

Harvesting Health: Exploring the health promoting benefits of a backyard garden sharing project for vulnerable populations

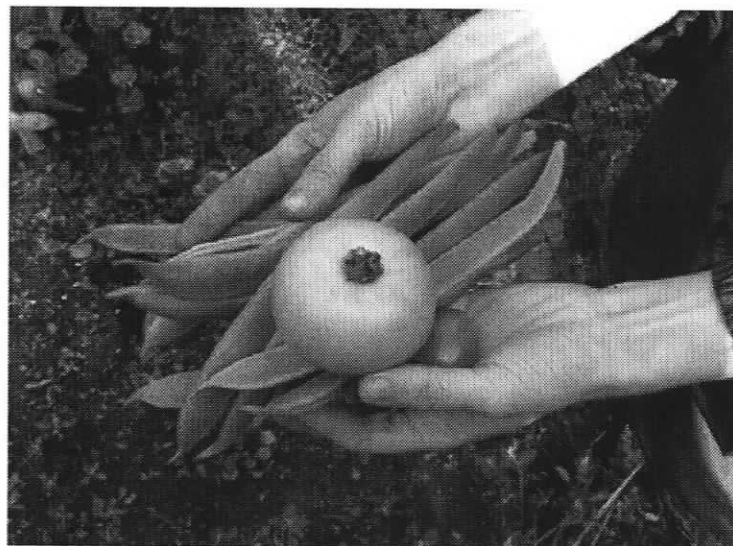
by

Analisa Blake
BA, University of Victoria, 2003

A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree of

Master of Arts

in the Faculty of Social Sciences/Department of Geography



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Abstract

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ABSTRACT

Health promotion identifies health as a resource for daily living and emphasizes the reciprocal relationship between people and their environments in creating health (MacDonald, 2002). In this thesis, I explore how community gardening programs can be used to improve the health and well being of vulnerable populations by creating positive changes within their physical and social environments. Furthermore, I address how community gardens can educate and empower these populations to live healthier lifestyles. My research is based on the creation and exploration of a project in Victoria, BC, where homeowners share their backyard vegetable gardens with volunteer gardeners. It is a small-scale qualitative study in the tradition of ethnographic research where the aim is to enhance understanding of phenomena (Johnston, Gregory, Pratt, & Watts, 2000, p. 238). I facilitated the project and monitored the progress of three garden partnerships for six months during Victoria's long growing season in 2005. Using in-depth interviews and participant observation techniques, I was able to come to a deeper understanding of the participants' experience of the project. This thesis addresses how the project may have promoted their health and well-being with specific reference to physical, psychological and social health and well-being. Suggestions for improvements for future application of the project are also provided.

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Dedication

This thesis is dedicated to my grandmother who has been an inspiration to me through her constant encouragement of my work and her undying passion for gardening.

Chapter 1: Introduction

1.1 The Broader Context

When I began this research project I did so with the intention of studying community gardens and their effects on the health and well-being of the people who use them. I felt that community gardens were a valuable solution to many social, environmental and food security problems facing communities today. However, when no appropriate venue for this research presented itself, I had to look elsewhere for a topic to study. In looking at a number of alternatives to my original idea, I came across a backyard-sharing project organized by Lifecycles, a local food security non-governmental organization (NGO). By using a bulletin board where people could post their requests for and offerings of land, Lifecycles presented people with the opportunity to share their backyards with who needed space to grow food. My supervisor suggested that I look into studying such a project, but with the added element of gearing it toward seniors and other vulnerable populations. Although I was still grieving the loss of my original plan, I welcomed the idea and began to move ahead with my proposal. In writing the literature review for my proposal I quickly discovered that while community gardens do offer a host of benefits to the communities in which they are located, they are not easy to create or maintain. I also learned that alternatives to community gardens that would overcome such barriers had rarely been pursued, and even more rarely been studied. I began to view backyard-sharing projects as very small-scale community gardens that could create many similar benefits to traditional community gardens while at the same time overcoming some of the barriers to traditional community gardens. Thus a new enthusiasm for my research project had been born.

