden through regular face to face contact and involvement in shared garden related activities. Gardeners described the setting as being a location for growing friendships as well as vegetables and flowers. These friendships are based on mutual trust and responsibility and a sense of duty in relation to the upkeep and maintenance of the garden. Participants spoke repeatedly of established rules and regulations that gardeners were expected to follow as well as patterns of behaviour that were acceptable within the garden. Collective decision making ensured that schedules were worked out to facilitate regular garden tasks such as watering and weeding. Individuals accepted these decisions in exchange for the assurances that everyone would adhere to the same standards.

Gardeners who participated in Hale et al's (2011) study also viewed their dedication as a social agreement based on trust and accountability. Participants reported feeling motivated to ensure the upkeep of their own plots, as failure to do so would reflect badly on the group as a whole. While some of the work expectations are formalised, most are based on interpersonal relationships and trust and this helps to build social cohesion within the group. Interestingly, the study does raise the question of reduced engagement when growth slows down towards the end of the season, though whether this is perceived as problematic is unclear. This study involved 67 participants from 28 urban gardens in Denver, Colorado.

The above examples highlight the importance of fulfilling obligations and meeting responsibilities with regards to promoting friendships and maintaining harmony within the garden. The reciprocal nature of the relationships as identified in these findings also demonstrates how community gardening can be used as a vehicle to promote social capital. While the issue of diminished work and responsibility due to the changing seasons is indeed raised, no recommendations are proposed for the ways in which this might be addressed. It is my opinion that the sense of endeavour and togetherness expressed by participants of previous studies provides justification for exploring ways of extending this social and occupational stimulation throughout dormant season.

Some research suggests that the friendships that have been developed between gardeners have extended beyond the perimeters of gardening tasks and that gardeners can often be relied on to support one another during times of hardship or illness. Participants of Teig et al's (2009) study described feeling a sense of obligation towards not only caring for the garden, but also in relation to ensuring the well-being of their fellow gardeners and that of their neighbourhood. For instance, when one of their members developed cancer, the other gardeners collected him from the hospice and drove him to the garden so that he might experience and absorb the energy of simply being there. The garden also provided a supportive environment to the wife of this member following his death. These findings

support my own existing knowledge and experiences of community gardens as supportive environments and highlight the need to explore ways in which this support might be accessible all year round.

Armstrong's (2000) study can shed further light on the potential for community gardening to extend beyond the realms of gardening activities. The study found that the most commonly expressed reasons for participating were to access fresh food, to enjoy nature and for the health benefits gained from keeping active. In addition to this, the survey found that community gardens also provided opportunities for addressing broader neighbourhood issues such as;

- Park and playground development
- Establishment of a neighbourhood association
- Development of a community babysitting service
- Setting up of neighbourhood watch groups

Participants believed that being involved in their community garden had helped them to get to know their neighbours better resulting in improved community cohesion. This cohesion was particularly useful in relation to community improvement efforts in that people now knew who to call on to initiate these efforts. Interestingly, community gardens in low income neighbourhoods were four times more likely to address other neighbourhood issues than community gardens in more prosperous areas (Armstrong 2000). These findings demonstrate how community gardening can perform a valuable role in relation to social identity. Not only have participants established a niche for themselves within the garden, they have found an important role within the community also.

Other studies have also highlighted the potential that community gardens offer participants in terms of providing opportunities to express altruistic motives. Gardeners view the food they grow as something that is not only for their own consumption but also to be shared with individuals and charities that support those in need. Teig et al's (2009) study describes efforts to identify and address issues of public concern such as donating surplus harvests to groups and individuals who don't have access to fresh produce.

Hale et al also described building bridges within their communities through the sharing of fresh produce. Gardeners either used formal systems for donating to community groups or informal baskets to distribute to friends, family and passers-by (Hale et al 2011).

These studies are useful in that they highlight the potential of community gardens in relation to breaking down barriers between different communities and for addressing social exclusion. These studies have also been a useful source of information to us when developing our own philosophy with regards to interacting with and providing a service to the wider community. Our study aims to add a further layer to this knowledge. The strength of the current study was my unrestricted access to the research site engaged in full time ethnographic immersion, where it was possible to shadow the participants as they went about their duties, thereby enabling me to provide deep insight into the ongoing experiences and practices as they occur. The next selection of literature will examine some of the cognitive inferences associated with community gardening.

Knowledge production and dissemination

This author has previously conducted a study exploring the community gardening experiences of a diverse range of participants at a facility in Co. Cavan, Ireland. The participants included unemployed men and women, and members of the local prison population. Learning was considered an important element of the overall experience both in terms of motivation to become a member initially and also in relation to continued personal development. The study also found that having the capacity to transfer acquired skills and knowledge to newer members was an important outcome for more experienced gardeners (Gaffey 2012). These findings are consistent with other studies including; Share (2006); Lee (2002) and Waliczek et al (1996), all of which identified learning from others and teaching others how to garden as being important aspects of the community gardening experience. Lee (2002) found that learning from others was of particular importance for newer, less experienced gardeners.

Furthermore, in relation to learning, studies have shown that prison inmates who engage in horticulture programmes as part of their rehabilitation have been able to use their learning experiences to examine and challenge previous life choices (Rice et al 1998 & Flagler 1995). Providing inmates with a section of ground to cultivate and a selection of seeds to choose from encourages inmates to express individual differences and take ownership of their plot. Important life issues can be addressed in this way. The soil is tilled, cultivated and the seeds planted. Despite the considerable investment, plants do not emerge straight away and when they do they must be carefully nurtured or they will die. Inmates who eventually harvest the fruits of their labour often reported experiencing feelings of pride and improved self-esteem. Key learning objectives in this process include setting goals and understanding the value of perseverance and delayed gratification. The authors argue that the significance of this learning is best understood in the context of the inadequate parenting that inmates may have received. Inmates who have not learned as children that growth takes time, perseverance and the ability to adjust one's goals are more likely to be impulsive as adults. Appreciating the value of delayed gratification through horticulture activities can help inmates to take control of this area of their lives (Rice et al 1998).

In addition to this, Rutgers University-Cook College in coalition with the New Jersey Department of corrections has helped to develop and deliver a horticulture training programme for youth offenders (Flagler 1995). A key objective of the course was to provide learning experience in relation to work ethic, responsibility, social skills, problem solving and decision making as these skills were considered important for future employment. Other objectives included to provide physical activity in the form of meaningful work and to provide quality food for themselves and their fellow inmates. On completion, participants were awarded with a certificate of achievement. Participants also completed questionnaires to assess the value of the course. The results suggested that the course had a positive influence on participants in the following ways;

- For 85% of participants it was the first time they had entered a college classroom and the same 85% reported an interest in going to college in the future
- 80% reported that the course provided them with ideas for future employment
- 87% believed that they could improve the quality of their lives through the job skills and experience they acquired, the contacts they made and ideas about future employment (Flagler 1995 p187)

These prison research articles highlight the ways in which horticulture activities can be used to promote rehabilitation of prison inmates, but perhaps an argument can be made that horticultural could be a useful tool with regards to teaching responsibility and delayed gratification for other groups and individuals also, particularly those with concentration or behavioural issues. When scrutinised as a whole, all of the above articles highlight the importance of learning and skills development within the community garden in relation to personal growth and development. However, as with many of the research sources in this chapter, there is an absence of ethnographically rich insight regarding the social processes and emotions involved in achieving these outcomes.

If we apply Maslow's *Hierarchy of Needs* theory (Maslow 1943), the cumulative effects of the physical, social and learning experiences of community gardeners as identified in the previous sections should help to pave the way for fulfilling quality of life needs on the higher levels of esteem and self-actualization. Broadly speaking, the previous research suggests that amongst other implications, participants felt welcome within the garden where they were among friends. Participation gave them a sense not only of belonging to the garden, but also to the wider community. They learned to produce their own food and found opportunities to teach others how to do likewise. Aesthetically, these types of gardens were viewed as positive developments within communities and participants developed a strong sense of responsibility not only towards the development and maintenance of the garden, but also towards the development of resources and services within

the wider community. If Maslow is right then, an improved sense of esteem and self-actualization should emerge through the culmination of all of the above implications.

The findings of a survey carried out by Walizcek et al (1996) shows how this might occur. The structure of the survey enabled the researchers to rank the importance of community gardening in relation to each need. The results found that gardening could play a part in fulfilling all of Maslow's needs including the higher levels of esteem and self-actualization. This is shown in the following statements;

- 'I can produce my own food' (p206)
- 'I can create something of beauty' (P206)
- 'Gardening makes me feel good about my own abilities' (P206)
- 'My food tastes better than store bought food' (P206)
- 'I can teach my children how to garden' (P206)
- 'I enjoy helping others to garden' (P206)
- 'My gardening experience helps others' (P206)
- 'I care for my garden and my community' (P206)

The next section will examine assertions from previous studies that gardening and interacting with nature can positively impact mental health.

Mental health and stress relief

There is a growing body of research which suggests that interacting with the natural environment can help to promote relaxation and alleviate stress. Within a community gardening context, Share's (2006) participants expressed the view that modern living could be stressful and that gardening was a useful way of switching off and relaxing. These views are supported by a number of other studies including, Hale et al (2011); Teig et al (2009) and by Lee's (2002) participants who expressly stated that gardening activities helped them to relieve stress. Other researchers have taken the implications of interacting with nature a step further by suggesting that simply looking at nature can bring positive health outcomes. In one Swedish study exploring the health benefits of gardens in hospitals (Ulrich 2002), hospital patients

with a natural environment window view had shorter stays in hospital and reported fewer post-surgical complications than hospital patients who had a non-natural environment window view. Hospital staff evaluation showed that nature view patients were more likely to be in good spirits than the other patients who were more likely to be upset and need encouragement. However, the non-natural view used in the study was a large featureless brick wall which could be considered monotonous. The researcher acknowledges this in his conclusions by suggesting that for some patients who are chronically under stimulated, a built up view such as a lively street might be more therapeutic than many natural views.

Leading UK mental health charity MIND conducted a study into the role the environment plays on the effectiveness of exercise in relation to mental well-being. Members of local MIND groups took part in walks in two contrasting environments to test the impact on mood, self-esteem and enjoyment. One of the walks was through a varied landscape of woodland, grassland and lakes while the other walk was around an indoor shopping centre. Outdoor walk participants reported improvements to self-esteem (90%), depression (71%) and tension levels (71%). Alarmingly, 44% of indoor walk participants felt that their self-esteem had deteriorated while 50% felt that feelings of tension had increased and 22% said that depression got worse (MIND 2007 p3).

Researchers at the University of Illinois also carried out a series of studies exploring how people are affected by green areas in their environment. One of these studies involving 98 identical apartment buildings found that those with trees nearby felt safer and suffered 52% fewer crimes than the residents with no trees nearby (Kuo & Sullivan 2001 p14). Some of the other findings from the range of studies carried out by the university also indicate that trees and green spaces can help to draw people out of their homes and in this way relationships are formed and a sense of community develops. This extra access to adults was deemed important to cognitive and social development (Prow 1999). These studies suggest that community gardens in urban environments might have more therapeutic value if landscaping features such as trees and water features are incorporated into the design. In relation

to our own study, this type of research influenced our decision to plant a small woodland at the research facility and also, to include a landscaped, outdoor kitchen/communal area in our design.

To conclude, chapter 3 examines the scope of research exploring the implications of community gardening participation. The diversity of the literature highlights the ways in which gardening and other interaction with nature activities can influence well-being on a physical, social and psychological level. The review found that the initial motivations for becoming involved in these types of initiatives often revolve around learning how to grow vegetables and having access to fresh, healthy food. Some participants reported feeling healthier as a result of having a more varied diet and by engaging in regular exercise associated with physical gardening tasks. Much of the available research suggests that the social processes involved in caring for these types of spaces such as working together and sharing responsibility have the capacity to promote lasting friendships that often extend beyond the garden. Some participants believed that being involved in their local community garden had helped them to get to know their neighbours better resulting in improved community cohesion. The final section of this chapter highlights research which suggests that engaging in horticultural activities and embracing the natural environment can help to promote relaxation and alleviate stress. When taken as a whole, the research shows how the combined experiences of community gardening can play an important part in relation to the development of social identity and the promotion of social capital.

None of the above literature addresses the issue of dormant season engagement. Hale et al (2011) acknowledge a falling off of work commitments and responsibilities towards the end of the growing season but do not say whether this is a problem or not. However, it cannot be assumed that just because previous research has not identified diminished work and responsibilities as problematic that there is not a problem. Given the range of positive physical, social and psychological implications identified in the selected research, often among potentially vulnerable and marginalised

participants, surely it makes sense to try to provide access to these outcomes all year round. Certainly, as previously outlined in the introduction chapter, the participants of my study were filled with dread at the prospect of the garden closing for the dormant season months, and most enthusiastic about exploring ways which would prevent this from happening.

The selected research provides a valuable insight into the implications of community gardening on quality of life issues. However, far from being the definitive word on community gardening, the above studies should be viewed only as a step towards furthering our understanding of the physical, social and psychological processes involved. While it is acknowledged that the studies highlighted are broadly in agreement regarding the outcomes of participation, surely community gardening is ripe for a different approach, one which can expose the dynamics of community gardening and access the very core of the social processes involved from the phenomenological or lived perspective.

Chapter 4: Working with the hands

Introduction

As part of our efforts to stimulate dormant season engagement for our participants, we organised a range of traditional craft workshops such as willow sculpting, slate work, fruit tree grafting, soft fruit propagation and seasonal craftwork such as nativity wreath and log making. A substantial orchard and a willow craft plantation were incorporated into our community garden to facilitate these activities. The final chapter of the literature review explores the well-being implications of working with the hands in a creative, meaningful and productive way. Ideas relating to social identity formation, shaping culture and history, and connecting with others through shared knowledge and wisdom are explored here. Chapter 4 also makes connections between skilled manual competence and increased employment opportunities. This chapter conveys the important role that dormant season horticultural craftwork activities can potentially fulfil within the community garden at this traditionally less busy time of year.

Practical Considerations

In his book, *Shop Class as Soul Craft: An inquiry into the value of work* (Crawford 2006), the author laments the decline of practical skills classes such as carpentry and engineering within educational institutions in the United States in favour of preparing students to become knowledge workers in a hi-tech, global future. Crawford acknowledges that American futurism is nothing new but he draws attention to the marriage of futurism to virtualism which amounts to, in his own words;

> 'a vision of the future in which we somehow take leave of material reality and glide about in a pure information economy' (p3).

The irony of this new approach according to the author is that knowledge based work can be easily outsourced to countries with a cheaper workforce while it is often much more logical to source craft and trade workers locally. Crawford argues that in addition to the difficulties associated with outsourcing these types of work, they also provide crafts people with a valuable place within society. This argument highlights the crucial role that craftwork and

working with the hands can play not only in providing future employment but also in relation to shaping identity. Indeed, my own research findings located in Chapter 6 will identify employment and volunteering opportunities that became available to participants as a direct consequence of their gardening and craftwork activities.

Crawford refers to the ability to fix or produce something physically tangible and useful as 'skilled manual competence' (p4). He believes that the aforementioned decline in skilled manual competence is strongly linked to more modern work methods whereby the planning and execution of work have become increasingly separated. This is a concept previously explored by Braverman (1974). This author makes a distinction between the division of labour in earlier societies and the division of labour in modern capitalist societies and argues that it is not the division of labour that is the problem but the breakdown of skills and occupations. The argument put forward is that in earlier societies labour might be divided into crafts which could be determined by a person's gender or by their competence at certain jobs. For example, in some societies men might specialise in woodcarving or ironworking, while women might be more likely to specialise in weaving or pottery. Even within the various crafts, there might be further specialisation, such as where one woman makes pots for everyday use while another specialises in pots for religious ceremonies. However, there is no division of tasks within the various crafts as might be the case in a post industrial revolution society whereby one person might gather or supply the clay, another shapes the pot while a third fires the kiln (Herskovits cited in Braverman 1974 p50).

Braverman argues that capitalist employers actively set about destroying the traditional concept of skill in order to maximise profits and increase control over the workforce. By dismantling the different elements of a skilled occupation the cost of labour becomes cheaper and the knowledge and planning needed to complete a job from start to finish are transferred to management with workers only delegated responsibility for performing routine or deskilled tasks. The author uses an example from the meatpacking

industry to highlight his point. In this instance the butchery of a carcass is performed on an assembly line by as many as thirty workers on up to twenty different rates of pay determined by their specialised task. According to Braverman, 'the labour power capable of performing the process may be purchased more cheaply as dissociated elements than as a capacity integrated in a single worker' (Braverman p57). Braverman referred to this process as the degradation of work as it deprived previously skilled workers of both their skills and their self-respect. Crawford shares very similar views to those held by Braverman and he refers to this dichotomy of mental from manual as 'the separation of thinking from doing' (Crawford 2006 p37).

Sociologist Richard Sennett has also written extensively on the role of craft workers in society and bemoans the fact that the dismantling of traditional craft skills has led to a situation whereby pride in ones work is now deemed a luxury rather than an obligation. Sennett argues that the human capabilities to shape physical things are the same capabilities needed to operate successfully in social situations. According to Sennett (2008),

> 'Both the difficulties and the possibilities of making things well apply to making human relationships. Material challenges like working with resistance or managing ambiguity are instructive in understanding the resistances people harbour to one another or the uncertain boundaries between people' (p289)

A report commissioned by the Ruskin Mill Education Trust who are responsible for the education of young adults with learning difficulties in the United Kingdom, shares some of Sennett's concerns about the decline of practical skills and the impact this might have on the social self. The findings of the report suggest that a curriculum rich in the use of craft materials, creativity, experimentation and design, is linked to the production of a more socially viable and employable young adult (Sigman 2008). The author argues that a craft based curriculum helps to nurture the right balance of cognitive and physical experiences necessary for full intellectual development. The author describes how the use of hand tools involves 'complex, real world behaviour' (p4) requiring elements of hand use such as movement velocity, direction and co-ordination which use and strengthen 'widely distributed, yet highly interactive, [brain cell] networks'(p4). The

author believes that the shift in education policy, which reduces the role of working with the hands, is particularly perplexing at a time when the neuro-cognitive effects of craft and handwork are now being used clinically to improve cognitive functioning (Sigman 2008). Sigman argues that the shift in education policy is responsible for the creation of a 'software instead of screwdriver society' (p3).

Craftwork as 'therapy'

Crawford, a senior fellow at the University of Virginia who doubles as a custom motorcycle mechanic argues that in addition to the practical considerations, the outcomes of being productive, working with one's hands and fixing or making things can also be very fulfilling, requiring the use of both physical and cognitive skills (Crawford 2006). This message is echoed by Walizcek et al's (1996) sample who achieved a sense of fulfilment from having the skills necessary to produce their own food and to create something of beauty. Share's (2006) study participants also expressed feeling satisfied in the knowledge that they were responsible for producing something that was worthwhile, meaningful and tangible.

Csiksentmihali (1990) refers to this sense of fulfilment and exhilaration associated with working productively in a creative way as optimal experience. He theorised that people are at their happiest when they are in a state of 'flow' which he describes as complete immersion and concentration in the task at hand. A state of flow is most likely to be reached when the mind or body is stretched to its limits to achieve something difficult or worthwhile. Being 'in the zone', or 'in the groove' are perhaps more recognisable ways of describing the mental state that is 'flow'. Csiksentmihali suggests that tasks which involve clear goals, flexible challenges and immediate feedback are particularly conducive to the facilitation of flow, all of which makes this theory particularly relevant to our own gardening and craftwork activities.

Knitting is one such craft activity that is regarded as both process and product orientated. In a study exploring the links between knitting and well-being (Corkhill et al 2014), the authors argue that the manual dexterity associated with knitting, when combined with opportunities for creative

expression and technical complexity, provides ideal conditions for the production of the aforementioned optimal experience. This online survey involved over 3500 knitters from 31 countries. The process of knitting was described by respondents as soothing and restful, and repetitive actions deemed to be hypnotic and calming. The survey also found that knitting is being used to manage traumatic experiences such as pain, anxiety, depression and addiction. For instance, of those respondents who suffered from depression, 81% perceived that knitting made them feel happier, with 54% claiming to feel happy or very happy after knitting (Corkhill et al 2014 p37). The survey also identified a relationship between knitting regularly and perceived improvements to cognitive ability, particularly in relation to arranging thoughts, forgetting problems, memory and concentration. Those respondents who were members of a knitting group also identified making new friends and reported improved social confidence and feelings of belonging as a result of their activities. This study highlights the positive implications of craftwork, working with the hands, and working as part of a group in a creative capacity. This research was deemed to be particularly relevant to our study, as the activity of knitting, bears many similarities to willow weaving and sculpting, activities which were crucial to our own efforts to stimulate dormant season engagement at the garden.

Craftwork within a 'community' context

In his book evaluating the social meaning of creativity, Gauntlett (2011) discusses the value of everyday creativity from handmade physical objects to online creativity. Although this is a very large a piece of work, the full extent of which cannot be explored in great detail here, it is worth highlighting some of the author's key points. Gauntlett asserts that making things, however trivial they may seem at the time, allows the maker to demonstrate that they are powerful creative agents who can do things that others can see, learn from and enjoy. By transforming material into something new, the maker is also transforming one's sense of self. The author argues that 'creativity is a gift, not in the sense of it being a talent, but in the sense that it is a way of sharing meaningful things, ideas or wisdom, which forms bridges between people and communities' (p245). This book was included as it highlights the

importance of nurturing creativity particularly as a means of promoting identity formation. Gauntlett's work also draws attention to the value of craftwork within a community development context. This idea is explored further below.

A study was undertaken by the Crafts Council U.K which explored the economic and social contribution of craft makers (Schwarz & Yair 2010). Researchers found that providing craft materials, knowledge and facilitation skills to those within the community setting could enable participants to experience for themselves the creative and social benefits of participation in craftwork. The study found that craft makers could bring significant value to community settings by providing a supportive, empathetic approach that enables learning and development in participants with the following key social impacts; sense of achievement and ownership, development of employability, development of focus and concentration, experience of enjoyment, social inclusion and development of confidence and self-esteem. This study highlights the potential value regarding the introduction of craft activities to community based settings. Many of the findings expressed here, particularly those related to sense of achievement, skills development and social inclusion were anticipated outcomes of the craftwork sessions at our research project also.

An Australian study carried out by Maidment & Macfarlane (2011) highlights the valuable role that group craftwork can play not only in relation to fostering well-being, but also in helping to build social capital. Participants of this study were made up of older women belonging to two different craft groups. Their activities revolved around making items of craftwork such as, patchwork quilts and trauma teddies which were then used to raise funds for local causes. Participants used their skills and knowledge to teach others how to craft and this was considered to be of particular importance as it helped to not only sharpen up the skills of the teacher, but also promoted a sense of self-efficacy. Mutual sharing of resources such as, recipes, knitting/sewing patterns, specialist equipment, car pooling and hospitality in the form of traditional home baked food were found to play an important role in the coming together as a group.

According to this study, group craftwork activities provided an outlet to access friendship and support and this was considered vital with regards to healthy aging. These findings show how craftwork can be used to challenge stereotypical thinking about older people as isolated, dependent and unproductive. The notion of participation was of particular relevance to participants who felt they had outlived their roles as mothers and grandmothers (Maidment & Macfarlane 2011). This study was chosen for inclusion as the participants under study share many characteristics with my own study group. Though not exclusively made up of older people, many of my study participants also shared a common sense of loneliness, isolation and futility prior to joining the community garden. This study demonstrates how craftwork activities can be used to address these issues throughout the dormant season when gardening tasks are no longer viable.

In conclusion, chapter 4 concerns itself with literature exploring the implications of working manually in a creative capacity to produce something of value. Researchers bemoan the fact that skilled manual competence is in decline in schools and industries as western societies pursue a more knowledge based economy. The tragedy of this, according to the contributors, is that this type of work can often be easily outsourced to the lowest bidder while manual craft and trade work must often be sourced locally. The research also highlights the division of labour in modern societies, whereby previously skilled manual jobs once carried out by professionals, are now broken up into a series of smaller jobs which can be carried out by operatives rather than tradespeople. This is referred to as the degradation of work and a major consequence of this is that it renders employees more expendable. The literature also draws attention to the sense of enjoyment and fulfilment associated with craftwork and manual competence as well as underlining the value of this type of work in relation to the construction of social identity. Craftwork can also fulfil an important function in relation to shaping history and culture through the sharing of knowledge, ideas and wisdom. Finally, and crucial to this particular thesis, chapter 4 emphasises the importance of craftwork activities and initiatives

within the community based setting as a means of promoting inclusion and building social capital.

Chapter 5: Methodology

Introduction

This chapter outlines the systematic processes which were implemented as a means of stimulating, accessing, collecting and interpreting data. As mentioned previously, the short growing season can limit the potential for these types of initiatives to provide year round engagement for participants, thus potentially reducing the therapeutic effectiveness of these spaces. The outdoor growing season typically lasts from March to November while the period from November to March is known as the dormant season when less light and lower temperatures slows or stops growth altogether. As a consequence of this, opportunities to carry out normal gardening activities such as sowing, transplanting, watering and weeding become diminished and this begs the question, how are the participants of community gardens stimulated during the long dormant season? This is an important issue which has not been addressed by any of the previous studies conducted in this area. In consultation with the participants at the research facility, I initiated a process of developing new garden features and activities which would provide physical and mental stimulation to its members all year round. This chapter will provide an overview of the background and implementation of the development of the research setting and details of its new features and activities.

Once the development stage was completed, a phenomenological research strategy was developed which allowed me to gain access to, and demystify the 'lived experience' of community gardening. This strategy required my full involvement in the day to day activities at the garden over a long period of time and effectively becoming a community gardener. Chapter 5 will provide an outline of this journey regarding the methodological framework, sample selection, data collection and analysis that were used to carry out this research. In relation to the sample, the reader will be introduced to each of the participants and their motivations for becoming involved with the project. Furthermore, the ethical issues that have been considered prior to and during the course of this research will also be identified within this text.

Research Setting

The setting for this research is a community garden project within a town in the North West of Ireland with a population of just under 1000 people. The project is under the management of the local Family Support Centre which is located in the nearby community centre. As previously mentioned, the aims of the project are to promote social inclusion, health and wellbeing through horticulture activities. The participants at the project include a diverse range of local men and women, some of whom might consider themselves to be socially disadvantaged.

This setting was an ideal location to carry out this research for a number of reasons. As discussed previously, the management and participants at the research project were extremely concerned about the prospect of having to close the garden for the winter months due to a perceived lack of work and were eager to explore potential solutions. The garden is located on a 1.5 acre field which is managed by the local pastoral council. Prior to my involvement in the project, just ¼ acre of this land was being used for gardening activities with the other 1¼ acres cut back for hay once a year by a local farmer. Upon further enquiry, it was established that the rest of the field might be made available to the community garden group and I was invited to submit a proposal outlining a plan for the future development of the field. I began to consider a range of different activities which I felt might have the potential to engage participants during the winter months. Some of the activities considered included fruit tree grafting, willow weaving and soft fruit and herb propagation. It was at this stage that I first began to identify with the research potential that these new activities might bring. I envisaged that a large orchard, willow plantation, and soft fruit and herb area would dominate the top end of the field and these would provide future access to willow weaving, grafting and propagation materials. An outdoor cooking and seating area would be included and these would provide a social focus. At the bottom end of the field there would be a small woodland with paths and shaded seating areas.

On 25 July 2013 I presented my plans for the new look garden and proposed activities to the board of the Family Support Centre and members of the pastoral council.

Figure 1: Sketch of proposed garden design

I also outlined my intentions to research the ways in which the participants experienced these new and existing activities. I pointed out to those in attendance, that while it would be possible to conduct and research some of these activities without developing the site, by importing willow rods, herb, soft fruit and fruit tree cuttings, it was my intention to show that these types of gardens could become self-sufficient with regards to access to these materials. This approach also made much practical sense from the point of view that many of the tasks associated with maintaining these spaces such as harvesting willow, pruning and feeding fruit trees and soft fruit bushes are best carried out in the winter months while plants are dormant and participants less busy. I further speculated that by proceeding in this fashion I would not only be developing a range of activities to engage participants during the winter months but would also be developing a new template of community gardening, one that would be easily transferable to other social horticulture settings. In concluding my presentation, I suggested that the improved aesthetics achieved by developing the field would not only serve to

enhance the community garden experience for participants but would also have a very positive visual impact on the local landscape. The proposals were very well received by those assembled with the pastoral council granting us permission to develop the field and the family support centre pledging the financial assistance needed to make this happen.

Development of the research facility

The first stage of physical development work began in October 2013 and involved extending the vegetable growing space. Prior to this, the participants only had access to indoor growing space in the form of a large polytunnel. The inclusion of outdoor vegetable beds would ensure that the overall gardening experience would be enhanced resulting in a richer narrative concerning growing season activities. The new beds would provide the group with fresh, previously unexperienced challenges such as gardening in inclement weather, coping with difficult ground/soil conditions and exploring solutions for bird/pest control. The beds, 16 in total were constructed from used scaffold boards and were then filled with soil which was imported from a nearby building site. The soil was then enriched with cattle manure which was purchased from a local farmer.

Figure 2: Outdoor growing area

Eight decorative herb beds made from reclaimed stone were then added to the bottom of the vegetable beds. These were also filled with topsoil and

manure before being planted with a diverse selection of culinary and medicinal herbs. Over the course of this research, cuttings and root sections were taken from these plants and used in herb propagation workshops. Some of these newly propagated plants were later sold to raise money for the garden. The remainder found their way into the gardens of the participants and their families. The vegetable beds and herb patch formed the main centrepiece of the garden. This part of the development was completed prior to the Christmas holidays 2013.

Figure 3: Main centrepiece in full bloom

In January 2014 we began the process of 'framing' the main centrepiece with the other areas as identified in the plan. At the top end of the vegetable beds a comprehensive orchard was planted. This orchard comprised 10 different cooking and eating apple varieties, 4 plum, 3 pear and 3 cherry varieties. The varieties were all chosen for their suitability to local soil and climatic conditions. In addition to the grafting activities previously discussed, this orchard was also used as a platform to educate participants regarding orchard management. Pruning, mulching and feeding the orchard proved to be popular winter based activities during the course of this project.

Two homemade benches and a cooking area were situated between the orchard and the vegetable beds to provide a social focal point. During fine weather, the open fire is used to boil a kettle for tea and also to cook an occasional fry-up. This is a favourite meeting place for the group as in addition to the seating, this spot offers panoramic views of all the different areas and features of the garden.

Figure 4: Orchard and outdoor cooking area

A soft fruit plantation was sited to the left of the vegetable beds. A large selection of currant and berry varieties and cultivars were planted including, red, white and blackcurrants, gooseberries, goji berries, raspberries, blueberries, aronia and amelanchier. Again, the thinking behind having such a well-stocked soft fruit area was not just to have access to a wider range of fruit, but also to increase the range of varieties which could be propagated. A wild fruit hedge was then planted at the back of the soft fruit area. This consisted of a mixture of crab apple, hazel, wild cherry, damson, sea buckthorn, blackthorn and elder. It was envisaged that upon maturity, the fruits of this hedge might be used for jam, jelly or wine making activities, perhaps in the form of cookery demonstrations/classes in association with the Family Support Centre.

Figure 5: Newly planted soft fruit area

At the opposite side of the vegetable beds is a small conifer plantation. These will be harvested as Christmas trees when ready. A fully restored horse drawn hay rake nestles beside the conifer plantation and provides another strong visual focal point. The complete restoration process was undertaken by the participants as part of dormant season activities.

Figure 6: Restored hay rake

At the bottom of the herb patch is a small nut orchard comprising six different varieties of domestic hazelnuts. To the left of the nut orchard is a willow plantation. The willow plantation was planted using locally sourced willow.

The willow crop was later harvested and used for a number of different craftwork activities including wreath making and living willow sculpting.

Figure 7: Living willow structure

Towards the bottom of the site we planted a small woodland made up of a number of native species including, alder, birch and hazel. It is hoped that as well as being an area of amenity and wildlife value, these trees will also provide future access to firewood and craftwork materials. A path runs the full length of the woodland, travelling from one side to the other and accessed and exited through two living willow arbours. Two benches have been strategically placed along this path to create quiet areas of meditation away from the hustle and bustle of the other work areas. It is acknowledged however that given the length of time it takes for woodland to mature, that the full practical and therapeutic value of the woodland was not realized during the lifetime of this research project. Other areas and features of the garden not specified in the original plans include a strawberry bed, a rhubarb patch and a fruit propagation area.

Figure 8: Sanding a homemade bench

The development work was completed in April 2014 and the garden was officially opened on 31 July 2014. All the physical labour was carried out by members of the gardening group under my supervision. It should be pointed out however, that although I kept a record of the development of the garden, no data was obtained concerning the participants experiences of this development work prior to February 2014 as I was waiting for authorisation to proceed with my M.A. until this time. The completion of the development of the research setting paved the way for me to begin the first stage of my field research which was to explore the lived experiences of community gardeners during the growing season. This next section will seek to examine the concept of phenomenology and explain why this was the methodological approach used to carry out this research.

Research framework

Explaining phenomenology

The word 'phenomenology' can mean both a philosophical attitude and a research approach (Flood 2010). At its core is a desire to understand and describe how a person's world or a 'phenomenon' is lived or experienced from their own point of view (Finlay 2011 & Robson 2004). A phenomenon or phenomena can be taken as the events, objects, situations, processes and circumstances that make up a person's lived world. Within a research perspective, Finlay (2011) describes phenomena as 'the specific qualities of the lived world being investigated' (p3). These phenomena or lived experiences have also been described as, 'those experiences that reveal the immediate, pre-reflective consciousness one has regarding events in which one has participated' (Kleimen 2004, p10). Lester (1999 p1) contends that the phenomenological approach presents an opportunity to 'identify phenomena through how they are perceived by the actors in a situation'. Phenomenology as a research approach therefore, seeks to expose the lived experience of a phenomenon.

The variety of phenomena which is open to research can range from very specific to very broad. Finlay (2011) suggests that, 'experiencing the rush of doing a bungee jump' (p16) would constitute very specific while 'the experience of first love' (p16) would be a very broad study. In terms of relevance to this particular field of research, 'specific' might be a piece of work ascertaining a community gardener's immediate reaction to the emergence of the first green shoots of spring. At the other end of the spectrum, research such as ours, which explores the lived experiences of community gardeners over a long period of time, would constitute a very broad study of phenomena. There are important reasons why it makes sense to explore this area over a longer timeframe. Amongst these is the scope it provides for me to become fully immersed in the various social and physical processes that make up the community garden experience and thus, better qualified to interpret data as a result. Equally important, this longer timeframe provides an opportunity to explore the rhythm of the seasons and all that this

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entails such as increases and decreases in workload, experience of weather, poor ground conditions and the ever changing aesthetics within the garden. An exploration of the seasonality of the experiences will fulfil an objective that no other inquiry into community gardening has managed to date.

Theoretical perspectives

The two main philosophical positions which underpin phenomenology are *descriptive* (Husserlian) and *interpretative* (Hermeneutics) (Price 2003, Flood 2010 & Connelly 2010). Descriptive or Husserlian phenomenology was developed by Edmund Husserl who believed that researchers needed to put their own views, perceptions and past experiences to one side if they wished to accurately grasp *only* the research participant's account of phenomena (Price 2003). This process involved the researcher first acknowledging their own assumptions about a particular phenomenon and then consciously trying to stop these assumptions from influencing the manner in which data is obtained and interpreted (Price 2003). Husserl referred to this shedding of knowledge as 'bracketing' and argued that only bracketing would prevent the researcher's biases and preconceptions from clouding the study and facilitate accessing the participant's subjective perspective (Priest 2004 & Flood 2010).

Hermeneutics or Interpretive Heideggarian Phenomenology was developed by Martin Heidegger, a student of Husserl who built on and modified his work (Connelly 2010). Heidegger was critical of the concept of bracketing, and asserted that researchers were part of the social world and therefore it was impossible for them to rid themselves of previous experiences, prejudgements and prejudices (Price 2003). He argued that rather than suspending and eliminating these background understandings and prior knowledge of our social world, this baggage in fact constituted expert knowledge which should be embraced in order to properly interpret the experiences of the participants (Priest 2004, Flood 2010, Price 2003 & Connelly 2010). Interpretative phenomenology seeks to attach meaning and significance to the descriptions of phenomena which have been put forward by participants. As with auto-ethnographic research, this approach assumes

that by engaging with or becoming absorbed in the phenomenon or situation under study, and by reflecting on prior knowledge, experiences and expert understanding, the researcher will then be better positioned to interpret these descriptions. The researcher then uses these interpretations to narrate a story which illuminates the phenomenon under question and the unique meanings and experiences associated with it (Kleiman 2004 & Flood 2010). This approach differs from Husserlian phenomenology where the emphasis is on describing a mirror image of the experience from the subject's point of view only (Wall et al 2004).

Participant Selection

According to Laverty (2003), participants of phenomenological research studies are often selected based on different criteria than that which is used to satisfy statistical requirements. It is not necessary to ensure that the chosen participants are representative of the broader population because as Price (2003) asserts, 'phenomenologists understand the value of research not in terms of reliability or validity, but in terms of authenticity' (Price 2003). While participants might not be representative of the wider population, greater diversity in the makeup of the participants will improve the chances of collecting rich and unique description of a particular phenomenon (Laverty 2003 p18). The focus therefore is on finding diverse participants who have lived experience of the phenomenon under study and are willing to talk about these experiences. Other commentators argue that this is easier said than done and suggest that researchers must select participants who are genuine co-researchers willing to challenge and be challenged about their own assumptions, understandings and prejudices (Crotty 1996). The number of participants necessary to carry out a phenomenological research study will vary depending on the type of study but will normally range from one person, up to a maximum of about 10 (Kleimen 2004). Data collection continues until such time that the researcher is satisfied that a fuller understanding of the experience will not be gleaned through further engagement with participants (Laverty 2003).

Positionality

I have chosen to adopt a hermeneutic or interpretive Heideggarian framework to carry out this study. In contrast with descriptive or Husserlian phenomenology which attempts to bracket or suspend any prior knowledge or understanding, the hermeneutic approach provides sufficient scope for me to reflect on my own expert understanding of the community garden experience. My rationale for adopting this position was that I was strongly of the view that drawing from and reflecting on my own previous experiences to interpret data, would facilitate the production of a rich, evocative dialogue which would only serve to enhance rather than limit our understanding of the community gardening experience as is suggested by the Husserlian school of thought. This self-reflective approach mirrors auto-ethnographic methods used in anthropological studies.

I have prior experience with regards to conducting research in this field. As part of Level 8 degree B.A. (Hons) in Social Care Practice in 2012/2013 I completed an undergraduate dissertation entitled, *An Exploration of the Experiences of Community Gardening Participants*. The primary research for this study was carried out at a community garden in Co. Cavan and involved participant observation techniques to record the horticulture experiences of community gardeners. The participants of this study were made up of members of the local woman's and men's groups and also with members of the Loughan House prison population. At the time, I was both a novice community gardener and also relatively inexperienced with regards to conducting and interpreting field research. Since this time I have accumulated a wealth of experience and expert knowledge within the field of community gardening facilitation and research. With the benefit of hindsight, I am in no doubt that a much richer and more authentic account could have been gleaned from the participants of this earlier study had I, at that time, been in possession of an expert and intimate personal knowledge of community gardening.

Data generation and collection

The purpose of data collection is to illuminate the phenomenon under question and the unique meanings and experiences associated with it (Kleiman 2004 & Flood 2010). Whether data is gathered using focus groups, observations or one to one interviews (ethnography) is perhaps less important than the ways in which participants are cajoled, probed and encouraged to ensure that implicit meaning emerges (Flood 2010). Participants should be treated as genuine co-researchers (Crotty 1996) and data which is generated concerning the meaning of the phenomenon must emerge as a result of co-creation between the researcher and the researched (Flood 2010). This approach typically involves a process whereby the researcher not only listens carefully to the descriptions put forward by the participants but may also seek clarification and request further descriptions and examples (Flood 2010) and, where necessary, even challenge their own understanding of the experience under study (Crotty 1996). McNamara, building on Crotty's work, suggests that a line of questioning is pursued which it is hoped will 'lead co-researchers into the clearings where the essence of the phenomenon may suddenly be illuminated for them' (McNamara 2005 p701). In addition to encouraging the participants to be reflective co-researchers, this researcher, in keeping with the hermeneutic and auto-ethnographic approaches, will give considerable thought to his own prior knowledge and experience in order to further enrich the process of data generation and collection. It is also worth bearing in mind that the roles of the researcher and the participants are interchangeable. In this regard, I have been completely immersed in the day to day activities at the research facility over a long period of time and am as much a co-participant as the participants are co-researchers. This immersion was deemed necessary in order to glean an insider perspective on the community gardening experience

Selection process

When discussing the participant selection process it should be pointed out that some of those selected are more articulate and expressive than others. This goes against the view of McNamara (2005) who argues that

phenomenological research participants should be selected based on their ability to become genuine co-researchers willing to challenge and be challenged about their understanding of their experiences. However, I made a decision, in consultation with my supervisor that all existing and new members of the group would be invited to participate regardless of their communication skills. The only stipulation was that members were committed to the research process and were also committed, regular attenders at the garden. This decision was taken on the grounds that all of the lived experiences represent meaningful knowledge and that my own knowledge of the research area and my intimate relationship with the participants would facilitate a sound interpretation of these lived experiences however ineptly they may have been articulated originally.

Diversity of participants

There was a very broad spread of age groups among the participants who also hailed from a diverse enough range of backgrounds to be considered broadly representative of the social care community. While this diversity of participants occurred more by luck than design, it had the effect of positively enhancing the overall experience for participants and helped to facilitate the unveiling of a richer, more expansive dialogue in relation to the community garden experience.

Participant profile

Though not explicitly stated within the aims and objectives of the garden, there is an understanding amongst all stake holders that the garden is first and foremost a social care initiative. The types of clients that the garden seeks to attract include socially isolated men and women, older people, retired or unemployed people, those with low level intellectual learning disabilities, physical disabilities and/or mental health problems. In total, there were seven study participants, all of whom fall into one or more of the above categories. The participants all had different levels of gardening knowledge and ability. All of the participants were either in receipt of an old age pension, unemployment benefit or a disability payment. All of the names have been changed to protect the identity of participants.

Paul is a married father of six in his early seventies and was the oldest member of the group. He is a former sawmill worker who joined the group when he found himself with little to do to occupy his time following his retirement. Paul was an extremely committed member of the group and a talented gardener and craftsman. Paul was usually left in charge to supervise gardening activities if the regular facilitator was not present.

Paddy is in his fifties and was the longest serving member of the group. Paddy is a single man living locally in assisted living accommodation and he became aware of the garden through his association with the local Family Support Centre. Paddy is a heavy smoker and often struggles with even minor tasks due to low energy levels. Some days he was not in the humour for work but still called in as he enjoyed having a cup of tea and a chat with the other group members.

Dolores is a separated mother of six in her late sixties and was a very popular member of the group. Dolores was an experienced gardener and joined the group for its social value and also to keep active. Dolores was always very thoughtful with regards to ensuring that some of the more socially disadvantaged members were included in the day to day activities at the garden.

Sue is a separated mother of one in her fifties and had some previous knowledge of gardening. Sue lives alone and often reported feeling fed up, anxious and depressed if she spent too much time indoors. The garden was very important to Sue as it was her main source of social contact and community participation. Sue was an important participant of this study as she was very expressive in relation to her experiences of community gardening.