Although the focus of this study is on the immediate and direct benefits to health and well-being for the participants, my enthusiasm for the subject of community gardening and urban food production rests also on broader issues. Questions regarding the mainstream food system, such as the implications of biotechnology, the safety of agricultural chemicals and how food is distributed, are of direct concern to the health of humans and the environment (Abaidoo, 2002). Any shift toward more local, sustainable production could mediate the negative effects of the mainstream global food system and potentially benefit human and environmental health. While the above concerns carry much weight in my mind, for the purposes of a single Master's thesis it would be impossible to delve into every dimension of the food security issue. Rather, it is my intention through this research to demonstrate the health promoting benefits of this backyard-sharing project in order to build community and government support for other such projects in the future. Ultimately, I hope that building support for programs like this will facilitate a shift to a healthier more sustainable food system.

1.2 Zeroing In –

1.2.1 Research Context

Although my interest in this research comes from a very broad perspective and the implications of it are potentially far reaching, this project, its rationale and its potential benefits can be conceptualized in a very focused, very concrete way by looking at it from the perspective of health promotion. Very basically, health promotion identifies health as a resource for daily living and emphasizes the reciprocal relationship between people and their environments in creating health (MacDonald, 2002). The environments in which people live can be composed of inequalities that put them at risk for ill health (Gatrell, 2002). This rings especially true for vulnerable populations. For example, a person may

have to live in a small apartment, far from a grocery store with no outdoor space to grow food. For an older person, an environment that once was considered healthy may become a challenge to continue to live in as that person ages and becomes less able to perform everyday tasks such as cooking, bathing or even gardening. I propose that community gardening programs are one way to mediate some of these environmental inequities in order to improve health for vulnerable populations. Furthermore, community gardens can educate and empower these populations to live healthier lifestyles.

1.2.2 Research Questions and Objectives

My research is based on the creation and exploration of a small-scale, local project whereby a homeowner shares his or her backyard vegetable garden with a volunteer gardener. It is a small-scale qualitative study in the tradition of ethnographic research where the aim is to promote understanding (Johnston et al., 2000, p. 238). The participant group consisted of three homeowner-gardener partnerships that were recruited with the help of a local volunteer services organization. I facilitated the project and monitored the progress of the partnerships and individual participants for six months during Victoria's long growing season (from May to November 2005). Using in-depth interviews and participant observation techniques, my goal was to gain a thorough understanding of the participants' experience of the project in order to learn how the project may have promoted their health and well-being. The purpose of this project was to explore how involvement in community gardening programs (i.e., backyard sharing) by vulnerable populations can promote their health and well-being.

My research project was designed with specific objectives in mind that would be realized through the implementation of the sharing backyards project, the community-

based development of that project and the completion of the research emerging from the project. The objectives are addressed in three different categories: personal health and well-being, building community involvement and knowledge translation/community and regional policy change.

1.2.2.1 Improving Personal Health and Well-Being

The primary goal of this project was to explore how this targeted backyard-sharing project could improve the health and well-being of the participants. It was anticipated that the project would facilitate lifestyle changes and would modify the participants' physical and social environments in positive ways, for example, by increasing access to green space, improving the condition of the senior's yard, building social networks and fostering intergenerational ties. As will be discussed in detail in the literature review, such changes can potentially enhance well-being by helping to improve nutrition and physical fitness, reduce stress, and decrease social isolation.

1.2.2.2 Building Community Involvement

With regard to community involvement, it was hoped that the backyard-sharing project would encourage participants to become more involved in community programs and activities more broadly. Within the limits of this project, community involvement could only be observed on a small scale. However, on a broader scale such increases in community involvement can potentially help create community capital and build a community's capacity to undertake future activities that could serve to improve well-being in the larger community.

1.2.2.3 Knowledge Translation & Policy Change

Another goal of this project was to provide information that could be used by governments, academics, organizations and individuals to develop more effective health-

promotion and food security programs. In addition, it was hoped that the findings would provide evidence that could guide community and regional policy in the areas of community development, housing, land-use and public health.

1.2.2.4 Research Questions

In designing my research project I devised several research questions that parallel my broader purpose and objectives. As a complement to the first objective of improving personal health and well-being my research questions are:

1. Does the sharing backyards program facilitate healthier lifestyle habits related to food choices and physical activity?
2. Does the sharing backyards program help to reduce social isolation?
3. Does the sharing backyards program foster intergenerational ties?