Shane is an unemployed man in his forties who lives alone and has been diagnosed with depression. Shane became involved in the garden through his association with the local Family Support Centre. He had very little gardening experience prior to joining but was very interested and eager to learn. Shane particularly enjoyed meeting and working with others and talking about sport.

Myra is in her early fifties and joined the group to learn about propagating herbs as she had hopes to establish her own herb propagation business in the future. Myra would also take responsibility for facilitating certain tasks when required.

Brian is an unemployed man in his thirties who joined the group following a recommendation from his social worker. He had very little previous experience of gardening prior to joining but worked hard and has since excelled in this regard. Brian enjoyed the work immensely and was particularly enthusiastic with regards to embracing fresh challenges.

Researcher's role in the garden

Despite my role as researcher, I was still very much involved in the day to day activities and interactions within the garden. As well as contributing in all the social discussions and events, I was also expected to pull my weight in the physical work department. As facilitator, I was officially responsible for planning and supervising day to day activities and for ensuring that the tools, materials and equipment needed to carry out everyday tasks were available to the participants as required. During the growing season, materials might include compost, seeds and bird netting while rootstocks, grafting tape, plant labels and other propagation materials would need to be sourced during the non-growing season. Managing these roles was often a difficult balancing act particularly in the early stages. I felt very much responsible for the general appearance of the garden and the quality of the vegetables produced and always aimed for the highest standard possible in my role as facilitator. This was a time consuming role that often generated conflict and tension regarding my role as researcher/participant as it allowed precious little scope for meaningful data collection. With practice and reflection I learned to step back from my role as facilitator and trust that the collective of the group would manage to get the job done. This often resulted in tasks being done surprisingly badly as is illustrated within the passage on seed sowing in chapter 6 but it did allow me to reflect more clearly on my role as researcher. From this position, I could also appreciate that making and correcting mistakes was a valuable part of the learning experience for participants

particularly in relation to the experiences of disappointment and achievement. Over time, my role as facilitator became more naturally diminished as long term participants, empowered by new knowledge and practical experience assumed greater responsibility for the running of this project and helped out with less experienced members. I would always encourage this development as, in addition to nurturing teaching and facilitation skills among the participants, this shared responsibility allowed me to temporarily park up my facilitation duties and embrace more fully the character of researcher/participant.

Data collection

Data collection commenced on 24 June 2014. Ideally, I would have liked to begin this work from March onwards to coincide with the start of the 2014 growing season. However, this was not possible as I was fully employed supervising the early development of the garden and recruiting and bonding with new members. This was an incredibly busy time for me, as in addition to supervising the early growing season activities such as soil preparation and seed sowing, I was also overseeing the final stages of development work in preparation for an official opening on 31 July 2014. I did make a number of attempts to gather data during this period but was unable to give sufficient attention to the task. The participants, some of whom were still finding their feet at the project were very busy with physical tasks also and found it difficult to focus on their role as co-researchers. For these reasons, I made a decision to postpone the collection of data until such time as it was possible to glean a more insightful narrative of events.

Data collection methods

Data concerning the day to day activities of the participants was obtained using primary ethnographic research methods such as participant observations, informal interviews and focus groups. Most mornings, as the group congregated around the fire prior to starting work; I would be making mental notes of the exchanges and interactions taking place. Throughout the day, I would be switching between my roles as facilitator, researcher and group member, providing advice and direction one minute and having a laugh

or digging a trench the next, or alternatively, asking probing, insightful questions to develop a particularly interesting topic or stimulate discussion further. This is not to suggest that the laugh and the chat do not constitute valuable field research, but rather to highlight the importance of being alert to the possibility of other, potentially important information that might be forthcoming.

For most tasks, such as fruit tree grafting, weeding and willow work, it was possible to keep everybody working together as a single group. Initially, I would usually take control of these tasks and would be directly involved in the facilitation and discussions taking place. As the group become more familiar with a particular task, some of the more experienced participants would also assist with facilitation duties. This would allow me to partially withdraw from facilitation duties so that I might focus more clearly on, and observe all of the intricacies of the task as they unfold. For instance, in relation to the fruit tree grafting workshop carried out in February 2015, following a number of demonstrations of the techniques involved, the participants were then encouraged to have a go themselves. The following section has been adapted from my field notes to provide a flavour of my attempts to capture this new experience;

After watching a number of demonstrations of the technique of fruit tree grafting, the participants are then observed attempting to come to grips with the task. Data collection begins by making mental notes of the body language such as ease of movement and facial expressions. In this instance, the body language was initially tense, unenthusiastic and uncertain as participants looked around sheepishly at one another waiting for somebody else to make the first move. These observations were then supported by reports from the participants along the lines that the task was too difficult or by fears expressed that they might do something wrong. Mixed in with these initial insecurities is an air of excitement also, and a sense that they might be on the verge of doing something very special. This was represented by statements asserting that, 'this is a job for the professionals rather than the ordinary gardeners like us', and also by expressions of disbelief concerning

the very generous profits that might be made from the sale of successful grafts, 'Imagine that, €25 for an apple tree in a garden centre'. From these tentative beginnings, I observe the participants rising to the challenge, taking note of the high levels of focus and concentration needed to get the cuts just right, the sense of relief when the union is tight, and the disappointment when they have to start again. I also note how the group learn to work together to overcome difficulties such as pairing up to secure the union in place with grafting tape, a much easier task when carried out by two people. On completion of that first graft, I observed a range of emotions, pride and almost disbelief that the skill levels were there to carry out the task and also, a sense of awe at the wonders of nature which allows us to take a cutting of any apple tree and as though by magic, clone it in this way. By the end of two weeks, having completed numerous grafts of different apple, pear, plum and cherry varieties, the atmosphere is now happy and relaxed, celebratory even. The memory of those early insecurities seems forgotten as participants freely boast about their rapid progress. I notice that the extreme levels of focus and nervous concentration prevalent in the early days of this exercise has been replaced not by complacency but by a more confident, self-assured form of concentration as participants become more familiar with the techniques and skill levels improve. This state of absorption seems to have a relaxing effect on the participants and often paves the way for the types of discussions that only occur when the groups are fully engaged in this way. During these unique situations, group members will sometimes discuss normally taboo subjects, such as loneliness and mental health issues. This type of 'serious talk' would be less likely to occur during tea break when discussions and revelations might be more social based.

In the example above, the novelty of the task ensured that data was forthcoming without too much intervention on my part. On other occasions, it might be necessary to pursue a line of questioning in order to unearth data or to stimulate further exchanges. If necessary, I will also ask participants to reflect on or clarify their position with regards to certain remarks made. These informal interviews are invaluable as a means of uncovering data which is not

readily forthcoming. Below is an example, adapted from my field notes, outlining how this works in practice;

One sunny day as I was weeding in the herb patch with Sue, Paul and Shane, Sue remarked on how lucky we were to have the garden as it meant we could be working outside on such a lovely day. Paul agreed, saying that it was great to have something to do and how it helped him to get out of the house. When I pressed them to explain the significance of this, Paul went on to describe the period immediately following his retirement when he suddenly found himself with very little to do except sit around the house all day 'making a nuisance of myself'. He then explained how the garden, in addition to providing him with the physical and mental challenge he was craving, also prevented him with an opportunity to get out from under his wife's feet. Sue listens carefully to what Paul has to offer and then says thoughtfully, 'it's a bit different for me because I live alone. I have only myself for company and I get depressed sometimes just looking at the four walls all day long. This place breaks up the week for me and I would be lost without it'. I then probe Shane as to whether he had any thoughts on the subject. Shane, who is a man of few words, replied, 'If I wasn't here I'd be in bed probably…..so I'll say that much for it, it gives me a reason to get up in the morning anyway'.

It is important to be always vigilant, alert and pro-active with regards to unearthing important data such as this as these types of discussions would not always develop fully without some stimulation on my part.

Note taking

From the outset, I was very determined that the collection and recording of data would occur in a natural, non-intrusive way. Rather than hovering over the participants with a clipboard taking notes, I am more likely to be found actively engaged in all the physical tasks within the garden. This allows for the collection of data as it is lived, or experienced, rather than as it is merely observed. From this position, I will make mental notes of key points, observations and participant disclosures which are then written down privately at the earliest opportunity either in the social shed or in my car. At the end of each session, I will use these notes to reflect thoroughly on the

mornings experiences prior to writing up all the exchanges and interactions more comprehensively. This will usually occur either in the privacy of my home or in my office at Sligo IT.

Data analysis

Analysis of data began at the end of a full year of growing and dormant season field research. This required labelling and colour coding the raw data so that differences and similarities could be identified and the experiences and interactions categorised under a number of headings linked to the literature review including; social inclusion, personal skills development, practical skills development, physical health, psychological health, experience of weather, aesthetics and financial implications. These codes then had to be ordered into parent themes such as; social identity, collective efficacy, self-esteem, empowerment and knowledge production and dissemination. The process of separating and reweaving these threads was the most challenging aspect of this study. All of this work was carried out manually.

Ethical considerations

This research was conducted with potentially vulnerable individuals and every effort was made to ensure that there was no harm to participants. Harm can involve physical harm, harm to development, loss of self-esteem and stress (Social Science Research Ethics 2012). From the outset, I was fully aware of the potential of a power imbalance between myself and the research participants and was mindful that the unfair exploitation of participants needed to be avoided at all costs. I remained reflective of this dynamic throughout the process. A further issue with regards to harm to participants is maintaining client confidentiality. In this instance, the identities and records of individuals will remain confidential and care will be taken to ensure that when the findings are included in the dissertation, the participants are not identifiable. Initially, participants were given a choice as to whether they wished to use their own names or a pseudonym in the study but given the intimate and personal nature of many of the disclosures; it was agreed, in consultation with my supervisor, to keep the names of the participants and

the location of the research facility confidential. The findings of the research will be kept at a secure location within the researcher's home and will be destroyed after a period of 12 months after submission of the theses.

A further ethical issue that needed to be considered was the informed consent of participants. Informed consent requires sufficient competence to understand what is involved. The researcher was aware of this and participants were fully informed of the research process, the purpose of the research and of the potential risks of participating in this study. Participants were given a participation information sheet (see appendix A) which the researcher went through carefully with each participant, making sure to clarify any language or issues that the participant was uncertain about prior to completion of the consent form (see appendix B). The clear guidelines of the participant information sheet helped to ensure that the participants were not deceived in any way. Deception occurs when researchers present their research as something other than what it is. Researchers may use deception to limit the participants understanding so that they might respond more naturally to the observation process. Again, I was mindful of the power imbalance between myself and the participants and was committed to acting with transparency and integrity to protect the well-being of participants at all times. In addition to this, I made the participants aware that they could choose not to confide information which they deemed to be an invasion of privacy. This message was repeated throughout to ensure that participants were comfortable in this regard. In consultation with my supervisor, I also took the step of hosting individual and group reflective workshops to discuss my interpretation of the interactions and exchanges taking place. These workshops helped to ensure that participants were comfortable with my take on events, particularly in relation to more intimate disclosures and also provided further scope for participants to fulfil their own obligations as genuine co-researchers.

Conclusion

Chapter 5 provides a comprehensive overview of the background to this research project. The reader is taken on a tour of the garden and the range

of new features which were incorporated to ensure all year round engagement for participants. While on this tour, the reader is introduced to all the main players responsible for implementing the development of the research facility. My own roles, responsibilities and motivations are laid out very clearly in this chapter also. The writing is very descriptive throughout and a selection of photographs help to flesh out the narrative in an attempt to place the reader at the scene of the research. This chapter also outlines and assesses the research methods which were implemented to stimulate access, collect and interpret the type of data needed to get at the lived experiences of community gardening participants. These research methods are grounded in the theoretical framework of Interpretative or Hermeneutic phenomenology and this has been critically evaluated in this chapter also. Samples of data collection methods and techniques were included to help explain this process in more practical terms. The ethical issues that needed to be considered prior to and during the course of this research are identified within this text also.

Chapter 6: Presentation of findings

Introduction

Before presenting my findings, let me first recap on the purpose of this study. The main objectives were to generate data regarding the experiences of community gardening participants from a lived perspective and also to explore the potential for community gardens to provide year round interest and activities for participants. In relation to the first objective, I felt that there was much scope within the available research for an alternative methodological approach, and that the complex, multi-layered properties of the research facility had the potential to provide a rich insight into the community gardening experience. This study will scrutinise the lived processes involved in gardening collectively in an effort to further our conceptual understanding of community gardening as a whole. Key topics which will be explored include;

- Sense of connectedness to the garden and to fellow participants
- Social identity construction and the ways in which the garden influences how participants self-identify
- Social capital, particularly in relation to collective efficacy, work ethic and toiling with the hands as caretakers, craft makers and producers
- Physical, social and mental health implications emerging from the relationships and dynamics associated with garden membership
- The ways in which weather, ground conditions, aesthetics and the rhythm of the seasons impact upon the overall community gardening experience

Being a full-time community gardener with a background in social care made me an ideal candidate to carry out this research. Drawing from and reflecting on my own experiences as a community gardener to interpret data has helped to facilitate the production of a rich, evocative narrative which shines throughout this chapter.

The journey begins with a preview of the social rituals and lived experiences that make up a typical day at the garden before going on to identify the opportunities available to community gardeners in relation to making new social connections. As someone who was involved in this process from the very beginning, I was able to track this progression closely, from those tentative first meetings, right through to establishing lasting friendships and developing social and support networks outside the garden. The narrative goes on to explore the collaborative actions and efforts on behalf of the participants in relation to developing and maintaining the garden. Ideas relating to sense of duty, teamwork, decision making, problem solving, fulfilling obligations, hard work, perseverance and commitment are explored here. These findings will serve to help us understand what it is that motivates participants to maintain and care for these types of spaces. The social implications outlined in this section form part of a wider argument that community gardening can fulfil an important role with regards to the construction of social identity and the promotion of social capital. I chose to discuss these findings as part of social identity as I felt that the collective efficacy on display was an evolving process, linked to the amount of time and commitment invested and the amount of progress being made. In other words, I was of the opinion that there was an obvious interconnectedness between the transformation of the garden and the transformation of the self.

The next section of the findings entitled 'food for the body, food for the mind' explores the sense of connectedness between the body and the garden. The initial focus will be on areas such as exercise and diet, experience of weather, engaging with physical challenges and the rewards and costs associated with meeting these challenges. Ideas relating to knowledge, learning, skills development and empowerment are discussed here. As part of this discussion, I will explore whether the culmination of the social, physical and learning processes can directly impact psychological well-being in areas such as self-esteem, stress relief and appreciation for life through their active involvement with nature, as much of the literature in chapter 3 would seem to suggest.

This chapter also features a seasonal chronology of a year in the working life of a community gardener. Here I will discuss the differences and similarities between growing and dormant season activities paying particular attention to the lived experiences of the physical and cognitive processes involved, and to the ways in which the rhythm of the seasons can influence these experiences. This section will demonstrate the very different but compatible role that craftwork, both horticultural and non-horticultural, can play during the dormant season when work would otherwise be scarce. I will also explore the potential transferability of these types of activities to similar social horticulture settings. A thorough analysis of the findings will be conducted throughout and where useful, links will be made to other research which has been conducted around the area of community gardening.

Overarching themes

As the reader is guided through the following chapter, it is likely that they will be confronted by a number of naturally occurring common threads. Throughout the findings, I will demonstrate how the chosen research methodology provided for the attainment of a rich and unique narrative which complements the existing knowledge base. I will present my findings in a style that captures my own lived experience as a community gardener. The writing is very descriptive and it is hoped that this provides the reader with a sense that they themselves are privy to the workings of a community garden or, at the very least, that a cognizance of the project will emerge which enables the reader to identify with the experiences, relationships and interactions of the participants as they unfold.

The second common thread which permeates these findings is the ongoing narrative which suggests that the garden is a sanctuary not just for vegetative growth but for human growth also. As mentioned previously, during our first winter together, I was responsible for almost the entire day to day decision making involved in developing and maintaining the project. This dynamic began to change as the winter progressed. Levels of participant interaction improved, bringing with it the procurement of new knowledge and skills and this led to increased levels of confidence. By early spring, the participants,

like the garden, were beginning to show signs that they were ready to break out of dormancy. By early summer, almost in perfect synchrony with the flowers and plants under their care, they were beginning to flourish. This process is illustrated throughout the early stages of these findings where the researcher draws parallels between the experiences of participants and the construction of social identity. This thread continues throughout our discussion on mental health issues where the caring environment of the garden comes to the fore. Participants struggling with external life issues find safety and support within the garden, allowing them some respite from the traumas and challenges of life, for the short term at least.

The final thread that the researcher would like to allude to is that the sense of improvement to overall well-being as identified throughout this research is not, as might be implied from snapshots of the narrative, a direct result of having a cup of tea and a chat together, or working as a group, or learning together, or sharing a sense of duty in relation to the upkeep of the garden although these are all important aspects of the community gardening experience in their own right. Rather, the researcher is suggesting that it is the interconnectedness and culmination of all these experiences that brings about the real meaningful engagement which seems to directly impact well-being. Hypothetically speaking, working together, sharing a sense of duty, and having tea together might help to nurture strong social ties and a sense of solidarity between participants while engaging in physically demanding tasks and consuming larger amount of fruit and vegetables might create a sense of improvement in relation to overall physical health. When we amalgamate these social and physical implications and then add in a sprinkling of learning and skills development within a supportive, aesthetically and sensorially pleasing environment, then it seems reasonable to suggest that improvements to mental health are possible. In the same way that the participants apply themselves to the care and maintenance of the different parts of garden, it is always with the intention of caring for and improving the garden as a whole. It is always about the whole garden, the whole experience, the whole person.

Community gardening and the construction of social identity

In this section I will explore the role that community gardening can fulfil with regards to the construction of social identity. I will begin by presenting an overview of the social rituals and experiences that make up a typical day at the garden before going on to identify the opportunities available to community gardeners in relation to making new social connections. This research will also show how the friendships which resulted from working and socialising together helped to nurture a very supportive environment in which participants felt confident enough to express themselves creatively and establish niches and roles for themselves within the garden. The research will also explore the ways in which external social connections and support networks have been developed as a direct result of community garden involvement. I will argue that the combined social experiences contribute towards the construction of social identity and the promotion of social capital. Not only have participants established themselves within the garden, they have found a place for themselves within the community also.

The social identity construction argument will be further developed by examining the responsibilities of community gardeners. These findings will show that the participants had an incredibly strong sense of duty in relation to the development and maintenance of the garden. I will argue that the collaborative actions on behalf of the participants in areas such as; leadership and facilitation, teamwork, decision making, problem solving, fulfilling obligations, hard work and perseverance were an exercise in character building. This argument is in keeping with one of the central themes of the findings which links the transformation of the garden with the transformation of the self or, in more simplified terms, that the garden is a sanctuary not just for vegetative growth but for human growth also.

Making social connections

A day in the life………

As highlighted in the literature review, many previous studies have emphasised the high social and recreational value of community gardening

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initiatives. These researchers suggest that strong social ties can be developed within the garden through regular face to face contact and involvement in shared garden related activities. Friendships are often based on mutual trust and responsibility and a sense of duty in relation to the upkeep and maintenance of the garden (Hale et al 2010, Teig et al 2009, Share and Duignan 2005, Share 2006 & Armstrong 2000). As both an observer and a participant, it is easy to see why the garden might hold such a strong social attraction for people. In my role as facilitator I would often arrive at the garden early in order to light the fire or prepare the morning's work or simply to enjoy that part of the morning when this sanctuary of beauty and tranquillity can be experienced in solitude. The seclusion ends with the arrival of the first participants as the garden slowly begins to emerge from its sleepy slumber. This inevitable transformation of the garden from quiescent to hive of activity is a gentle, unhurried process. In ritualistic fashion everyone congregates around the fire which has been lit to boil the kettle for tea, chatting with one another and catching up on life events outside the garden. Family outings and occasions, personal health, local social events and the weekend's sporting action are regular topics of discussion at these early morning catch-ups. As participants slowly begin to ease themselves into the first chores of the day, the dialogue and focus begins a shift towards gardening related issues although non gardening related social interactions still manage to permeate this aspect of the community gardening experience also. Participants seldom work alone, choosing instead to divide up into small groups or to work together as one full group. Participants are constantly communicating with one another as they work, asking questions, giving instructions, sharing knowledge and tips, swapping gardening stories and folklore and offering encouragement when needed. Sometimes these interactions involve disputes and arguments about correct methods and techniques, and despite the occasionally high intensity of the exchanges, they are usually enjoyed by the group.

The second ritual of the day, the tea break, provides an opportunity for us to put the world to rights, as sport, politics, local gossip and community events

dominate the agenda though conversation inevitably drifts back towards family, relationships and physical and financial health also.

Figure 9: The drop of tea

At the end of each session, the group, again with ritualistic regularity congregate at the gate prior to going home in order to survey the morning's work. This provides an opportunity for us to reflect on what has been achieved to date and, if it is summertime and the weather is agreeable, to bask in the beauty of the garden. The following week's work is often planned with great enthusiasm while standing at the gate. We often use this time to talk about our upcoming social plans. If someone is going away or has an important family event planned for the weekend, the rest of the group will use this opportunity to wish them well. Though it is likely that all community gardens have their own unique rituals, the above preview provides a useful lens through which a typical day in our community garden might be viewed and is a good place to start this journey.

Rewind to pre-gardening blues

Prior to assessing the social and recreational value of community gardening, let us first work the shovels of investigation a little deeper into the clay to determine how or why participants arrived at the garden in the first place. For some participants, particularly those with more fulfilled family and social lives,

their reasons for joining were predominantly associated with being interested in gardening and wanting to learn about growing food. For others however, not surprisingly given the social care philosophy of the project, the deciding factor when choosing to join was not because of their love of or interest in gardening, but rather for the explicit reason that they wanted to broaden their social horizons. Share and Duignan's (2005) and Share's (2006) evaluations also highlight this space for diversity within garden groups. Some of their participants described meeting people and the sense of camaraderie from working with other's in shared gardening tasks as one of the best things about their involvement while others cited knowledge of food production and preparation as being crucial to the overall experience. This finding highlights the scope of community gardening with regards to holding appeal for a broad spectrum of individuals. The following passages gleaned from my experiences of working closely with the study participants over a long period of time will help to illuminate this dynamic further.

Sue, one of the core members of the group, is very open regarding the limitations of her social life 'I don't get out much' she acknowledges, and, 'I don't get to meet many people'. Sue often spoke of how prior to joining the garden she was attending a day service for people with disabilities and mental health issues. She becomes visibly upset when recalling her time spent here. She believed that this intervention was not suitable for her as she felt that her own health issues were not on a par with many of the other attendees whom Sue describes as having 'very serious illnesses'. Consequently, she found it extremely difficult to relate to or integrate with the other service users, 'I get awful bored, I go to (name of centre) but it just makes me worse. Sometimes, even if I go there in a good mood it will put me in a bad mood, this place (garden) is the opposite I can come here in a bad mood and go home in good form'. Sue fully appreciates the value of being socially active. 'I love this garden' she says, 'if I wasn't involved here I wouldn't see anybody from one end of the week to the next'.

Shane who lives alone and has been diagnosed with depression re-iterates Sue's sentiments when describing the social significance of the garden for

him. The garden provides an opportunity for him to talk about his mental health issues and the problems associated with his solitary lifestyle; 'this is just what I need' he says, 'it gives me a reason to get up in the morning'. Shane has spoken of how prior to joining the garden he would spend a lot of time at home on his own, lying on the couch watching television; 'what good is that to anyone?' he asks, 'watching T.V all day, it's like being in prison'. These types of disclosures often stimulate a flurry of support from other participants usually along the lines of; 'this is the place to be, keeping busy and meeting people' or; 'everybody needs to get out of the house, keep the mind occupied'.

The tea break can often highlight the different social expectations that exist between the participants. For some of the more socially disadvantaged participants like Sue, Shane and Paddy, the tea break is the highlight of the day. They will never be the ones to suggest that it is time to get back to work. This unpopular task usually falls to participants like Paul and Myra who seem primarily motivated by a desire to work and learn. The call to return to work is often greeted by a chorus of disapproving groans by the rest of the participants. In essence, one group of participants might relish a morning spent talking and drinking tea while the other might see this as a waste of a morning. This is not to suggest that Paul and Myra do not enjoy the social interactions but rather to highlight the different perceptions and expectations between the two different factions. This accidental dynamic helps to ensure that there is a nice balance between work and play within the garden.

Developing support networks

Previous studies suggest that as well as being a place for making social connections, community gardens can also be a source of ad hoc therapy and support (Teig et al 2009; Share 2006; Lee 2002; Armstrong 2000 & Rice et al 1998). This is a view that is not always explicit within formal definitions as alluded to in Chapter 2. For instance, the Community Garden Reference Guide defines a community garden as,

> 'any piece of land, public or private where plants are grown and maintained by a group of individuals in the community' (William Mitchell College of Law 2012 p2).

while, according to the AHTA, community gardening is considered to be more of a leisure or 'recreational activity' involving the production of food rather than 'therapy' (American Horticulture Therapy Association 2007 p1). These definitions do little to enhance our understanding of community gardening from a therapy perspective. As a full time participant of the community gardening under research for more than three years and therefore in a very privileged position with regards to insight, I will now attempt to flesh out these 'support' arguments based upon my own lived experiences and on my interactions with and observations of my fellow gardeners over a long period of time.

In the early months of this research, the provision of support was largely the forte of myself as facilitator in conjunction with the Family Support Centre. Some participants were very much focussed on their own needs, unenthusiastic with regards to sharing work and often having an underlying tendency to dominate tasks. The remainder, like shrinking violets, seemed content to *endure* the community garden experience beneath the shadows of their more assertive counterparts. This dynamic began to change slowly but surely as the fabric of the group became stronger with each passing week. The culmination of a number of factors such as the everyday social interactions and rituals, learning together, sharing responsibilities, and helping one another with physical challenges has helped to transform working relationships into friendships and the garden into a hive of therapy and support. Over time, as friendships developed, the dominant participants began to take more interest in their less assertive colleagues and began looking at ways of addressing their vulnerabilities. The key word here is vulnerabilities. Recognising the vulnerabilities in others seemed to trigger an awareness among the stronger participants regarding their true purpose and role within the garden. Paul began to take an interest in Shane as though recognising that while Shane may be willing, he often lacked the confidence to work alone. As an observer it was touching to watch Paul allocating tasks to Shane anytime he was standing around looking lost with nothing to do, or watching him explaining patiently how and why a particular task needed to be done. On one occasion Paul confided to the researcher, 'Shane needs this

place, whatever else happens, I'll make sure there's always work here for Shane'. If previous research is an accurate barometer then this arrangement might be mutually beneficial. A number of studies highlighted in the literature showed that providing support in the form of passing on knowledge and helping others to garden are rewarding outcomes of the community gardening experience (Gaffey 2012; Share 2006; Lee 2002 & Waliczek et al 1996). From my own point of view I would say that this is certainly the case. In addition to the satisfaction gained from doing someone a solid turn, helping others at the garden has given me a platform to showcase my own skills and knowledge thus cementing my position as an important member of the group. Furthermore, supporting others in this way has helped me to develop and sharpen up my own horticultural skills and knowledge over the years.

A similar dynamic emerged between Sue and Dolores. Sue who is not a local, by her own admission lacked self-confidence and was finding it very difficult to integrate into the local community. Dolores, who was very well known locally, insisted that Sue became involved with the vegetable shop as a means of getting to know more people. Sue was very nervous to begin with. In the early stages of the shop initiative she remained very much a peripheral figure leaving all customer relations in the hands of Dolores. Her lack of confidence left her feeling constantly vulnerable that she would do or say something wrong, 'what happens if someone asks me something and I don't know the answer' she would enquire agitatedly. Over the following months Sue, with Dolores's support began to develop a rapport with customers and staff at the centre to such an extent that when Dolores took a break from the garden due to ill-health, Sue took over the running of the shop on her own. Dolores also recognised that Sue found it hard to occupy her time outside the garden and often invited Sue to her home in order to 'help break up the day for her'. On other occasions the two women travelled to hospital together to support one another during periods of ill-health. As described earlier in the literature review, uniting to protect and support one another in times of hardship like this was a feature of Teig et al's (2009) study also. As previously noted, when one of their members developed

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cancer and was no longer able to participate, the other gardeners would collect him from the hospice in a car, and take him to the garden where he could sit and enjoy the energy of the place from the comfort of the car. The gardeners also provided support to the man's wife following his death.

The following examples are just snapshots of the types of therapeutic interactions that permeate the experiences of participants. There are many more interactions and exchanges scattered throughout this dissertation which further highlight the supportive potential of community gardening. These exchanges range from the more hands on approaches such as demonstrating and helping with gardening tasks, to talking about and listening to personal problems, and making sure that people feel included in the day to day activities, discussions and events also. The dynamic that developed between Sue and Dolores also supports the findings of the aforementioned Teig et al's (2009) study which suggests that friendships and supports can extend beyond the perimeters of the community garden. These findings when taken as a whole could be used to make a case for redefining the essence of what a community garden encompasses. Implicit and explicit in this new definition should be the assertion that community gardens are not just places for growing food but are places of therapy and support also.

Social outings

Building on this idea that friendships can extend beyond the garden, one of the outcomes of being involved at Mohill Community Garden is the annual excursion which includes a meal and a visit to an attraction. This is paid for by the profits made from the sale of vegetables and craftwork produce. This is an important event on the calendar, given the socially isolated lifestyles of some participants. Prior to one excursion Sue said, 'I have been looking forward to this for weeks. I don't get a chance to go away very often'. In 2015 the group visited Eagles Flying in Sligo while the previous year they visited The Museum of Country Life in Castlebar, Co. Mayo. There have been educational visits also including trips to Ardcarne Garden Centre and Knockvicar Organic Gardens, both of which are in Co. Roscommon.

On this year's visit to Eagles flying and subsequent meal, Myra remarked 'What a wonderful day, amazing birds, wonderful meal and good company'. 'I really enjoyed myself' agreed Sue. 'Last year was good but this one was even better. I'll remember this day for a long time'. Similar sentiments were expressed by the other members also. These types of trips provided an opportunity for participants to get to know one another outside of the working environment. Prior to the visit to Eagles Flying there had been tension building between Sue and Myra. Sue felt that Myra was bossy and domineering and took exception to this on account of her being the more senior member of the group. However, the two women really hit it off on the day out, going shopping together and spending all their time in one another's company. 'I wasn't fond of Myra before today' confessed Sue, 'but that's all changed now. She is a lovely woman and great craic altogether'. My take on this is that the garden can be a very competitive environment with everyone struggling to find and hold onto their niche, thereby establishing their place within the hierarchy of the group. In addition to the more obvious social benefits, these types of outings serve as a lens for participants to view one another outside of this competitive environment. Experiencing one another warts and all, their qualities and vulnerabilities, while stripped of their gardening clothes, seems to have an enlightening effect on those involved. Participants always seem to be a little bit more humble and united in their cause when they come back from these trips. Of course these types of excursions also fulfil a function with regards to integration within broader society, which is the next topic on the agenda.

Place within the community

Previous studies have highlighted the important link that community gardening can provide between participants and their local communities. Teig et al's (2009) study participants described how being involved in their local garden gave them an increased sense of belonging to the wider community while Armstrong's (2000) sample believed that community gardening had helped them to get to know their neighbours better, resulting in improved community cohesion. Let us now examine how some of these claimed

benefits might manifest themselves. In relation to our research setting, the garden and participants are highly visible and we attract a lot of passing traffic, due to our proximity to the town. Passers-by and visitors to the garden regularly commented on the beauty, vibrancy and visually stimulating appearance of the garden. The garden has also been a source of inspiration for other local and wider community groups with an interest in gardening including; the tidy towns committee, visiting schoolchildren, Active Age members and other community garden groups. We as participants are very proud of our association with the garden, and see ourselves as the 'caretakers' of this wonderful addition to the local community. The official opening day in July 2014 presented the perfect opportunity for us to showcase our skills and talents to family, friends and neighbours. Dolores spoke of her pleasure with regards to bringing her grandchildren closer to nature and showing them that she played a part in creating the garden, 'it looks so impressive, I'm very proud of what we have achieved here'. After the event, Sue remarked, 'I don't like being around crowds or having to talk to people I don't know, but I was so proud of the work we did that I had to be here'. Much of the literature in chapters 3 and 4 also draws attention to this strong sense of achievement and fulfilment associated with gardening, craftwork and manual competence (Corkhill et al 2014; Maidment & Macfarlane 2011; Crawford 2006 & Waliczek et al 1996). These findings are very much part of our social identity construction discussion, particularly in relation to our perception of ourselves as 'caretakers' 'guardians' 'makers' 'producers' and 'creators'. From my own experience I know that this can sometimes be what makes us identifiable. As one of 11 siblings I have been in situations where an acquaintance knows I am one of the Gaffey's but is struggling to put a first name on me. 'Aren't you the one that looks after the garden?' is often the way that this puzzle is solved. This outcome is compounded for participants like Paddy and Sue who are not native to the area and would previously have had a very low profile. Again, this social identity construction theme can be linked back to ideas put forward in the literature review, most notably by authors such as Gauntlett (2011), Sigman (2008), Crawford (2006) and Braverman (1974).

In addition to the opportunities for integrating with the wider community within the garden setting, some of our activities also offered potential for liaising and communicating with individuals and groups outside the garden. A weekly vegetable shop was set up at the local community centre to raise funds for the upkeep of the garden. The group have also sold vegetables and craftwork produce from the garden at a number of local social events including the Halloween Bazaar and the Christmas craft sale both of which are held annually at the local community centre. These types of events were relished by participants who enjoyed showcasing their talents and mingling with the natives in a carnival atmosphere. Schwarz & Yair (2010) also highlight the potential for these types of community craft fairs to invite and enable conversations and connections.

Gauntlett (2011) also makes an important link between artisan crafts and community integration when he says,

> 'creativity is a gift, not in the sense of it being a talent, but in the sense that it is a way of sharing meaningful things, ideas or wisdom, which form bridges between people and communities' (p245).

For Dolores, 'meeting and chatting with people in the garden and meeting new people through the shop' is one of the most important benefits of being a member. 'I love that aspect as well' says Sue, for whom, establishing this social network outside the garden is such an important facet of her continued community integration and sense of well-being. Sue has drawn a lot of confidence from her interactions with others. 'I was awful nervous when I started here (vegetable shop) but I met such a lot of lovely people and everyone is always so nice that now it (meeting people) doesn't worry me at all'. It is also worth mentioning that third parties such as the family support centre staff and shop customers regularly opined that some of our members had, 'come out of themselves' since joining the garden. I believe that the increased public exposure is hugely instrumental in this development.

Implicit in the philosophy of our garden is a desire to make a positive, tangible contribution to the local community. When setting up the vegetable shop initially, a collective decision was made to ensure that vegetable prices

would be kept affordable enough for the service users at the family support centre where the shop was located. When deciding what day to hold their weekly sale the group decided against having it on a Thursday or Friday even though these would be the busiest days at the family support centre. The participants were very determined that they did not want to interfere with other vegetable sellers who operated in the town on those days. In addition to this, much of the unsold produce at the end of each weekly sale was left behind to be used by visitors, staff, and service users at the centre.

Giving away surplus produce seems to be a common enough feature of community garden initiatives. Teig et al's (2009) study participants donated surplus harvests to local groups and individuals who might not otherwise have access to fresh produce while Hale et al's (2010) participants described building bridges within their communities through the sharing of fresh vegetables. These participants described using formal systems for donating to community groups or informal baskets to distribute to friends, family and passers-by. This is seen to good effect in Maidment & Macfarlane's (2011) craftwork study also, where much of the activities of the participants under study revolved around making items of craftwork such as, patchwork quilts and trauma teddies which were then used to raise funds for local causes. We have also experimented with different ways of using surplus produce and on a number of occasions have donated vegetable hampers as prizes to be raffled at local community events. This was very much a reciprocal dynamic as in addition to raising the profile of the garden and the participants, we have also been publicly commended for our generosity. The participants themselves seemed to take much satisfaction from these types of arrangements and would often be heard to reflect pleasantly when back in the privacy of the garden that, 'money is not what we are about', 'it's nice to give stuff away' or 'it's nice to give something back'. These findings highlight the functions that community gardening and craftwork initiatives can perform with regards to creating a sense of purpose among participants and also in relation to promoting social capital. The next section explores the social capital theme further by investigating the collaborative actions and efforts on

behalf of garden members in relation to the development, care and maintenance of the garden.

Collective efficacy

During the three years that I have been involved at this project, what was previously a neglected field has been transformed into a sanctuary of beauty, tranquillity and productivity by a collection of previously unconnected and inexperienced gardeners. But how did this happen? I believe that this transformation was made possible by the collective actions on behalf of all participants in areas such as; research, leadership and facilitation, teamwork, decision making, problem solving, fulfilling obligations, hard work, perseverance and commitment. Teig et al's (2009) study of community gardening refers to these types of personal skills and virtues as collective efficacy. These findings will show that the development of collective efficacy was an ever evolving process linked to the amount of time and commitment invested and the amount of progress being made. In other words, levels of collective efficacy seemed to increase over time as we came to realize and accept that this spectacular transformation of the garden was a glorious consequence of our collaborations. This was social capital in action. Let us now examine more closely some of these personal skills and virtues crucial to maintaining a healthy, functioning and inclusive community garden

Sense of duty

The reciprocal nature of the relationships as identified in this section demonstrates how community gardening can be used as a vehicle to promote social capital. First and foremost is the sense of duty that exists among participants, both to each other and to the garden. We regard ourselves as caretakers of the garden and believe that discrepancies in the maintenance and appearance of the garden reflect badly on the group as a whole. Hale et al's (2010) study group referred to this process as a social agreement based on trust and accountability, and acknowledged that neglecting tasks or the appearance of the garden damages everybody's efforts. And certainly, we also placed a huge amount of emphasis and effort

into what were mostly regarded as unpopular tasks such as mowing and weeding, with a view to keeping up appearances and thus fulfilling our own end of the bargain. One always had the sense that reputations were on the line and that group members were motivated into inconveniencing themselves by thoughts of what others might think. On many occasions the group were stirred into action in this way. In high summer when weeds were rampant participants would look at one another pensively, shake their heads, roll up their sleeves and get stuck in. There was no question that the task would not get done. As they worked, participants would often remark on their assiduousness, 'that (patch of weeds) is catching my eye every time I look down here' or 'it looks bad if visitors come and see it like this' and 'I wouldn't like people coming here and seeing the place untidy'. Teig et al's (2009) participants shared the view that having a strong sense of duty is a very influential motivating factor in relation to the upkeep of the garden. These participants accepted their responsibilities, which were mutually agreed upon, in exchange for the assurances that everyone would adhere to the same standards. The next section will explore the influence of collective decision making on the community gardening experience.

Collective decision making and negotiation

In the early stages of this project, almost the entire decision making was left in the hands of the facilitator and the management at the family support centre. This began to change following the procurement of new knowledge and skills which enabled participants to carve out personal niches and establish new roles for themselves within the garden. Confidence levels increased as a result and participants at last began to find a voice. That the participants were becoming more empowered in relation to owning the decision making processes initially became apparent midway through 2014 when the first crops of vegetables were ready for harvesting. This created a number of dilemmas such as what to harvest, how to divide the produce and what to do with the surplus. The question of what to harvest might seem like a straightforward decision, but to those participants who had invested so much time and energy into the project, lifting vegetables was a wrench that

felt like a betrayal of the aesthetics of the garden. And when the first early crops of cauliflower and broccoli were ready, the group simply could not bring themselves to harvest them. One participant remarked, 'the place looks so nice now, it seems a shame to harvest them'. Others agreed with this viewpoint and it wasn't until vegetables began to over ripen and spoil that the group made a collective decision to be more ruthless with regards to harvesting.

This experience was the catalyst the participants needed to take responsibility for decision making processes, thereby stamping their sense of ownership on the project. Other hard decisions were to follow such as how to divide up the produce and what to do with surpluses. Some participants were disgruntled with one of their colleague who was seldom available for work but always managed to put in an appearance when vegetables were being harvested. The group tolerated this situation for a while but eventually, following an impromptu meeting, a decision was made that everyone should at least try their best in exchange for food. As a group we were not entirely comfortable with imposing rules on participants but felt it was justified. As one participant remarked, 'I couldn't not make a contribution and still take a share of the veg'. Teig et al's (2009) participants overcame these types of scenarios by implementing schedules to facilitate regular garden tasks such as watering and weeding. While we did not pursue this more formalised approach, there is now at least, a verbal agreement in place, which stipulates that an honest effort is required in return for produce.

In relation to surplus produce, while the facilitator and the Family Support Centre Management were responsible for hatching the idea of setting up a shop, the implementation of this idea was left very much in the hands of the participants. A meeting was held during which it was decided that two of the women, Sue and Dolores, would look after sales while the rest of the participants would be responsible for harvesting and ensuring that the vegetables reached the shop on time and were of the desired quality. This created a new dynamic whereby participants were officially responsible for separate but related tasks in their roles as shopkeepers and suppliers. As

vegetable sales increased, the shopkeepers became more ruthless in their demands regarding what to harvest. Heated negotiations took place between the shopkeepers who were determined to have as diverse and visually appealing selection of vegetables as possible, and the suppliers who were in favour of retaining for their own use any vegetables that could be stored. Below is a sample, adapted from my field notes, of some of the exchanges and interactions that take place, while a harvest is in progress, in preparation for the shop.

The garden is a hive of activity as today is shop day. Dolores and Paul are discussing which vegetables should be harvested for today's sale. Paul is saying something about lifting radishes before the slugs get them. Dolores harvests some beetroot. Shane emerges from the polytunnel carrying a half full bucket of french beans. He is telling Sue that he cooked some of the beans over the weekend and that they were very good. Onions, butternut squash, aubergine, cucumber, lettuce, cabbage and herbs are also harvested. 'Should we bring some carrots and potatoes', Dolores wants to know. Paul is not keen on this. Traditional vegetables like carrots, parsnips, potatoes and turnips are much more highly prized than some of the less familiar, often visually fetching vegetables like butternut squash or aubergine which some participants would be less keen on eating. As well as being the foods of choice, these vegetables keep fairly well and provide the prospect of free vegetables long into the winter months. 'They'll keep for another while in the ground' Paul argues, 'let's just bring what needs to be used for now'. Sue looks less than happy, 'there was people looking for carrots last week' she says. It is clear that Sue and Dolores who will be selling the produce want to have the best possible display, but Paul is holding his own, 'we'll sell some later on when the perishables are gone otherwise ye will have nothing to sell in a few weeks'. The women consider this for a few moments and seem happy enough with Paul's rationale.

Though this may seem like a trivial bout of exchanges, it should be acknowledged that just a few months previously the participants had very little input or opinion regarding day to day decision making at the garden,

allowing themselves instead to be guided by the recommendations of the facilitator. The group have also had to make some very tough decisions in relation to the philosophy of the garden. On one occasion the group threatened to boycott the garden if a FETAC course was imposed on them at the request of one of the funding bodies. The group objected on the grounds that it would interfere with the social and recreational dividend of the project. On another occasion, the group resisted suggestions by the family support centre that the garden might be shared with other groups. The decision to oppose was not taken lightly but borne out of a genuine concern that their role would be diminished to maintaining the garden for other people's use. The group also argued that there was no interest from other groups when all the hard physical work was being carried out with one participant remarking, 'we didn't see any sign of other groups when we were up to our knees in muck last winter'.