With regard to the second objective, building community involvement, I ask:

4. Does the sharing backyards program improve awareness of and/or participation in other health promoting community programs?

And finally, with regard to knowledge translation and policy change my question is:

5. What are some challenges and areas of improvement for future application of the project?

These questions served to guide my research design, data collection and analysis as described in Chapter 3 of this thesis.

1.3 A note about scale

It should be noted that although this is a small-scale, local project, it is nonetheless based on concerns that span a range of scales from local to global, and from personal to system-wide. The generalizability of small-scale qualitative studies is often problematic and as such it may be said that this study is only relevant within the specific communities under study, or even more narrowly, relevant to the specific individuals involved.

However, in examining the benefits of this small pilot study, one can begin to see how

those benefits might be strengthened and magnified if many people within the community become involved. Still further, other benefits may arise if many communities within the province or even the country also become involved. Overall, this project has implications for the health of individuals (micro-scale), the health of communities (meso-scale), and the health of the Canadian population in general (macro-scale).

1.4 Thesis outline

The remainder of this thesis consists of four additional chapters. Chapter two is a literature review that outlines the historical roles and present day status of community gardens, situates the health benefits of community gardens within the context of health promotion, and introduces the concept of vulnerable populations. In chapter three, the research design is outlined including a description of specific methods, data collection process and analysis techniques. Chapter four will outline the results of each of the three garden partnerships in detail, including a description of each participant, an outline of the development and dynamics of each partnership and a discussion of the benefits and key elements of the partnership. Chapter five concludes the thesis, with a summary of the benefits for participants, an outline of challenges and possibilities for the future, an acknowledgement of the limitations of the research, and a general concluding discussion.

Chapter 2: Community Gardens, Health and Vulnerable Populations: A Literature Review

2.1 Introduction

The idea of linking community gardens to health is not new. As demonstrated in this literature review, many researchers have succeeded in providing anecdotal evidence indicating how community gardens can benefit the health of the communities in which they exist and the individuals who use them. This project will consider the health promoting benefits of a non-traditional community gardening program for vulnerable populations on a short-term, local scale.

There are some key gaps and issues that arise in the literature regarding this subject, which provide both relevance and challenges for my research. While there has been a good deal of research on the health benefits of community gardens, there is little that links these benefits to multiple vulnerable populations. Furthermore, suggestions for alternatives to traditional forms of community gardens are absent from the literature even though most articles recognize various threats to the survival of community gardens as they exist now (including rising land values and demands for housing). Finally, because of inherent difficulties in obtaining quantitative evidence linking community gardens to health, and as qualitative research is not as highly valued as quantitative research from the perspective of Canada's population health approach (which dominates our health policy), it is difficult to validate linkages that may be apparent in small-scale qualitative studies.

In this literature review I will establish the context for my research and detail the issues discussed above. First, I will explore the historical development of the community gardening movement and define the meaning of 'community garden' as it applies to this

research. I will go on to identify connections between community gardens and health and discuss the relevance of these connections from a health promotion standpoint. Following this, I will define vulnerability as used in this research and address the relevance of health promotion programs for such populations. Finally, I will provide a discussion of the necessity for initiatives that break out of the traditional model of community gardens with consideration to the challenges involved in creating conventional community gardens, and the needs of certain vulnerable populations.

2.2 Community Gardens in Context

In this section, I will briefly outline the origins of community gardens since the 1800's, their development through the past century and the emergence of the current generation of community gardens. I will move on to define the idea of community as it applies to my research and then set out a clear definition of 'community gardens' that will be used as the basis of this research project.

2.2.1 The History

The origin of the community gardening movement can be dated from the Industrial Revolution in England where the enclosure of the commons, exploding urban populations and growing urban poverty led to the division of common land into allotments for the purposes of gardening (Warner, 1987). Community gardens first appeared in North America during the US depression of 1893 to produce food for consumption and sale as part of government relief programs for the poor (Warner, 1987). As the American economy picked up and land values rose, gardening projects declined. From this time forward, community gardens continued to emerge through history during times of

economic crisis to feed struggling populations and lift spirits. Invariably the use of such gardens would wane when economies recovered (Schmelzkopf, 1995).