In relation to the terms of use of these types of gardens, Teig et al's (2009) study participants spoke repeatedly of established rules and regulations that gardeners were expected to follow as well as patterns of behaviour that were acceptable within the garden. On a number of occasions prospective members have approached our group and expressed an interest in dividing the garden into allotments for personal use. This suggestion is always met with outright disapproval. 'Absolutely not' argued Dolores on one particular occasion, 'this is about the group and everyone has to pull together, if one person gets an allotment others will want one and then what will happen to the group?' Other, more seasoned members of the group allowed themselves a wry smile in recognition of the opportunism for they have been there long enough to know that interest from outsiders almost always occurs during high summer when the donkey work is done and the garden is at its most breathtakingly beautiful. It should be pointed out that this position is not an altogether positive arrangement and does contradict the participants expressed views regarding community integration. This lack of enthusiasm or indifference towards recruiting new members also raises questions about the long term sustainability of the garden. How can a balance be achieved? Gardens need to recruit in order to replace retired or former members, but it

is also important that future members are prepared to buy into the prevailing philosophy in order to ensure the continued harmony of existing members. A skilled facilitator should be able to manage this situation by vetting potential members and reassuring existing members that their contribution is not being devalued.

Leadership and facilitation

A key feature of the dynamics at our Community Garden was the willingness with which some participants embraced roles of leadership and facilitation. Previous research has also identified that helping and teaching others how to garden are important aspects of the community gardening experience. The studies do not go into any great detail regarding this process and the suggestion seems to be that this is a purely altruistic dynamic which revolves around one group or individual giving or sharing with another group or individual. The following piece, adapted from the researcher's diary, while not wishing to convey an overly cynical presentation of the helping dynamic does seem to suggest that there can sometimes be clear tensions between the individual and the social self.

The group are congregated in the polytunnel for a seed sowing tutorial. They listen attentively and with a little nervous apprehension as the facilitator informs them of the different processes, techniques and dilemmas associated with sowing different varieties of seed. What type of seed tray? What type of compost? How far apart to plant the seeds? How deep? Not too much water and don't forget to label with the name, variety and date. The participants appear content initially to watch a couple of practical demonstrations by the facilitator. Then, tentatively at first, the group attempt the task in stages under the guidance of the facilitator. With growing confidence, the group then complete the task unassisted. It is always at this stage, when some participants are getting the hang of it while others are still learning that it develops into a free for all. The dominant members of the group take over, often doing more than their fair share at the expense of other, less assertive members. It seems as though the rationale for this less considerate approach is to establish ones position in the pecking order of the group. Only when the

participants have established that they have mastered the task do they turn their attention towards helping their struggling colleagues often in response to prompting by the facilitator.

This dynamic permeated many aspects of the gardening experience during the first year of this project. Paul did not want any help thinning carrots in case 'it wouldn't be done right'. Likewise, Sue was unsure of her colleagues in relation to weeding the herb patch, 'I like to do it myself because you couldn't be sure that some of the others wouldn't be pulling flowers instead of weeds'. During the lifetime of this project however, facilitation between participants has evolved, bringing a gradual shift away from this individual approach to become progressively more caring.

Figure 10: Working together

Prompting, encouragement and persistent narrative regarding group philosophy on the part of the facilitator is only partly responsible for this shift. In addition to the facilitators influence, it is suggested that the physical and social qualities of the community garden experience created an emotive dynamic between participants whereby stories were shared, and needs and vulnerabilities identified. For instance, when participants heard Shane talking about his house feeling like a prison or about having nothing to do except

watch television on his own all day or saw the anguish on Sue's face when she spoke of the loneliness, anxiety and depression of a life spent mostly in solitude, they seemed genuinely concerned. The more assertive participants who were once competitive and possessive with regards to sharing the workload began to recognise the importance of their role in promoting inclusion.

Most days at the garden, Paul and Shane would be found working together with Paul stopping occasionally to impart nuggets of wisdom or to explain patiently the purpose of a particular task. On one occasion when the weather was cold, wet and stormy Paul talked the group into staying long enough to do a few small jobs and have a cup of tea. Afterwards he confided that he wouldn't have minded going home early but felt that some of the participants needed the stimulation. Likewise, Myra was always mindful of the needs of others in relation to social and physical engagement, 'I try to make sure that everyone has something to do and that people are not standing around bored'. Myra's thoughtful approach was often at the expense of her own enjoyment as there were times when, by her own admission, she would have preferred to be, 'doing my own thing in the herb patch'. These findings are consistent with other studies including; Gaffey (2012), (Share 2006), Sinang (2002) & Waliczek et al (1996), which identified how opportunities to embrace caring, leadership roles can be an important aspect of community gardening for some participants. Maidment & Macfarlane (2011) and Schwarz & Yair (2010) showed that this facilitation dynamic can be an important feature of craftwork initiatives also.

This functional interdependence might be what sociologist Emile Durkheim refers to as 'organic solidarity' (Macionis & Plummer 2002 p85). As a seasoned community gardener and craft worker, I would like to suggest a few ideas as to where this appeal lies. Firstly there is the feel-good factor associated with helping and being nice to those we care about and the sense that helping others is the right thing to do. Another consideration is that facilitation and leadership duties often provide participants with a platform to display their own skills and knowledge thus confirming their position in the

hierarchy of the group. Finally, from a personal point of view, facilitation duties have helped me to hone my skills and build on my own horticultural and craft work knowledge over the years.

Independent fund raising

One of the proposals put forward by the researcher when developing the garden was that over time the group would aspire to become largely self-sufficient in relation to funding. This proposal was fully embraced by the participants to ensure that this goal could become a reality. As mentioned previously, a weekly shop was set up to sell vegetables throughout the growing season. In addition to this, significant funding was raised at the Christmas fair from the sale of craftwork produced at the garden during the winter months including; slate clocks and mirrors, Christmas logs and Christmas wreaths. Herbs propagated during the winter months were sold throughout the year while fruit trees grafted at the garden will be grown on for two years before eventually being sold also.

The participants' attitude to fundraising was all the more remarkable considering that the group was already fully funded. When quizzed regarding their motivations one participant responded, 'this way we are contributing towards the cost of the garden and that is good for the group'. Others nodded in agreement as the oldest member of the group seemed to capture their thoughts in a nutshell, 'nobody ever has any value on a thing when its handed to them on a plate'. Most of the funding raised was used to pay for basics such as seeds, plants, compost, petrol for the lawnmower and other basic essentials throughout the year. The remainder was used to pay for the once yearly recreational excursion including a meal for all involved. This finding shows how the collaborative actions of participants can help to promote positive attitudes in relation to independence and empowerment. This brings us on to our next stage in this research which will explore the physical and mental health implications of community gardening.

Food for the body, food for the mind

In the previous section, when describing a typical day at the community garden, I was at pains to paint an idyllic picture of life at the community garden. Though no mention is made of weather, the reader probably finds it easy to imagine the sun shining as the group congregate around the fire laughing and talking as they drink their tea. And at the end of the shift as the participants stood back and basked in the beauty of the garden the reader will be able to conjure up images of apple trees laden with fruit, of peas climbing up supports, of lushness, vigour, vibrancy, colour, texture, smells and sounds. Certainly there were days like this at our facility, when the sun was shining, the garden was lush and lovely and everyone was happy. But the sun was not always shining and for most of the year the garden was aesthetically unremarkable. Cold winters, wet summers, thin soil, heavy ground conditions and an exposed site ensured that gardening at the project was seldom less than challenging. Despite these demands, over the last three years, the same core of participants have persevered doggedly with their task, rolling up their sleeves and getting stuck in whatever the weather while others have come and gone.

This section explores the relationship between the garden and the body beginning with the physical implications of community gardening. Exercise and diet, experience of weather and engaging with physical challenges will be discussed here. These findings go some way toward illuminating the motivations, costs and rewards associated with engaging in physically demanding and often relentless tasks. I will also identify the role community gardening can play in relation to food poverty, paying particular attention to the perceived health benefits associated with the combination of higher consumption of fresh fruit and vegetables and regular physical exercise. The ways in which weather affects not only plant health but can also have a significant bearing on the physical and psychological experience for participants will be assessed in great detail here also.

These findings go on to explore the mental health and cognitive implications for community garden participants. I will begin by identifying the hunger for

knowledge and learning that permeates almost every aspect of the community gardening experience. The reader will be taken on a unique tour of the highs and lows of a variety of learning experiences in an effort to provide a sense of the value of learning and skills development in relation to the overall community gardening experience. I will also examine the role that the garden can play with regards to providing participants with a sense of purpose and of the importance of this in relation to mental health. As mentioned previously, one of the common threads of these findings is that the culmination of the social, physical and learning processes can directly impact participant mental health in areas such as self-esteem, stress relief and appreciation for life through their active involvement with nature and it is in this here that these ideas begin to come together.

The physical implications of community gardening

Experience of the physical challenges

The variety of physical tasks undertaken by the participants over the course of a calendar year is extremely diverse with each task presenting its own unique set of challenges and rewards. Share and Duignan (2005) proposed in their recommendations that the physical experience of community gardening should be viewed as a positive aspect of these types of initiatives both in terms of the enjoyment they provide and also for the physical exercise implications. Armstrong's (2000) study participants identified perceived health benefits gained from keeping active through gardening tasks and also expressed the views that this was an important motivating factor regarding participation This section will explore some of the less glamorous tasks at the garden such as mowing, weeding and digging as these were the tasks that often demanded the most strenuous physical challenges for what may have seemed like, on the surface at least, little or no reward.

Perhaps the most unpopular task of all was keeping on top of grass cutting. This became increasingly the case from July onwards as growth accelerated and the lawnmower made a weekly experience. Participants complained about the effort required to keep grass growth under control. Paddy, eager

and enthusiastic about using the lawnmower early in the summer now complained that it made him tired and dizzy and that the noise gave him a headache. Shane complained about the blisters on his hands while Paul remarked after one wet warm spell when growth was particularly rampant that, 'it's hard enough to keep on top of my own without having to do this one as well'. And perhaps this is part of the problem. Many participants had their own lawns at home therefore mowing the lawn was nothing special. Yet, participants consistently pushed their physical boundaries as though in grudging acceptance that this was a necessary task. And the rewards were immediate. 'Instant results', Paul remarked. 'This is what makes the garden' said Dolores proudly, 'it sharpens everything up and makes the whole place look tidier'. And this was certainly true; everything seemed to stand out more against a freshly cut lawn. The fruit trees looked taller, the cabbages greener and the flowers more vibrant.

Figure 11: Mowing the lawn in splendid isolation

On the physicality of the work, despite the complaints, Paul believed that these types of challenges were essential to his wellbeing on the grounds that they kept him fit and allowed him to go home feeling fulfilled in the knowledge that he had 'a good days work done'. This is the same dynamic that Hale et al (2011) and Teig et al (2009) allude to, when they suggest that the relationship between the garden and the gardener is a mutually beneficial or 'reciprocal' one whereby the gardener nurtures the garden and is nurtured in

return. This logic could also be applied to Sue who began volunteering for lawn duty following advice from her doctor, 'I need to lose a bit of weight' she announced earnestly one day, 'Doctor's orders'. Sue pushed herself hard and often remarked on the 'lift' she got from a half hour spent mowing the lawn and the satisfaction drawn from, 'working up a sweat' in this way. Shane, despite his blisters would just shrug his shoulders as though to say, 'it has to be done'. With his easy going manner his attitude to work was always the same, 'I don't care what I do so long as I'm busy'.

Some of the other more physically demanding tasks undertaken by participants included weeding and digging over beds. These tasks though heavy and backbreaking were not treated with quite the same antipathy as mowing and brush cutting work. Brush cutting and mowing is noisy, solitary work, while weeding and digging tasks could be undertaken as a group or in pairs thus providing opportunities for socialising. This seemed to be a factor in relation to making this type of work more endurable. The following piece adapted from the researchers diary shows how this might happen.

Paul and I spent the morning weeding the 60 foot long raspberry trench. The first 10 minutes seemed like an eternity. Progress was excruciatingly slow as this was a long neglected task and the weeds were very deep rooted and stubborn. As we settled into the job we began chatting. Paul recalled a childhood spent growing up on a farm weeding much longer trenches than this one. He remembered that the farms at that time were very small but much more diverse than the farms of today. His family grew all their own vegetables and other crops such as wheat, oats and barley. Some crops such as mangolds were used exclusively as animal feed. They kept chickens, sheep, pigs, cattle and an old Shire horse who helped with the heavy work. Now his Nephew runs the farm. The acreage has increased over the years but the chickens, pigs and sheep are gone while heavy machinery has replaced the horse. Like all of the neighbouring farms, the only crop that is grown now is grass to feed cattle. Paul believes that the countryside is worse off as a result of this transition. Fields that were once a patchwork quilt of colour from the diversity of crops, now all look the same. Those same fields,

once teeming with men, women and children are mostly empty now save for a few cattle and a farmer on a quad who makes an occasional hurried visit. On and on the conversation went until we reached the end of the trench and neither of us could believe that a full two hours had elapsed. Paul remarked how much easier and more enjoyable the work seemed when 'having the chat'. Who would have thought that a job which had been avoided for so long would prove to be so rewarding?

One of the interesting things about the above passage is that Paul, despite being a good talker, was normally a very private man not given to divulging personal information lightly. During the tea break he might be heard discussing all manner of local events, sport and gardening issues, but personal exchanges would only occur while he was in work mode. Perhaps the global motto of the Men's Shed's movement can shed light on why this might be so.

'Men don't talk face to face, they talk shoulder to shoulder (Golding cited in Irish Men's Sheds 2014 p1).

As with lawn mowing tasks, the rewards for digging, weeding, planting, harvesting and various other physical tasks differed from person to person. For some, it was the sense of fulfilment from the sheer physicality of the work, often represented by statements such as, 'there is a lot to be said for hard work' and 'this will keep me fit', or 'this is my kind of work'. For participants with mental health issues, work might bring a welcome relief from anxiety associated with neglecting tasks, 'I am glad that's done, those weeds were catching my eye every time I passed' or 'it looks bad from the road' and, 'I would hate anyone to see it like this'. For others, particularly those who lived alone, they just seemed happy to be occupying their time, doing anything that might keep them out of the house for a little bit longer, thus shortening the time they spend in isolation.

It should also be pointed that as the project evolved, individuals and smaller groups of participants assumed responsibility for certain tasks within the garden. Though not solely responsible for these tasks, it was their lookout so to speak. For example, while everybody participated in keeping the grass cut,

there was always an expectation that Paul would ensure that this task did not get neglected. He would know when were due a spell of prolonged wet weather which might have prevented us from mowing and would organise the troops accordingly. In fact Paul would generally be found at the coalface whenever there was heavy work to be done. He would often be heard reminiscing about a lifetime spent engaged in hard physical work at his local sawmill and of his ability to meet the challenges of this type of work. Throughout the duration of this research, Paul, despite being the oldest member of the group remained determined to express his physicality and it was to Paul that the rest of the group would go to for help and guidance in relation to physically challenging tasks. Paul was known as the man to get things done within the garden. He revelled in this reputation and enjoyed being the first point of contact when heavy physical challenges presented themselves. This finding fits in well with the social identity construction theme in so far as fulfilling perceived gender based obligations presented Paul with an opportunity to positively reinforce his masculinity (Meek 2008).

Sue can also shed further light on the ways in which fulfilling perceived gender based obligations can help to establish and bolster social identity. Occasionally Sue would feel comfortable enough to discuss very personal issues such as her struggles with anxiety. Implicit in these discussions is the message that she is a caring mother who prides herself on being a fighter and a survivor who refuses to give in to her anxieties. During tea break one morning, Sue recalled an incident following the break-up of her marriage when her social worker sent a home help around to her house. 'I really resented her being there and after a while I asked her to leave. I said to her, I'm an independent woman, I raised a family and I don't need anyone to tell me how to clean my house'. As though to illustrate this point, Sue was the tidiest person at the garden, always ensuring that the social shed was clean and tidy and that the cups were washed. Sue could usually be relied on to ensure that the general appearance of the garden was neat and tidy. On rare occasions when pruning or weeding tasks were neglected due to other work commitments, it was generally accepted that Sue or Dolores would eventually get around to doing it.

The combination of social and physical qualities associated with garden tasks provided ample opportunity for participants to not only talk about who they are and what they are about, but also to express themselves through their deeds, actions and contribution within the garden. Crawford (2006) has also spoken extensively on the valuable role that physical work and manual competence can play in promoting personal growth and shaping and maintaining identity. The above passages also suggest that community gardening can provide scope for the practices of behaviours considered acceptable and desirable within a particular gender. This also fits in well with our social identity construction argument in so far as fulfilling perceived gender based obligations such as heavy physical work in Paul's case and tidying tasks in relation to Sue and Dolores, presents an opportunity for them to positively reinforce their masculinity and femininity respectively (Macionis & Plummer 2002). The next section, in keeping with the physical health theme looks at the participant's relationship with food and identifies how this relationship has evolved during the lifetime of this research.

Figure 12: Collective weeding in the herb patch

Response to food poverty

When discussing food poverty, it is important to be aware that this issue concerns not just affordability, but also availability, accessibility and awareness (Healthy food for all 2015). Studies suggest that one of the most

rewarding outcomes of community gardening is that it provides easy access to fresh, affordable vegetables (Share & Duignan 2005; Share 2006; Waliczek et al 1996; Sinang 2002 & Armstrong 2000). From April onwards, starting with the first tender lettuces, vegetables continue to be harvested right up until December when the last of the Brussels sprouts are plundered for the Christmas dinner. Family meals are planned around what is seasonal or available in the garden on any given day. For the carnivores, this means selecting a cut of meat to suit the vegetables as opposed to the previous strategy of choosing vegetables to accompany the meat. In essence, the vegetables have become the star attraction and dictate what we will be having for dinner. The following examples show the simplicity of this arrangement.

A) *The mornings work is done and Sue is surveying the garden to see what is available. It is still quite early in the year so the pickings are slim. She ignores the lettuces and spring onions which have been a staple of late and asks Paul if the cabbage is ready yet. Paul takes out his pen knife and harvests two young cabbages, one for Sue and one for himself. Sue accepts the cabbage and digs up a few new potatoes, 'a bit of bacon will go nice with that lot' she says. Sue and Paul briefly discuss cooking methods and both are agreed that the cabbage should be cooked in the bacon water for extra flavour. As she heads towards the gate with her ingredients having said her goodbyes, she pauses momentarily as though considering something important, then turns around and walks hurriedly back to the herb patch where she pulls a few sprigs of parsley, no doubt to make a parsley sauce to accompany her bacon and cabbage, as is traditional in this corner of the world. She then salutes to the group, resumes her journey and is gone.*

B) *Paul heads down to the vegetable patch to stock up on vegetables for the weekend. He is armed with a shovel, a secateurs and a shopping bag. It being September, there is an abundance of late cropping*

vegetables ready and he is spoiled for choice. He pulls up a good sized swede, lays it on the grass and cuts off the stalk and the root with the blade of the shovel. Next he pulls some carrots and parsnips and cuts the tops of before putting them in his bag along with the swede. A few good sized potatoes are then added to his growing collection of roots. He walks to the shed where the onions are being stored and helps himself to a few of these also. He comes back down to the outdoor cooking area where the rest of us are sitting chatting, holds up his bag proudly and tells us that he will be stopping at the butchers on his way home for a bit of round steak to make a nice beef stew. The rest of the gang nod approvingly and some offer culinary tips regarding how long to stew the meat and what herbs to use. Paul had forgotten about the herbs and traipses back down the garden for some rosemary and thyme.

Relying on a diet of seasonal vegetables might paint an impression that the participants were somewhat restricted in their food choices. However, this would seem to be far from the case and participants regularly testified that their diet has never been more varied. Indeed, the experience of cooking and eating new and unusual food was a recurring theme within the garden, and brought a touch of worldliness to the experience. Unlikely as it seems, Shane who lives on his own and does all his own cooking had never cooked a cauliflower before joining the group, while many of the group members acknowledged that they did not even know the names of a lot of the less traditional vegetables prior to joining the group. Courgettes, kale, fresh sweetcorn, oriental greens, chard, runner beans, spinach and butternut squash are just some of the vegetables that participants would previously have been relatively unfamiliar with.

Preparing and cooking of these vegetables was often achieved via a medley of improvisation, experimentation and word of mouth. Someone might hear of a recipe or know someone who knows what to do with it and the results would be brought back to the group. Paul did not know what to do with

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butternut squash but his daughter showed him how to make butternut squash soup which he thought was delicious. On another occasion, Myra brought in some fennel tea which everyone enjoyed. The vegetable shop was a good place for picking up tips also. Sue and Dolores would often ask customers how they planned to use certain vegetables. Various recipe ideas and cooking techniques such as roasting aubergine and courgettes and stuffing butternut squash were reported back to the group. Sharing recipes and techniques in this way has helped to promote a more swashbuckling, adventurous attitude towards food within the garden. Other researchers including, Share (2006), Share and Duignan (2005) and Lee (2002), also highlighted that being able to access hard to source vegetables and experimenting with new and unusual food experiences were both important aspects of the community gardening experience. Cookery and nutritional education classes were important components of the food projects under research by Share (2006) and Share and Duignan (2005). This was discussed with our participants who expressed a good deal of interest in going down this road also but unfortunately this was not achieved due to time constraints.