During World War I community gardens re-emerged in the United States in response to food shortages with as many as five million participants producing five million dollars worth of food in only one year (Hanna & Oh, 2000). With the end of the war, the gardens faded away again, re-emerging once more with the Victory Garden Program of World War II. These Victory Gardens were targeted at alleviating food shortages resulting from the war and eventually came to be known as community gardens because of communities' involvement in their creation (Hanna & Oh, 2000). They reappeared yet again during the 1970's when inflation and recessions created extensive food shortages in the developed world (Warner, 1987). Community gardens have since been experiencing both a grassroots resurgence and a battle for existence as land values rise (Schmelzkopf, 1995).

2.2.2 Definition

Before the concept of community gardens is defined in the context of this project, I will set out a definition for 'community.' This task, however, is one that could be the focus of an entire thesis. For the purposes of this project, 'community' will be defined as any collection of people defined by geographical, social, or philosophical boundaries that share a common purpose or challenge (Holland, 2004).

Different researchers offer several differing definitions for 'community garden', which vary in their consideration of types of activities and numbers of participants. Ferris et al. (2004) developed a typology of community gardens identifying eight different kinds of community gardens including leisure gardens, schoolyard gardens, entrepreneurial

gardens, crime-diversion gardens, neighbourhood pocket parks, ecological restoration gardens, demonstration gardens and healing/therapy gardens. On a general level, in community gardens there is a degree of democratic control over the land (Ferris, Norman, & Sempik, 2001), and a sense of community among the gardeners (Schmelzkopf, 1995). By far the most encompassing definition is that provided by the American Community Gardening Association. This organization defines a community garden as “any place where two or more people garden together” (Kantor, 2001)[✳]. This highly inclusive definition encompasses the diversity and range that exists among community gardening programs no matter the size of the project, location of the garden, the nature of the participants, or the aim of the project. I have decided to use this broad definition in order to consider new ideas for community gardens that may not fit into other more stringent definitions.

2.2.3 Evolving Toward Community Capital

Historically, community gardens filled a need during times when food was scarce and spirits were low. Today, community gardens are still used in many developing countries as a means to reduce food scarcity, improve self-sufficiency and unify communities during perpetual hard times (Holland, 2004). Community gardens are used in essentially the same way in developed countries, though perhaps without the same level of urgency for survival. In the developing world a new era of ‘hard times’ has emerged, where environmental and social values are often in conflict with the interests of economic progress (Holland, 2004). While the economy may be relatively prosperous, communities face problems of social and environmental poverty, which generally come

[✳] However, small-scale family or household gardens would be excluded from this definition.

second (if they are addressed at all) to broader economic issues (Holland, 2004). As is evident from this situation, a healthy economy does not necessarily beget a healthy population.

Economic capital is only one ingredient in the recipe for healthy communities. Economic capital (e.g., sustainable community businesses), ecological capital (e.g., clean air, clean water, plants, etc), social capital (e.g., networks of friends and neighbours) and human capital (e.g., healthy, skilled people) are all required in the creation of a healthy community. The combination of these four elements is known as community capital, the key resource for healthy communities (Hancock, 2001). In order to build community capital, community programs must incorporate elements that can build all of these forms of capital concurrently. Hancock (2001) suggests that community gardens are a prime example of a type of project that can do this successfully by providing opportunities for economic development, social interaction, therapeutic labour, and environmental stewardship. Hancock's presentation of the concept of community capital is demonstrative of "the new health promotion" which seeks to empower communities to gain control of the determinants of health.

Of particular importance in this project is the aspect of social capital. According to Nutbeam's *Glossary of Health Promotion* (1998), social capital relates to "the processes between people which establish networks, norms and social trust and facilitate coordination and cooperation for mutual benefit (p.362)." As Nutbeam (1998) points out, "social capital is created from the myriad of everyday interactions between people" and is present, among other places, in "informal community networks and in the norms of volunteerism, altruism and trust (p.362)." Nutbeam (1998) also points out that the

stronger the social network is “the more likely it is that members of a community will cooperate for mutual benefit (p.362).” In this research, social capital is evaluated on a small-scale through the observation of participants’ social networks.