Despite the absence of a definite focus in this regard, the participant's attitudes towards food has evolved significantly over the duration of the research. Prior to actually experiencing the flavours of the garden, participants would have smirked or rolled their eyes at the notion of eating butternut squash or drinking fennel tea. Even attitudes towards traditional vegetables seem to have changed since joining the group. Early on in the project, the prevailing attitude was one of indifference along the lines that a cabbage is just a cabbage, regardless of where it comes from, but as the group became more knowledgeable regarding food, an increasingly thoughtful analysis began to emerge. Participants began to notice differences between their vegetables and shop bought vegetables, like the way their tomatoes, carrots and parsnips became shrivelled and wizened in storage while shop bought produce seemed to keep its shape forever before finally succumbing to black mould and fungus. Participants began to question how vegetables could only be grown at certain times of year in the garden but

were available in the shops all year round and, how much of the freshness of shop bought vegetables could be attributed to the use of preservatives. Food knowledge and an awareness of the bigger picture regarding food production and consumption featured prominently in Share's (2006) and Share and Duignan's (2005) evaluations also.

Almost unanimously, participants acknowledge that they eat more vegetables now than they did prior to joining the garden. Other studies including Litt et al (2011); Zick et al (2013); Share (2006) and Share and Duignan (2005) also highlight increased fruit and vegetable consumption as a positive health related behaviour much associated with community gardening. For some participants, freshness and taste was key and there was a general feeling that our produce was of a higher quality than shop bought vegetables which it was felt lacked taste or were simply 'not the same'. Dolores argued that the garden produce 'even smells different'. Sue had this to say, 'I love fresh vegetables and I eat a lot more since I got involved with the garden. Some vegetables like beetroot I would have only eaten pickled out of a jar. There's no comparison between sweet fresh beetroot and the other stuff'. Participants of Waliczek et al's (1996) study were also of the opinion that their vegetables tasted superior to shop bought vegetables. Another explanation for the increased interest in eating vegetables might be that participants felt obliged or compelled to eat what they produced. One participant remarked, 'I used to buy vegetables all the time and end up not using them and they would go off, but when it's your own veg it's different, you would hate to see them going to waste'. Incidentally, not all participants were as enthusiastic about the availability of fresh vegetables. Shane was very interested in the process of growing vegetables and admired the aesthetic qualities that vegetables bring to the garden yet remained mostly indifferent towards eating them. Brian would occasionally eat a few strawberries or tomatoes out of his hand as he worked but usually declined offers to take home his rightful share of the produce. The next paragraph will examine some of the implications of increased vegetable consumption.

While our study has not been designed to measure the health benefits associated with increased vegetable consumption, some participants have, nonetheless, articulated how higher intake of fruit and vegetables has had a positive impact on their sense of physical well-being. This is a view shared by participants of Share's (2006) and Lee's (2002) studies who reported feeling healthier as a result of higher consumption of fruit and vegetables. In relation to our participants, Paul who has been diagnosed with diabetes has made significant lifestyle changes since joining the garden, 'I always liked my vegetables but I eat a lot more of them now'. Paul gave up eating junk food and also began cycling to the garden. Paul believes that the opportunities presented by the garden in relation to exercise and diet have had a positive effect on his health. Sue agreed with Paul's analysis, 'Definitely, I feel way better now, better diet and more exercise. I have high cholesterol anyway and am under strict instructions to make changes so this is great'.

Influence of weather conditions on gardening experiences

There has been very little research carried out regarding the impact of weather on the community gardening experience although participants of Share and Duignan's (2005) study identified working outside as one of the best things about being involved in their community food project. The combination of working out of doors where there was access to fresh air and direct contact with soil and nature was found to be relaxing for participants. Ironically, working outside in the rain was reported as being one of the worst things about the project also. When I first began to consider the relationship between community gardening and the weather, the issues that immediately sprang to mind were all related to horticulture, like the disappointment felt by the group when a late frost burnt all our early potato stalks, or annoyance that the lawn became overgrown when a prolonged period of rain prevented us from mowing it. The summer of 2014 was uncommonly hot and dry for this part of the world and many of the young fir trees in our Christmas tree plantation died from the lack of water. Conversely, in 2015 there was too much rain and the damp conditions created fungal issues which affected the growth of pumpkins, courgettes, melons and strawberries. However, a more

thoughtful analysis of the field research shows that these types of challenges and disappointments are usually easily dealt with. Participants will gather round the affected plant and shrug their shoulders philosophically as if to say, 'it's not our fault, we can't do much about the weather' or point to the cabbages and say, 'look how well they're doing with all the rain'. Someone might even suggest that this is a blessing in disguise since the introduction of water charges, as more rain equals less watering therefore less expense. Cold weather is generally considered more tolerable than wet weather with a general sense that hard frosty weather is healthy and helps to sterilise the soil. As one participant remarked, 'no harm to get a proper winter for a change, the bit of frost will do our soil all the good in the world'.

Figure 13: When the weather is good

Of far greater significance would seem to be the direct impact of weather on participant wellbeing. Paddy did not like the cold or the rain and avoided the garden unless the weather was dry and warm. Paddy might not be the best barometer to use a pun, as he often seemed reluctant to inconvenience himself in lots of ways. Wet weather had a very negative effect on Sue's physical and mental wellbeing. She often became depressed to such an extent that she could not find the motivation even to leave the house thus compounding her feelings of depression. Indeed, Sue's demeanour at times

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like these, if she did manage to find the resolve to attend the garden often seemed to resemble the weather. If one can imagine weeks of dark, dreary, persistent drizzle and dampness and then try to imagine Mary arriving at the garden having spent the previous weeks cooped up in the house alone and depressed. Dark shadows under her eyes, crying profusely, apologising for her behaviour, threatening to leave, begging to stay and grasping for all and every support that the garden can offer. The overall impression was one of oppression and bleakness mixed with anxiety and despair. At times like this the participants would rally around offering words of encouragement and support. When the sobbing eased, someone would help her to her feet, place a weeding trowel in her hand and Sue would reluctantly oblige. Work seemed to be a great distraction at times like these.

Shane suffers from depression, which can be exacerbated by cold or wet weather and often presented at the garden in very low spirits, sometimes struggling to speak to or even make eye contact with the other gardeners. Though he would be neither as visibly emotional nor as vocally expressive as Sue, I would often be left with the impression that there was great inner turmoil beneath the seemingly calm, quiet façade. Shane, like Sue, usually brightened up when work started, 'sometimes the hardest part is getting here. It's not too bad once you get this far'. Though often a deterrent, the rewards for braving inclement weather can be significant. One participant had this to say during a prolonged cold, wet spell when morale was low and the collective effort of the group was beginning to flag, 'We have to keep it going, it's hard when the weather is like this but at the same time it's more satisfying if it's a challenge'. And on a nice sunny day when the garden looks particularly lovely and the group sit around the fire, drinking tea and savouring the ambience, Paul will remind the group of our first winter here when we were trying to get the garden established; about the months spent up to our knees in muck, in the rain, the snow and the wind, almost ready to throw in the towel and walk away, almost broken. And then he will look from one participant to another, point towards the garden, shake his head in wonder, and with pride and emotion in his voice ask rhetorically, 'Did we ever think when we started here that we would end up with a garden that looks

like this?' This brings us on to the next section which will examine more closely the emotional and cognitive implications of community gardening.

Psychological well-being and cognitive functioning

In the previous section, we looked at the often physically demanding and at times fickle relationship that exists between the participants and the garden. We discussed the rewards and challenges associated with carrying out heavy, physical work that often seemed to be relentless and uncompromising. We spoke of how the limitations and resolve of the group were often tested to their utmost by inclement weather and challenging ground conditions. In essence, it was an exploration of the hard slog, of a battle that was fought more often by brawn rather than brain, by doggedness, self-determination and pride rather than skill, creativity or finesse. In this section we will change tack by exploring the cognitive processes associated with working in the garden and ask whether the culmination of these processes can directly impact upon the participant's psychological health in areas such as self-esteem, stress relief and appreciation for life through their active involvement with nature. Regarding psychological health issues and implications, it is acknowledged that there is much overlapping between this section and other sections and I will do my best to pull them all together here.

The quest for knowledge

Permeating the community gardening experience, whether operating amidst lush summer growth or deep in the depths of winter, is a hunger and appreciation for knowledge of all things horticultural and a desire to learn new skills. Even the most menial of tasks such as weeding have the potential to stimulate and arouse immense curiosity. If a strange weed is spotted a barrage of questions are likely to follow; what is it called, is it invasive, how did it get here, did it self-seed from the local environment or was it brought here via imported topsoil and manure? Straightforward tasks like mowing the lawn are put under the microscope to be analysed, often over a pot of tea. When does grass start growing, when does it stop, how much grass can we put in the compost heap, what happens if we don't collect the grass, does the

wet weather promote moss, how do you get rid of moss. Participants often become animated as different philosophies are discussed and tried and trusted remedies passed down from dead relatives are proposed. And like great scholars putting the world to rights, the tea break often drags on and on and the mowing of the lawn is postponed for another day. These types of interactions suggest that the accumulation of horticultural knowledge is often an innate, naturally occurring phenomenon as opposed to a conscious, thought out process. Attainment of plant knowledge is a feature of similar studies including; Gaffey (2012); Share (2006) and Share and Duignan (2005).

Skills development

Underpinning the community gardening experience was a desire to evolve knowledge, manifested in the procurement of new skills. Growing season activities often presented a different learning experience to dormant season activities. Participants were already familiar with many of the concepts associated with some semi-skilled tasks such as seed sowing, potting on, and planting out. Participants understood that if you sow a seed it should germinate and if you planted a small cabbage it should grow into a big cabbage. These are the types of tasks participants expect to be doing when they join a community garden. As such, they were often approached with a confidence and bravado that belied their knowledge and expertise and it often became quickly apparent that the participants had only a vague understanding of the processes involved. Lack of patience and an unwillingness to wait for guidance from the facilitator, absence of clear planning, and a failure to abide by the group ethic often resulted in these types of tasks being done surprisingly badly. The following passage adapted from the researcher's notes demonstrates how this can happen.

The facilitator is trying to organise the participants. He wants them to measure out and prepare all the beds prior to sowing seeds but nobody is listening. Already they are opening seed packets and emptying the contents into their hands. Some participants don't have the dexterity for handling smaller seeds. Round seeds like cabbages and broccoli roll around in their

hands and slip through their fingers to the soil below while light seeds like carrots and parsnip blow away in the wind. Once participants get to grips with the handling, they then realize that they should have marked out the drills first before they took out the seeds. Someone with a free hand consults the packet, how deep, how far apart, how much distance between each row. In an ideal wold, the participants would work together as a group marking out all the drills in advance, making sure they are neatly done and evenly spaced. The seeds would be sown at their required spacing's, with each drill being finished to completion before moving on to the next in order to avoid confusion. Instead, a free for all develops as participants push past one another, jockeying for position around the beds. There is no structure and no communication as each participant starts doing their own thing. The result is chaotic. Measurements are being taken from both ends of the bed. Some rows have nine inches between them and some have four. Nobody knows which rows are fully seeded and which are not. 'Did you do that one?' 'I thought you did it'. 'The seeds are too dark and I can't tell for sure'. Afterwards the group seem a bit sheepish. They regard themselves as relatively skilful gardeners but are disappointed with their performance and agree to organise themselves better next time around.

But similar scenarios occurred throughout the summer. On familiar ground, participants repeatedly abandoned the careful planning and structure that seemed to work so well with less familiar learning tasks. This was often a less than thoughtful dynamic as the more assertive participants tried to do more than their fair share at the expense of the more reclining participants as though competing for the accolade of best worker, most skilled and most knowledgeable. This competitiveness almost always resulted in a diminished standard of workmanship as group structures collapsed and planting patterns were lost. This raises a very interesting question regarding group cohesion and the dynamics of collaborative work at these types of community based social initiatives. Can these projects govern themselves in a way that promotes equality regardless of ability and, how can the more robust participants be prevented from imposing themselves to the detriment of others? It is acknowledged however, that the passage of time did help to

create a more caring dynamic within the garden whereby participants became more thoughtful and considerate with regards to sharing work and helping others.

Figure 14: Senior member showing how it's done

The learning dynamic changed significantly for less familiar activities of the type often carried out during the dormant season. Tasks like fruit tree grafting, soft fruit and herb propagation, wreath making and willow sculpting were completely new to participants. These tasks were very eagerly anticipated also but were approached in a much more cautious and attentive way. In relation to fruit tree grafting, participants were very much uninformed and were therefore willing to place themselves entirely in the trust of the facilitator. What is a rootstock, what is the purpose of a rootstock, why are apple trees not grown from seed, what is a cutting, how do you take a cutting? Though fascinated by the whole idea of grafting, participants were sceptical about their abilities to carry out the task, seeing it as beyond the skillset of ordinary gardeners. The participants were watchful and vigilant while the facilitator demonstrated the techniques involved. This patient, respectful demeanour was in direct contrast to the bullish approach often taken to more familiar tasks. One explanation for this is that the uniqueness of the task places them all on a more equal footing to begin with. The passage below outlines the main techniques and processes involved.

First the rootstock is pruned to the correct length. A variety is then chosen to graft on to the rootstock. This involves taking a cutting six inches or so in length from any of the apple trees in the orchard. The main stipulation is that it must be from last year's growth. If the wood is any older than that, the graft will not strike. The bottom of this cutting is then pared into a wedge shape. A vertical cut is made in the rootstock to accommodate the wedge end of the cutting. The cambium layer of the cutting must be touching the cambium layer of the rootstock. This is a delicate task and the wedge might have to be offered and re-pared many times before it marries up. Once a union is struck, the graft is bound tight using grafting tape. The participants work in pairs to achieve this, one holding the graft union in place securely so that it doesn't slip while the other wraps and ties it with the grafting tape. The grafted rootstocks are then labelled and planted in a prepared bed where they will be allowed to develop prior to being sold as two year old trees.

In relation to learning, grafting and propagating tasks were placed on a pedestal above all the other tasks within the garden. It seemed so unlikely to participants that a piece of wood could be severed from one plant and reattached almost surgically to another, 'like magic' said one participant. Or that new soft fruit bushes could be raised by pushing cuttings of new wood into well tilled fertile soil. Or that long willow poles severed from the dormant parent plant, before being pushed into the ground elsewhere and bent, twisted and manipulated into a variety different shapes would green up in spring to form a healthy, living sculpture. Even more incredulous was the realisation that that they had the capacity to carry out these tasks. There was a definite sense that this amounted to highly skilled work. As one participant articulated proudly, 'more a job for professional nursery workers and not ordinary gardeners like us'. This is not to suggest that this type of work is better or more enjoyable in a general sense than growing season tasks but rather that the skills, knowledge and theory involved are less mainstream and therefore more valued and appreciated as a result.

Perhaps it is the uniqueness of these challenges that separate them from the rest, the sense that they have done something a little bit different and are in

possession of skills and knowledge not possessed by the majority. Self-actualisation in action, often evidenced by the way visitors to the garden are never allowed to leave until they have been subjected to both a tour of the grafting, propagation and willow sculpting areas and a dissertation on the processes involved.

Figure 15: Propagating herbs

The importance of being able to validate ones skills and workmanship to others is captured well by Crawford (2009), when describing his time spent working as an apprentice electrician. At the end of a job he would flip a switch;

> 'and there was light, it was an experience of agency and competence. The effects of my work were there for all to see, so my competence was real for others as well; it had social currency' (p14).

As the above passages show, the attainment of new skills and knowledge brings about positive outcomes relating to empowerment, personal development and social identity. In addition to this, many of the skills which have been developed such as vegetable growing, grafting, propagation and willow craftwork are useful, practical every day skills which can also have a bearing on future employment. Crawford (2006) bemoans the recent decline of manual, practical skills and making things in favour of an information

based economy. His argument centres around the belief that traditional, practical skills hold a special type of value in that they are often more difficult to outsource to countries with a cheaper workforce. Since joining our garden, Myra has secured part-time paid employment with an organic food producer and hopes to set up her own herb propagation nursery in the future. Paul meanwhile has been asked by the local tidy towns committee to grow the plantlets needed for the hanging baskets, borders and window boxes within the town. As regards yours truly, I have recently purchased some land beside my home and am currently in the process of establishing a fruit tree nursery. This year I will graft 3000 apple, pear, plum and cherry trees as well as propagating a large selection of soft fruit. Apples suitable for the wet Irish climate will be my speciality and I will be able to supply more than 250 named varieties including 50 Irish heritage varieties. I will also be specialising in producing trees with multiple varieties grafted on to them, so that potential customers can buy a single tree capable of producing red cider apples, yellow eating apples and green cooking apples. Grafting and soft fruit propagation is a passion of mine and my involvement with the garden over the last three years has presented me with an opportunity to practice and hone my skills and also to identify the business potential of these activities.

Stress relief

At various stages throughout these findings, there is the suggestion that community gardening has the capacity to impact directly upon depression, anxiety and stress. Participants themselves seem to accept the connection between their membership of the garden and positive mental health. During one discussion on mental health Sue said, 'This is the place to be, learning, keeping busy and meeting people'. This opinion was greeted with nods of approval and similar statements. Shane said that the garden gives him a reason to get out of bed while Paul said, 'everyone needs to get out of the house, keep the mind occupied'. Share's (2006) participants expressed the view that modern living could be stressful and that gardening was a useful way of switching off and relaxing. Other studies (Teig et al 2009 &Lee 2002) also bear witness to this phenomenon but apart from the testimonies of the

participants, the question remains, how does this phenomenon manifest itself? Ulrich (2002) suggests that simply looking at nature can result in positive physical and mental health outcomes. These findings are supported by UK mental health charity MIND who conducted a study into the role the environment plays on the effectiveness of exercise in relation to mental well-being. Members of local MIND groups took part in walks in two contrasting environments to test the impact on mood, self-esteem and enjoyment. One of the walks was through a varied landscape of woodland, grassland and lakes while the other walk was around an indoor shopping centre. 71% of outdoor walk participants reported improvements to depression and tension levels while 50% of indoor walk participants felt that their feelings of tension had increased while 22% said that their depression had got worse (MIND 2007). This section will attempt to flesh out some these stress alleviating claims by examining two separate situations whereby participants presented at the garden in a distressed state.

Sue has had a lot going on in her life of late and her emotional state seems very fragile. This morning she arrived at the garden in a very distressed state as the group were preparing to undertake a soft fruit propagation task. She was in a very agitated mood, worrying and crying profusely about an upcoming hospital appointment. She is then almost instantly embarrassed about her behaviour and threatens to leave again. The group cajoles her into staying and try to keep her chatting as they prepare the task but Sue remains visibly distraught. It is only when she starts to involve herself in the work that the flow of tears begins to subside, the sobbing turns to weeping and then just a whimper as Sue slowly seems to become more visibly relaxed. The task involves taking cuttings of blackcurrants, gooseberries and jostaberries and planting them in a freshly prepared bed. This is slightly more complicated than it sounds as different techniques are required for different fruits such as the length of the cutting, how many buds to leave above the ground and the distance between the bottom bud and the soil. These variables seem to concentrate the minds of all participants including Sue and they become completely absorbed in the task, pruning the cuttings to the correct length, scraping off unwanted buds, measuring the distances between the cuttings

before planting to the correct depth. Sue is working away and has brightened up considerably, even to the point of joining in with the banter and making occasional remarks about how it's nice to do something different or great to learn something new. She is focussed; concentrating on what she is doing, has stopped crying and seems to have forgotten her troubles for a while at least.

These types of scenarios are relatively commonplace in the garden whereby a person shows up looking unhappy or distressed and through some combination of social interactions, physical engagement or immersion within a particular task in the great outdoors, are lifted out of the doldrums at least for that part of the day when they are engaged in this way. Corkhill et al's (2014) study of knitting group participants highlights the positive implications of craftwork, working with the hands, and working as part of a group in a creative capacity. The process of knitting was described by respondents as 'soothing' and 'restful', with the 'rhythm of the repetitive motion' being 'hypnotic' and 'calming' (p37). The survey also found that knitting is being used to manage traumatic experiences such as pain, anxiety, depression and addiction The authors were also able to identify a relationship between knitting regularly and perceived improvements to cognitive ability, particularly in relation to arranging thoughts, forgetting problems, memory and concentration. Csiksentmihali (1990) theorised that people were at their happiest when they were in a state of 'flow' which he described as complete immersion and concentration in the task at hand. According to Csiksentmihali, a state of flow is most likely to be reached when the mind or body is stretched to its limits in a voluntary effort to achieve something difficult or worthwhile. In the previous instance, the mental stimulation provided by the task appears to have been the hook that distracted Sue's attention away from her problems, but more mundane, physical tasks seem to have stress relieving qualities also as the following example will testify.

Shane arrived at the garden in very low spirits this morning. He looked very sad and gaunt, his movements were slow and lethargic and he was disinclined to engage in conversation or participate in the tasks of the day as

is normally the case. During the tea break Shane shed some light on his uncharacteristic behaviour. He spoke about his ongoing struggle with depression and revealed that he was in particularly bad form of late, lacking energy and without any enthusiasm for work. Paul said, 'this is the best place for you' and Sue added, 'it's good that you came'. After tea, Paul makes a more obvious effort to engage Shane in a weeding task as though to take his mind of things. Shane reluctantly joins in. He is listless and lethargic at first, working with stiff, robotic movements. Paul is talking about football but Shane who is normally enthusiastic on this subject responds only with monosyllabic answers. After a while the two men fall silent as they become increasingly absorbed in their work only stopping occasionally to straighten their backs or to stand with hands on hips as they survey the progress with satisfaction. The longer the work progresses the more it seems that Shane is shrugging of his lethargy and that a great weight is being lifted from him. The repetitive actions involved in weeding whereby the fingers, wrists, elbows, shoulders, knees, hips and back are all moving rhythmically, create a transformation in Shane comparable to a seized hinge that has been liberally applied with oil and moved back and forth until the movement becomes free and easy. With each action, Shane's tempo seems to increase and his movements become more fluid. Later, when the group are congregated at the gate reflecting on the mornings work Shane is still a bit quiet and while it would be an exaggeration to say that he looks happy, the black clouds which shrouded his earlier demeanour seem to have lifted temporarily at least and he now appears to be content and even fulfilled.

Again this could be a version of 'flow' in action. Certainly many of the conditions are right for the facilitation of flow. Though not especially creative work, the task does have clear goals, is capable of stretching Shane's physical and mental reserves and there is immediate visible, rewarding feedback in the shape of a freshly weeded vegetable plot. Interestingly, from a weeding task perspective, persistence is one of the specific character traits recognised by Csiksentmihali (1990) as being conducive to 'Flow'. From my own experience, there are many horticultural tasks that can absorb my attention in this way but none more so than direct seed sowing outdoors,

particularly if I am working with small, difficult to handle or easily windblown seeds like carrot or parsnip as they require full concentration. The whole process of digging over the bed, breaking up the soil, raking to a fine till, marking out the drills, sowing the seeds not too thinly but not clustered either before covering with a generous dusting of nice sandy soil, absorbs me to such an extent that I often lose all sense of time. Grafting, propagating and orchard management tasks fascinate me and are my main passion within the garden but in terms of total immersion to the point of being oblivious to all else around me it has to be the example outlined above.

One of the key objectives of this study was to explore the potential for community gardens to provide year round interest and activities for participants. Up until now we have discussed the implications of dormant and growing season activities within the context of the overall experience. The next section will provide an assessment of the activities and experiences within a seasonal context.

Seasonal experiences

One of the central identified aims of this study was to generate data regarding the lived experiences of participants during the dormant season. This meant developing the research facility to include areas which would facilitate the exploration of dormant season activities and experiences. This development process is outlined in the Methodology Chapter under the sub-heading 'Development of the research facility' and it may be worthwhile for the reader to revisit this process prior to reading this section. I spent much time deliberating over how to structure my overall findings. Initially I intended to dedicate a chapter each to growing and dormant season activities in the style of a head to head or growing season verses dormant season format. I eventually decided against this as I felt that by separating the two seasons, I would diminish the importance of one of the previously alluded to central threads of the findings, that of the interconnectedness of all the yearly activities and experiences as a whole. With this in mind, I will use this section not specifically to separate the growing and dormant seasons, but rather to highlight certain activities and experiences that seem to be more unique to one season or the other. This section opens with a very descriptive chronological outline of a year in the working life of a community gardener which highlights the ways in which participants are directed by the rhythm of the seasons. This is followed by a discussion exploring the differences and similarities between growing and dormant season activities paying particular attention to the physical and cognitive processes and to the ways in which these processes are experienced. I will also use this opportunity to critically assess some of the more experimental dormant season activities and question whether these might be transferable to similar social horticulture enterprises.

Rising to the challenge, a chronology of work in the community garden

As one would expect, the challenge of managing an area of this size and diversity requires a huge physical effort on the part of a small group of participants. In relation to growing vegetables, the first seeds are planted in seed trays in the polytunnel in early spring. The outdoor beds are then

prepared by digging them over and removing the weeds prior to incorporating manure into the soil. Onions and early potatoes are the first of the crops to be planted out usually around mid to late March. By mid-April, the first of the early sowings; lettuces, cabbages, broccoli and cauliflower are planted out. These must all be netted to protect from birds which are a major problem at this site. At this stage the grass is starting to grow and the lawnmowers and brush cutters make their first appearance of the year. The last of the potatoes are planted by the end of April and herbs and flowers propagated over the winter months are used to replace casualties in the herb patch. By mid-May, the risk of frost has passed and tender plants such as tomatoes, peppers, cucumbers, aubergines, pumpkins and melons can be planted in the polytunnel. Temperatures are on an upward trajectory outside also and carrots, parsnips, beetroot, radish, spring onion, peas and runner beans should be able to germinate freely outside. The steadily rising temperatures ratchet up the pressure further and by late may the early cabbages, broccoli and cauliflower are thriving and more seed trays need to be prepared to succeed these when they are harvested. The grass and weeds are rampant and need to be tackled on a weekly basis. Cracks start to appear as the group begin to feel the pressure. Fingers are pointed and questions are asked regarding the role of some participants while others seek to defend or exaggerate their own contribution. 'Whose job is that?' 'I thought you were doing it' 'I can't do everything'.

By the end of June, the growing season is in full swing. All the beds are filled with plants at various stages of growth and the pressure eases somewhat as the break in planting and sowing allows the group to focus on maintenance tasks such as weeding, thinning, mowing and brush cutting. This is a nice time in the garden as participants take stock of the progress, reflect on the effort of the last few months, and reassure themselves that it has all been worth it, a payoff of sorts. Harvesting begins, slowly at first, lettuces and radishes followed by a crop of early potatoes from the polytunnel. Towards the end of July the first tomatoes are starting to ripen along with the summer cabbage, cauliflower and broccoli. By early August vegetables are starting to mature very quickly and participants are unable to use the produce quickly

enough. Panic sets in as snow white cauliflowers begin to yellow and cabbages split open from over ripeness. Everyone knows that it's time to set up the shop but nobody wants to take the initiative. Nobody wants to leave the garden. Eventually two of the women say, 'we'll do it so' and everyone breathes a collective sigh of relief.

It's great that someone is doing the shop and that the vegetables won't spoil but the reality now is that the group are shorthanded by two at a time when grass and weed growth is relentless. Harvesting peaks in August and September and the grass eventually begins to slow down. By Halloween, the last of the potatoes, carrots, and parsnips have been lifted for storage and all that remains in the ground outside is a few cabbages, turnips and some sprouts for Christmas. The shop, along with the growing season is finished for another year and everyone seems pleased that this is so. The body language suggests that they have had enough of mowing, digging and weeding and are looking forward to the change that winter activities will bring.

The rest of the year passes at a more sedate pace as the emphasis of the work shifts from physical to cognitive. The month of November is spent propagating soft fruit, herbs and flowers. Herbs such as rosemary, sage and thyme are propagated from softwood cuttings while root division is the technique used for mint, chive, lemon balm and other clump forming herbs. Soft fruit plants such as gooseberries and blackcurrants are raised from hardwood cuttings while new strawberry plants are propagated from runners. Craftwork activities take over in December as the group make Christmas wreaths, Christmas logs, slate clocks and mirrors which will be sold at the local Christmas Fair. The year seems to have taken a lot out of the participants who seem to visibly wilt on the final stretch. However, orders taken for wreaths and logs are honoured nevertheless and the Christmas break arrives not a moment too soon.

January and February are the most relaxed months of the year as participants ease themselves slowly back into a routine following the Christmas break. The first job of the New Year is the harvesting of the willow plantation. This is done by cutting all the willow rods close to the ground

using pruning saws and secateurs. The harvested willow is used to strengthen up existing willow structures and for building new ones. Fruit trees and soft fruit bushes are pruned and mulched with compost in early February, in preparation for the new growing season. Towards the end of February and into mid-March, fruit tree grafting takes over, apples and pears followed by stone fruits. This is highly valued skilled work which is relished by one and all. The newly grafted plums, apples, cherries, and pears are then transplanted into a specially prepared area where they will be grown on for two years before being lifted and sold. From mid-March onwards the pressure starts to build once more as dormant and growing season activities collide and participants must do it all over again (See Appendix D for breakdown of activities).

Differences and similarities between growing and dormant season activities

The above passage highlights the diversity of the tasks undertaken at the garden over the course of a calendar year. Though the focus of the work noticeably shifts between one season and the next, the overriding experience remains the same in many key areas. Regardless of the time of year, the garden maintains its status as a resource for making social connections and offering support. Whether winter or summer, participants can for the most part be found talking, laughing, arguing, sharing stories and of course, working together in groups in what is predominantly a very supportive environment. The all-important cup of tea moves inside for the winter months but continues to cling on to its ritual significance as the time of day when participants down tools and talk about non gardening related issues such as family and home life, health and financial issues or an eagerly anticipated upcoming social events or lack thereof. The garden continues to provide a platform for making social connections outside the garden right throughout the year as craft sales replace vegetable sales during the dormant months. In the same way that selling vegetables served as a mechanism for integration with the wider community, the making and selling of Christmas logs and wreaths opens the door for participants to remain visible at this important and

potentially lonely time of year. One might expect the weather to be a significant factor, and it is, as previously articulated in earlier paragraphs. But in so far as the weather impacts participant experience more so in one season than the other is not explicitly determined. Prolonged wet weather is certainly dreaded by all but is not specific to one season or another. Conversely, a warm sunny, summers day is indeed cherished by participants but then so too is a bright, crisp and frosty winters morning. It is fair to say however that there is an increased likelihood of inclement weather conditions during the dormant season. The physicality and pace of the work often increases a notch at various stages during the growing season but there are also nuances in intensity and physicality during the dormant season months, suggesting that this is a question of variables rather than differences.

There are of course some aspects of the experiences, while not altogether unique to, are certainly more specific to one season more than the other. The first of these is the impact of aesthetics within the garden. Whether it is the vibrancy or the colour from the herb and flower patch, the lushness of the vegetable growth or the instant visual effect that a newly mown lawn offers, one thing that is clear is that aesthetics have a significant influence on the growing season experience. Tea breaks enjoyed under the morning sun are often a good time to savour the beauty of the garden. On one such morning as we sat on our homemade benches drinking tea, Sue remarked, 'look at those foxgloves, I could sit here looking at that all day'. On another occasion as the group sat around enjoying sausages cooked on the open fire, Dolores was heard to say, 'isn't it lovely to be able to sit here and look out at that (garden)'. Some areas are more cherished than others with the herb and flower patch a particular favourite, 'I love the herb and flower area' says Sue, 'I love everything about it, the colours, the smells, the way the sweet peas climb up and the nasturtiums trail over the sides of the stones'. When the weather is nice and the day's work is done, participants will often dilly dally at the gate surveying the fruits of their labours and plotting the following weeks tasks as though reluctant to leave. This is often an opportune time to gain further insight into the importance of beauty in the garden. On one such occasion Dolores asked 'did we ever think when we started that we would

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end up with a garden that looks like this'. On another occasion Paul said, 'I never thought when I first saw that plan, that in a few short months we would have achieved this'. These types of opinions are often met with a chorus of 'absolutely gorgeous', 'beautiful' or similar sounding votes of confidence and reassurances. It is not enough simply to point out the pleasing effect or the sense of achievement associated with these moments of reflection regarding the appearance of the garden as it means so much more than this. As discussed elsewhere in these findings, much of the drive, energy, perseverance and commitment demonstrated by participants revolve around maintaining and improving the aesthetical qualities of the garden. Their horticultural reputations are on the line and some of the more physically demanding and unpopular tasks are often undertaken with military like efficiency with a view to keeping up appearances for both internal and external audiences. It is this sense of duty that drives the project forwards at busy times of year when it sometimes seems as though the effort outweighs the rewards.

It should be noted however, that this sense of beauty in the garden, though much more prevalent within, is not absolutely exclusive to the growing season. Frost and snow can transform the decaying dormant garden into a winter wonderland. Landscaping and architectural features such as the orchard, the homemade benches and willow arches are visually appealing all year round while the restored hay rake provides a splash of badly needed colour even during the bleakest of times. Other research also highlights the importance of garden aesthetics, most notably, Ulrich (2002 & 1991) who found that hospital patients benefitted significantly by having access to a garden or by having a view of nature when recovering from illness. Ulrich's (2002) study showed that hospital patients with a natural environment window view had shorter stays in hospital and reported fewer post-surgical complications than hospital patients who had a non-natural environment window view. Nature view patients were more likely to be in good spirits than the other patients who were more likely to be upset and need encouragement.

The second important feature of the community gardening experience which is more unique to one season than the other, is the availability of fresh vegetables. As discussed previously, access to and availability of fresh vegetables is a hugely important and rewarding aspect of community gardening. Availability of fresh produce is of course, much more a part of the growing season discussion, though not absolutely exclusively so. Brussels sprouts, kale and turnips are harvested right up to Christmas and beyond. In fact, many of the participants would argue that the flavour of the aforementioned vegetables is often bland until it gets a bit of frost. Depending on yields, participants may still have access to potatoes, carrots and onions from the storage shed up until the end of January.

Though the absence of an abundance of fresh vegetables and more drab aesthetical qualities of the garden, coupled with the increased likelihood of inclement weather conditions diminish the dormant season experience somewhat, this is offset by the final of our aforementioned significant differences between dormant and growing season experiences. I am referring to the uniqueness of the dormant season activities. As discussed previously, many growing season tasks such as digging, weeding and lawn mowing have an air of familiarity about them and though participants for the most part enjoyed these tasks, they were often not approached with the same measure of focus, excitement, apprehension and uncertainty of dormant season tasks. With almost all of the dormant season activities, whether fruit tree grafting, soft fruit propagation, herb propagation, willow sculpting, orchard management and the vintage hay rake restoration, there was always the sense that this was a journey into the unknown. This dynamic is touched upon elsewhere but I will add to this discussion further here.

As previously alluded to, participants were very sceptical about their ability to graft fruit trees which they felt was beyond the capabilities of ordinary gardeners. Likewise, in relation to propagating herbs from softwood cuttings, the range of physical and cognitive steps involved seemed to almost elevate this task from gardening work into craftwork territory. Consider these processes in relation to propagating rosemary from softwood cuttings. Firstly,

special compost consisting of equal amounts of peat and sharp sand must be prepared to allow for adequate drainage and for young roots to establish. Next the participants must learn to distinguish between new growth (softwood) and old growth (hardwood). Once this is established, a few three inch pieces of new growth are cut from the mother plant using secateurs. All but the top three or four leaves are carefully stripped from each cutting. This is a fine balance, anymore and the rootless stem will not be able to keep the remaining leaves alive, any less and the opposite might be the case. The stripped stems are then immersed in water before being dipped in a rooting hormone powder to optimise the success rate. This step always lends a sense of theatre to proceedings. The cuttings are then planted in small pots of the prepared compost. The pots are watered before being sealed in zip lock bags. This bag provides the warm environment necessary for the cutting to become established and also helps to retain moisture which prevents the cuttings from drying out. To complicate things further, different plants require different propagation techniques. Herbs such as rosemary, thyme, sage are propagated from softwood cuttings. Black currants, gooseberries and willow are propagated from hardwood cuttings while herbs such as mint, and lemon balm are mostly propagated by root division but would have a natural inclination to propagate from softwood cuttings also.

When one considers that the group explored all of these techniques and learned to make these distinctions, and bearing in mind their hunger and desire to acquire new knowledge and to evolve their skillsets as discussed earlier, then it is easy to see why these types of tasks hold such a strong attraction for participants. There is always the sense that this is highly skilled work. In fact, the participants joked that it was high time they were provided with white laboratory coats when the rooting hormone was produced. Likewise in relation to fruit tree grafting, participants expressed the view that this was, 'more a job for professional nursery workers and not ordinary gardeners like us'. Willow sculpting and fruit tree training provided an opportunity to express creativity and also generated feelings of disbelief and awe that living forms could be coaxed and manipulated in this way.

As previously suggested, I believe that it was the uniqueness of these challenges that separated them from the rest, the sense that they had done something a little bit different and were in possession of skills and knowledge not possessed by the majority. Crawford (2006), as part of a larger discussion on craftwork and manual competence, recognises the incredible sense of fulfilment that often accompanies this type of work. Both Crawford and Braverman (1974) are agreed that retaining traditional skills and a sense of individuality takes on even more significance in an increasingly deskilled society. There was also the palpable sense associated with many of these tasks such as grafting and orchard planting and management, willow sculpting, and the making of wooden benches, clocks and mirrors, that they had created something lasting thereby leaving their mark on the garden and on the community for many years to come, further shaping their own identity formation in the process.

Sennett (2008) suggests that the capabilities needed to coax and manipulate craftwork materials are the same capabilities needed to operate successfully in social situations. According to Sennett,

> 'Material challenges like working with resistance or managing ambiguity are instructive in understanding the resistances people harbour to one another or the uncertain boundaries between people' (Sennett 2008 p289)

Gauntlett (2011) also recognises this quality that craftwork and working creativity can fulfil in relation to shaping and bolstering identity. He argues that making things, allows the maker to demonstrate that they are powerful creative agents who can do things that others can see, learn from and enjoy and by transforming material into something new, the maker is also transforming one's sense of self. Gauntlett also saw the potential for this type of work in relation to community development arguing that sharing meaningful things, ideas or wisdom could help to build bridges between people and communities.

Whether the above tasks would be transferable to similar community gardens might hinge on the skills and leadership qualities of the individual participants or the availability of a competent facilitator. All of our members were able to

participate fully in all of the above tasks under my instruction. However, when I announced in late summer 2015 that I would be stepping down from my role as facilitator in order to finish my M.A., the participants took a decision not to attempt the above winter activities as they believed they were not yet at the level required to carry out these tasks unsupervised. As a result, attendance at the garden was sporadic from October 2015 onwards with participants meeting up only occasionally for a cup up tea and to carry out fairly routine tasks like cutting back herbs and digging unwanted vegetation from vegetable beds. This response highlights the crucial role that local community development champions must perform in relation to guaranteeing the long term sustainability of these types of initiatives. The group did however meet up in mid-December 2015 to make ornamental nativity logs for the Christmas Fair. Other tasks that were carried out at the garden that could be transferable to similar settings included the making of natural slate clocks and mirrors, and also, the addition of landscaping features such as an outdoor seating and cooking area and vintage machinery restoration projects although it is acknowledged that these would be mostly one off events.

Conclusion

In conclusion, the findings demonstrate the function that the community garden can perform in relation to the construction of social identity. At its most basic level it provides a gateway through which socially isolated individuals can make new social connections. Once inside the garden, participants experienced a whole range of social processes, the culmination of which it is argued contributes towards the development of social identity. Sometimes it is the simple things that mean a lot such as meeting up, saying hello and having a cup of tea together. Participation also provides a platform for talking about life stories, events and challenges within a caring, trusting and supportive environment. The findings also show how the garden can serve as a lens through which participants can be viewed, as previously unremarkable individuals are now much more visible and immediately recognisable as 'caretakers of the garden'. External shop and market activities help to showcase this persona to a wider audience and bolster their

indisputable position as community garden custodians. Making that journey from the garden to the wider community brought its own challenges particularly for the more vulnerable gardeners, but in overcoming these challenges; participants had succeeded in finding a place for themselves within the community.

The findings also described in unique detail, the collaborative actions and efforts on behalf of the participants in relation to developing and maintaining the garden. This involved the participants embracing ideas relating to sense of duty, teamwork, decision making, problem solving, fulfilling obligations, hard work, perseverance and commitment. These findings were discussed as part of social identity as it was felt that the development of these interpersonal skills was an evolving process, linked to the amount of time and commitment invested and the amount of progress being made. That the commitment and effort involved in developing and maintaining the garden amounts to an exercise in character building is articulated throughout the discussion entitled 'collective efficacy'. This reciprocal relationship between the gardener and the garden is a variation of that common thread permeating these findings which suggests that the garden is a sanctuary not just for vegetative growth but for human growth also. When viewed collectively, these findings demonstrate the function that community gardening can perform in relation to nurturing empowerment and promoting social capital.

The section 'food for the body, food for the mind' provides a unique analysis of the relationship between the garden and the body. These findings identify the challenges, motivations and rewards associated with carrying out physically demanding and sometimes unpopular tasks in often less than ideal weather conditions. Attitudes to food, diet and exercise in addition to perceptions relating to garden inspired changes or improvements to overall physical health are discussed here also. This section also outlines the positive mental health and cognitive implications as experienced by the participants and argues that it is the culmination of cognitive, social and physical processes arising from garden activities which underpin these

encouraging outcomes. This was one of the central themes which were identified at the outset of the findings chapter.

The strength of the methodology is evident throughout this section, reinforcing another of our central threads, that of the aforementioned complexity and richness of the data and analysis. The findings outlined in this section not only serve to bolster the findings of previous studies which identified social, physical and mental health benefits of community gardening, but also serve to incorporate a further layer of depth by providing a lived commentary of the various processes in action as they overlap and interweave to become one.

The findings also provide a clearer picture of the working life of a community gardener over the course of a calendar year with a special focus on the seasonality of certain tasks. The experiences help to convey the important role that dormant season horticultural craftwork activities can fulfil at this traditionally less busy time of year which was of course, one of my key research objectives. These findings also demonstrate how dormant season activities can not only complement the growing season experiences in terms of the change of pace, scenery and direction, but also provide real value in terms of the different cognitive and skills development processes involved in carrying out these unique, unfamiliar tasks. This research also shows that although the dormant season activities are experienced in very different ways to growing season experiences, the garden still maintains its all-important status as a focal point for making social connections within a supportive environment. The selected literature extolling the virtues of craftwork, creativity and skilled manual competence has helped to re-inforce these arguments.

Chapter 7: Conclusions

Introduction

The rationale for this study was to generate an understanding of the lived experiences of community gardening participants throughout the growing and non-growing seasons. This distinction between growing and non-growing season experiences is an important one as all previous research in this area has addressed growing season experiences only. The reason for this gap in the research can most likely be explained by the limited potential for gardening activity engagement during the dormant season as less light and colder temperatures bring growth to a standstill, with the assumption being that diminished work opportunities equals diminished research opportunities also. Only Hale et al's (2010) study drew attention to this falling off of gardening commitments but failed to state whether this is viewed as a problem or not. Neither do the authors offer any recommendations on how this lack of engagement might be addressed. That it did constitute a problem was surely beyond question given the messages emanating from the literature extolling the quality of life and well-being implications for community gardening participants. If these qualities could be accessed during the growing season, then it must be acknowledged as desirable to extend these outcomes into the dormant season also. In addition to this conjecture, the reaction of the participants at our research facility when confronted with the possibility of the garden closing for the dormant season was one of intense dread and anxiety, further highlighting the need to address the issue of engagement at this less busy time of year and bridge this noticeable gap in the research into the bargain.

While previous research does indeed highlight the many virtues and well-being implications associated with community gardening, there was certainly nothing within this body of research to suggest that a period of absence from the garden during the dormant season would draw such a dramatic negative reaction from participants. While acknowledging the important contribution made by previous researchers I could now identify a demand for a fresh research approach, one which would stimulate a deeper understanding of

community gardening. From what began as a desire to explore the ways in which participants might be engaged during the dormant season from this point on I now had a further clear objective which was to attach meaning to the community gardening experience from the point of view of the participants. To recap again, the specific questions which have been addressed by this research project are as follows;

1. What are the lived experiences of community gardening participant's during the growing season?

2. Are there other activities that can be used to convey these experiences during the dormant season when growth slows down and work becomes scarcer?

3. What meaning can be attached to these experiences?

The key topics which were explored include;

- Sense of connectedness to the garden and to fellow participants
- Social identity construction and the ways in which the garden influences how participants self-identify
- Social capital, particularly in relation to collective efficacy, work ethic and toiling with the hands as caretakers, craft makers and producers
- Physical, social and mental health implications emerging from the relationships and dynamics associated with garden membership
- The ways in which weather, ground conditions, aesthetics and the rhythm of the seasons impact upon the overall community gardening experience

A phenomenological research framework was implemented to facilitate the generation of the type of data that would answer these questions from a perspective that might be considered 'lived experience'. This strategy required my full involvement in the day to day activities of the garden over a long period of time and effectively becoming a co-participant as well as researcher in the study. This approach also required that the participants become co-researchers, willing to talk about, challenge and share their own

experiences and assumptions of community gardening in an effort to ascertain the meaning of their involvement. Furthermore, a comprehensive review of literature was conducted prior to carrying out field research and this helped to provide a solid framework for many of my findings

This chapter will discuss the conclusions that can be drawn from these findings in relation to the research questions. I will also demonstrate how my work contributes to the existing body of research and outline the potential influence of this study from both a theoretical and policy perspective. I will also use this chapter to highlight the limitations of this research and to make suggestions concerning related issues that might benefit from future research.

Discussion of main findings

This study has comprehensively delivered with regards to achieving its key research objectives. In relation to getting at the 'lived experience', the methodological choices stimulated the production of a rich and unique narrative which complement previous studies conducted in this area. One of the main findings gleaned from this insight is that community gardening can fulfil an important function with regards to the construction of social identity. This was shown to be a complicated journey involving numerous social processes ranging from meeting and socialising with others and swapping life stories and events to sharing challenging work related responsibilities, making key decisions and establishing specific niches and roles for themselves within the garden. Embracing these processes was highly transformative as participants who were initially little more than 'passengers' at the facility, now began to view themselves as highly competent gardeners and rightful custodians of the garden. The research shows how confidence levels were increased further following the development of a range of unique skills which were previously deemed, by their own admission, to be beyond their capabilities. Shop and market activities provided an opportunity to present this new persona to the wider community thereby reinforcing this new social identity. The research also identified employment and volunteering

opportunities stemming from involvement in the garden, further compounding this upwardly socially mobile trend.

The findings also demonstrate how the supportive environment of the garden allied with the culmination of all the various cognitive, physical and social processes can have a positive impact on mental health particularly with regards to stress relief and relaxation. The process by which this finding was ascertained highlights the strength of the methodology to good effect. Though other studies have drawn attention to the stress alleviating outcomes of community gardening, the level of depth and detail articulated in some of the passages shed some badly needed light on the processes involved.

A key objective of this study was to explore whether the introduction of a range of new activities would solve a problem with regards to maintaining dormant season interest and engagement at this traditionally less busy time of year. This was an important question as it was an area that was previously unexplored. The findings demonstrate how these new activities not only served to bridge the dormant season gap, but could also complement the growing season experiences in terms of the change of pace, scenery and direction. These new activities also provided real value in terms of the different cognitive and skills development processes involved in carrying out these unique, unfamiliar tasks. This new research also shows that although the dormant season activities are experienced in very different ways to growing season experiences, the garden still maintains its all-important status as a focal point for making social connections within a supportive environment. This research takes on increased significance when one considers the hugely positive implications of community gardening as identified throughout this study and the likely negative impact on the well-being of the individuals involved, should activities be suspended for the duration of the dormant season.

In relation to funding, the research shows that there is much scope for these types of initiatives to become at least partly self-sufficient in relation to funding. While this in itself goes a long way towards ensuring the long term sustainability of the project, the process of self-funding is much more

complex than simply generating income. Fundraising activities and events were shown to be important occasions on the social calendar, providing opportunities for mingling with the locals in a carnival atmosphere. These events also presented participants with an opportunity to showcase their skills and talents to a wider audience while fundraising in general helped to promote positive attitudes in relation to sense of duty, independence and empowerment. These findings also feed into and reinforce previous arguments suggesting that community gardening can fulfil a role regarding the construction of social identity.

Theory and policy implications

The findings of this study suggest that the field of community gardening would benefit enormously from a new definition. Previous definitions suggest that the sole outcome of these initiatives is the production of food. Consider this lacklustre effort from the Community Garden Reference Guide which defines a community garden as 'any piece of land, public or private where plants are grown and maintained by a group of individuals in the community' (William Mitchell College of Law 2012 p2). Any revised definition should capture not only its 'practical' or food related implications, but should also encompass the full range of social, physical and therapeutic functions which these spaces can fulfil. This could be part of a much bigger branding exercise that would see community gardening re-packaged under the banner of 'Social and Therapeutic Horticulture'. We are currently seeking approval to change the name of our facility to *Flourish: A social and therapeutic horticulture initiative*. This name was chosen as it draws parallels between human and plant growth. Flourishing is also the metaphor that ancient philosopher Aristotle borrowed from the plant world to describe when a person is physically, socially and psychologically thriving.

The research surrounding dormant season activities could also be used to develop policy relating to the planning and development of community gardens. The findings showed how the introduction of both horticultural and non-horticultural craftwork activities facilitated the engagement of participants who would otherwise have been much less productive at this time of year.

These activities would certainly be transferable to similar initiatives, but the success of them might depend on the availability of a suitable facilitator or the skilled manual competence of the participants. Careful planning at the policy and development stage to include features such as orchards, soft fruit areas, and willow plantations would not only ensure year round engagement, but would also guarantee a sustainable supply of craftwork and propagation materials.

The findings also show how both new and existing activities might influence policy making in relation to independent fund raising. Our study group were able to generate funding from the sale of fresh produce during the growing season and from their craftwork activities during the dormant season. Business was conducted at the local community centre through a weekly shop, and also at various fairs and events throughout the year. There was further potential to expand these operations as the group was invited to take a stall at the local Farmers Markets. This offer was refused on the grounds that the group had sufficient funds already. These findings, particularly those related to the production and sale of non-growing season produce, could be used to support and complement existing policy relating to the long term economic sustainability of these types of initiatives.

Limitations of the research

While I was generally very happy with the overall quality of fieldwork, my multi-faceted role at the garden did create some problems. In addition to being researcher, I was also responsible for planning and facilitating all the day to day activities at the garden. As a 'participant' and one of the more physically capable members of the group I was also expected to shoulder a large share of the physical burden involved in maintaining a garden of this size. These expectations greatly interfered with my research duties particularly during the development stages when the experimental nature of proceedings meant that I was constantly consumed by facilitation duties. This situation would be further compounded if there was a large group present or if there were newer members as these would be more likely to absorb a lot of my time and attention making it virtually impossible to focus on data

gathering which requires extreme vigilance even at the best of times. The process of gathering data would certainly have been more straightforward had there been an alternative dedicated facilitator already on site. It should be mentioned that this situation improved over time as the more experienced participants armed with new skills and knowledge gradually began to assume some of these facilitation duties, leaving me with more time to step back and fully engage with my roles as participant researcher.

The high labour demands to which I was exposed also placed a further limitation on the research process. It was fully intended to explore a number of other dormant season activities such as dry stone wall building and rustic furniture making, but these had to be postponed because of time constrains. It was a pity that we could not meet all of these obligations as identified in the research proposal but I do feel that the study still achieved its objectives in relation to exploring potential dormant season activities. The fact that we ran out of time is an indication of this success.

Recommendations for future research

During the course of this research, the group was approached by one of its main funding bodies who said that funding could only be continued if an accredited educational program was introduced at the garden. The group opposed this measure on the grounds that it would interfere with the social and recreational qualities being enjoyed at that time. The project was in its infancy and every day brought new and exciting experiences. Fortunately for us we were in receipt of funding from other bodies and had also begun to generate our own funding through the sale of produce so were in a strong position with regards to choosing the direction of the project. With the project now in its third year much of this novelty value has evaporated and I believe that the participants are now ready for a fresh challenge. Educational attainment would seem now to be a natural progression, particularly for more experienced participants. It would make for a very interesting study to explore the ways in which an educational programme such as a FETAC Level 1 or 2 in organic vegetable growing would impact on the enjoyment of the community gardening experience. It may well transpire that a more

disciplined approach would detract from the swashbuckling adventurous approaches to gardening activities currently in operation within our garden.

There is also scope for a much deeper exploration of food use and craftwork within community gardens. At some stage in the future I would be very interested in developing research workshops and tutorials exploring the diversity of ways in which community garden produce might be used. Fruit and vegetables could be consumed fresh in the form of juices and smoothies. The shelf life of fresh produce could be extended through the drying process or through other preservation techniques such as jam, chutney and cider making. Wines and cordials could also be produced from the fruits of the orchard and wild fruit hedge. Grafting and propagating training could be incorporated into these workshops with a view to developing employment opportunities. Participants were very open to the suggestion of introducing cookery and baking classes to the original study but unfortunately, due to time constraints, this goal was not realised.

Conclusion

The social, physical and cognitive qualities of the experiences, as identified throughout the narrative, highlights the potential value of community gardening initiatives to the broader social care and therapeutic community. This study has also fulfilled an important function in relation to bridging a noticeable gap in the research regarding dormant season engagement. The findings provide a rich and unique insight into the experiences of community gardening participants from a lived perspective over the course of a calendar year. The outcomes of this research could have far reaching consequences within the field of community gardening, particularly in relation to policy which concerns the future planning, development and sustainability of these types of initiatives.

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Appendix A: Participant information sheet

I.T SLIGO

M.A in Social Sciences

A Phenomenological Study of Community Gardening: An insider's view of the lived experiences of community gardening participants throughout the growing and non-growing seasons

Daniel Gaffey

Kilnagross

Carrick on Shannon

Co Leitrim

 0877701937

Dear participant.

Thank you for your interest in this project: **A Phenomenological Study of Community Gardening: An insider's view of the lived experiences of community gardening participants throughout the growing and non-growing seasons.** You are being invited to participate in this research project and I am required to provide a participation information sheet and consent form to inform you about the study, to convey that participation is voluntary, to explain the potential risks and benefits of participation, and to empower you to make an informed decision. You should feel free to ask me any questions you may have. If you agree to take part, I will ask you to sign a consent form. Please take as much time as you need to read it. You should only consent to take part in this research study when you feel that you understand what is being asked of you and you have enough time to think about your decision. Thanks again for reading this.

PURPOSE OF RESEARCH

To learn about what motivates people to join community gardening projects and to explore the different ways that participants experience community gardening. This study will be of future benefit when identifying strategies which maximise the potential therapeutic benefits of community gardening.

WHAT I WILL DO

I will observe and participate in gardening workshops in an effort to gain insight into the setting and its participants. My interpretation of these observations may be included in my research dissertation and will be submitted to IT Sligo for assessment.

POTENTIAL BENEFITS

Although you will not directly benefit from participation in this study, you will be contributing to a greater understanding of the benefits of community gardening. In addition, I would like you to understand that you are central to this study and the completion of same.

POTENTIAL RISKS

The potential risks of participating in this study are limited but you should be aware that as we are dealing with a sensitive subject, some discomfort may arise for you in the course of our discussions. Please understand that you are free to stop participating at any stage and to withdraw immediately. All information and topics discussed are confidential and your anonymity is assured at all times.

PRIVACY AND CONFIDENTIALITY

The data for this project will be kept confidential. Once the observations are completed, transcribed and analysed, I will securely store the information in my home office and keep identifiable names and interview material entirely separate. My office will be secure at all times. The data will be stored for up to 10 months and then completely destroyed. Some of the data will be transferred onto computer files but these will be filed confidentially and again no identifiable names or other information will be revealed. I will discuss my findings with my supervisor, **Dr Gwen Scarbrough**. The results of this study may be published or presented at professional meetings but the identities of all research participants will remain anonymous at all times.

YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW

Participation in this research project is completely voluntary. You have the right to say no. You may change your mind at any time and withdraw. You may choose not to answer specific questions or to stop participating at any time.

CONTACT INFORMATION FOR QUESTIONS AND CONCERNS

If you have any questions about this study, please contact myself at the address above. If you have any questions about your role and rights as a research participant, or would like to register a complaint about this study, you may contact, anonymously the following: Gwen Scarbrough IT Sligo.

Summary

Participation in this study is on the clear understanding that your participation is voluntary can be withdrawn. A consent form accompanies this participant information sheet. A copy of both will be provided to you. You are required to sign a copy of the consent form should you agree to participate in this study. Thank you so much for considering taking part in this study.

Appendix B: Consent Form

A Phenomenological Study of Community Gardening: An insider's view of the lived experiences of community gardening participants throughout the growing and non-growing seasons

Daniel Gaffey

0877701937

1. I confirm that I have read the participation information sheet dated------ for the above study and have had the opportunity to ask questions ☐

2. I am satisfied that I understand the information provided and have had enough time to consider the information. ☐

3. I understand that my participation is voluntary and that I am free to withdraw at any time. ☐

4. In signing this consent form I   agree to volunteer to participate in this research study being conducted by Daniel Gaffey ☐

5. I understand that I will participate in the generation of field research with the Daniel Gaffey on the agreed topic. ☐

6. I understand that a written transcription of the interview is available to me on request. ☐

7. I grant full authorisation for the use of the above information on the full understanding that my anonymity and confidentiality is preserved. ☐

8. I grant permission to use a pseudonym. ☐

_____   _____   _____

Participant   Date   Signature

_____   _____   _____

Researcher   Date   Signature

Appendix C: Therapeutic horticulture techniques (Trellis 2013)

Adaptive Gardening

Like couture tailoring, adaptive gardening is concerned with ensuring that garden design, gardening activities, methods and tools are a good fit for the people who will work in and visit the garden. There is no 'one size fits all' and an individually tailored approach is required. The only generally applicable rule is always to **consult** with the people who are going to use the garden.

In the past, much of the advice given out by experts was based on 'traditional methods' such as double digging and even the demanding regimes of competition growers, which are unsuitable for many people. Adaptations may be necessary in our own domestic plots, as much as at community or therapeutic garden projects e.g. when a change in working hours or in a health condition means less time or energy is available to tend the garden. Here are some suggestions for adapting gardening to suit. The limit is your imagination!

Situation	Suggestions
Less time or decline in strength/fitness	• Adapt design and planting to require less maintenance. • Reduce plot and lawn sizes- use membrane/mulches e.g. gravel, bark chip • Watering: To stop pots and beds drying out quickly use water-retaining gel in compost mix and mulches (e.g. corn-starch sheeting, cocoa mulch, pebbles, sand) over compost in containers as well as in beds. Have several sizes of watering can to hand incl. bottles- lighter to lift. Set up accessible water containers at convenient points, and consider installing irrigation systems e.g. 'leaky hoses'. Try 'immersion bath' watering for seed trays and containers where they are set into a larger container of water to soak up what they need then lifted out. A 3-foot cane inserted into the end of a hose pipe can extend the reach of it without needing to

	bend or stoop. Opt for low maintenance plants e.g. perennials, shrubs. For food gardeners this could mean fruit bushes, rhubarb & asparagus, artichokes and perennial herbs • Try No-dig systems • Choose plants with maximum interest and a long season. • Encourage wildlife (allies in pest control and bring interest to the garden.)
Knee/back problems, impaired mobility (& Sight loss)	• Raised beds can be useful – reducing the need for stooping. They can be any shape including round, organic shapes, and include varied heights, little 'niches' for sitting in, or broad flat wall tops for resting on. Materials may include used tyres, sleepers (not ex-railway due to toxic residues), brick, drystane dyke, 'Link-a-Bord' (from Harrod Horticultural online, among others), scrap wood, turf etc. They may also be helpful for visually impaired gardeners who may want to avoid stooping to the ground when they can't see whether the way is clear of thorns etc. • Use polystyrene chunks instead of crocks as drainage in pots to reduce weight. • Use a potting bench and arrange your tool shed so that equipment is easy to reach without bending and overstretching. • Try some 'adapted' tools. Long handled trowels/forks etc allow weeding without bending to soil level. Handle extensions can be bought to extend length of conventional tools or attach at a perpendicular angle as a more comfortable option for the wrist. Suppliers include Wolf and Peta tools, but these tools are very individual – try one first to see how it suits. • 'Kneeler' – a foldable kneeling pad with 'arms' on which you can lean to push yourself up to standing again. Workshop participants said these were hard to find, and expensive from some outlets. Available from Coopers of Stortford catalogue Tel 0844 482 4400 or online at www.coopersofstortford.co.uk

Gardening from a Wheelchair	• 'Table-top' raised bed – allows gardeners to get knees underneath instead of twisting sideways to work on a bed. • Paths and surfaces – use roll-out paths (e.g. search on line) and turf-saving blocks from various landscape suppliers. This may be called 'grass guard', 'cellular grass paving', and 'ground guard' 'turf stabilization' 'reinforcement mess/grid' 'grass/ground protection'. These can make lawns, gravel or wood chip areas far more stable and sturdy for wheelchair access. • Elevate containers when you want to work on them by putting them on top of another upturned pot. • Experiment with long-handled tools to extend reach.
Weak grip/loss of fine motor skills or co-ordination	• Adapted tools e.g. secateurs with assisted grip mechanism are available. • Pelleted seed may be easier to handle, or opt for larger seed varieties, mix very fine seed with sand to aid sowing. Buy in plug plants instead. • Mix seed with wallpaper paste and use an 'icing bag' to pipe the seed into lines. Be aware that some wallpaper paste may contain a fungicide that organic growers may want to avoid.
Sight Loss	• Contrast – high contrast can improve visibility for people with certain sight conditions. A cheap way to incorporate higher contrast is to paint yellow or white bands on tool handles or path edges and intersections. Buy yellow or bright coloured equipment, and even planting in colour blocks may be more easy to navigate for some people • A handrail or tactile markers may helps some people to find their way around the garden independently. • Lines or blocks of a single crop may be easier to weed than mixed planting • Use scent and texture to help people identify plants e.g. to distinguish lavender and sage or the hairy leaves of pumpkins, as well as just for pleasure. • Make outsized plant labels/markers with space to write names on in large print.

Motivation	• Try square yard plots – this size has been found to be useful with some groups because it is small enough to be weeded or sown in a single session without overwhelming, and so gives a sense of achievement. May engender a sense of ownership too.
	• 'Fast-return' plants e.g. peas, beans, sunflowers, lettuce, rocket. Things that grow and crop quickly may be better able to capture and keep the imagination of gardeners with short concentration spans or lower motivation. The ultimate of course are mustard and cress seeds or bean sprouts – ready in around 4 days – cultivated on a window sill.
	• Rewards, praise and thanking people for their input are important factors in creating and sustaining motivation.
	• Planning and setting goals that are appropriate for each gardener is also useful in some situations. Involving everyone in this process is helpful. Too large a project can be daunting and demotivating. Too easy or insignificant a task can also be boring and uninspiring.
	• Creative projects – e.g. bringing mosaic or design into the garden; using dried plant materials for art projects can broaden the repertoire of activities on offer especially in winter.
	• Sales of produce can be very motivating – when buyers part with hard-earned cash for something a gardener has grown this is a clear statement of the quality and value it has to others, and gives pride to the grower.
	• Finding other interests or 'hooks' to gardening e.g. someone who enjoys cooking may be inspired to grow herbs for culinary use. Landscaping or construction work may be seen as more 'macho' by some who think gardening is not for them.
Communication difficulties	• 'Signifiers' (e.g. a small plastic flower pot) can be used to help non-verbal gardeners understand that gardening activity is scheduled, or to convey which tasks or plants will be involved.
	• Pictorial markers – can be used to indicate certain places, rules or systems e.g. the correct place for tools storage.

Dementia	• Continuous paths e.g. circular, figure of eight, preferred to linear ones as doubling back to retrace one's steps can be disturbing • Certain wall heights may encourage climbing – consult the experts (see Stirling University below)

(Trellis 2013)

Appendix D: Breakdown of activities

March	Preparing seed trays/manuring beds/planting onions and early potatoes
April	Planting outside lettuces/cabbages/broccoli/cauliflower/maincrop potatotes
May	Planting tomatoes/peppers/cucumbers in tunnel, carrots&parsnips outside
June	Lawnmowing/strimming/weeding/watering/harvesting lettuces&radishes
July	Lawnmowing/strimming/weeding/watering/harvesting cabbage/broccoli/cauli
August	Shop duties/harvesting/lawnmowing/strimming/weeding/watering
September	Shop duties/harvesting/lawnmowing/strimming/weeding/watering
October	Shop duties/harvesting/lawnmowing/strimming/weeding/watering

Table 1: Growing season activities

Diagram of research facility

November	Propagating soft fruit/herbs
December	Christmas crafts/ wreaths/logs
January	Harvesting willow/willow sculpting
February	Mulching pruning fruit trees and bushes/fruit tree grafting
March	Fruit tree grafting/digging manuring vegetable beds

Table 2: Dormant season activities

Note: For the most part, growing season activities occurred either outside or in the polytunnel while many of the dormant season activities such as fruit tree grafting, Christmas crafts, herb and soft fruit propagation took place in the social shed/canteen which is located to the left of the polytunnel in the bottom right hand corner of the research facility diagram.

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