2.3 Healthy Connections in Community Gardens

In this section I will briefly outline how the term ‘health’ will be used in this project. I will discuss the concept of health promotion and its development in depth. I will then identify how past research has linked community gardens and health and how community gardens can be an effective vehicle for health promotion. Finally, I will place health promotion in the context of the Canadian population health approach and critically assess the implications of the discord that exists between these two concepts (health promotion and population health) with respect to research on community gardens and health.

2.3.1 What is Health?

Health is a concept riddled with definitions that have been composed in different eras, under different conditions, with different goals in mind. Because this project is centred on the health promoting benefits of community gardens, it will be useful to adopt a positive definition of health. As defined by the World Health Organization, health is not only marked by the absence of disease, but is a state of complete physical, mental and social well-being (WHO, 1948), a state that acts as a resource allowing people to live full and satisfying lives (WHO, 1986). Thus in order to live well, every person must attain the asset of health at some level. This definition shifts the focus away from how disease is created or prevented, and leads us to look at how health itself can be fostered and optimized. It also indicates a move away from the quantitatively focused biomedical model that has dominated health policy for so many years. In the following section you

will see how the concept of health promotion is situated within this positive perspective of health.

2.3.2 Health Promotion

Though some argue that the concept is quite young (Kickbusch, 1994), health promotion has had a long road to its current conceptualization. Claimed by nurses to have been the basis of their practice since the days of Florence Nightingale, health promotion has been in practice much longer than the concept has been formalized (MacDonald, 2002). An alternative view on the history of health promotion depicts health education as an early incarnation of health promotion (Badgley, 1994). The emergence of health promotion as a formal term did not occur until 1974 with the publication of the Lalonde Report, *A New Perspective on the Health of Canadians* (MacDonald, 2002; O'Neill & Pederson, 1994). A key contribution of the Lalonde report was the Health Field Concept, a conceptual framework for health which considers four different spheres of influence on health: human biology, environment, lifestyle and health care (Lalonde, 1974). This research project addresses the first three of the four elements of Lalonde's health field concept.

Lalonde focused on the elements of his health field as "causes and underlying factors of sickness and death" (Lalonde, 1974), however, if we adopt the WHO's positive perspective on health, these elements implicitly become causes and underlying factors of health and well-being. Unfortunately, the health promoters (governments and professionals) who adopted Lalonde's idea of health promotion for public health directed their efforts primarily toward promoting the lifestyle determinants of health and ignoring the other elements of Lalonde's Health Field Concept Model.

This lifestyle approach to health promotion was problematic and was criticized primarily for its lack of distinction from health education or social marketing and for its lack of consideration of the structural influences that constrained people's behavioural and lifestyle choices (Labonté, 1994; MacDonald, 2002). Evidently, these critiques were enough to ensure a continued dialogue among health promotion professionals and larger organizational bodies over the meaning of health promotion and the validity of its guiding principles.

The creation of the Ottawa Charter of 1986 (WHO, 1986) (prompted by the First International Conference on Health Promotion) set aside Lalonde's lifestyle version of health promotion, creating the agenda for a new health promotion conceptualization that defined health as a resource for daily living and that emphasized the reciprocal relationships between people and their environment in creating health (MacDonald, 2002). In the Ottawa Charter, health promotion is defined as "the process of enabling people to increase control over, and to improve their health" (WHO, 1986). This involves strengthening the skills and capabilities of individuals so that they are able to exercise control over the determinants of health (Bauer et al., 2003; Nutbeam, 1998). On a macro-scale, health promotion takes a structurationist or ecological approach in which human agency (and consequently human health) is seen to have a complex relationship with physical, social and political structures (Bauer et al., 2003; Best et al., 2003; Grzywacz & Fuqua, 2000; Stokols, 1992, 1996). On a micro- or meso-scale, health promotion's view of the reciprocal human-environment relationship can be exemplified through the implementation of local programs that empower individuals and communities to take actions that will affect their immediate environment and thus their own health and

well-being. Community gardening is one program that demonstrates the relevance of studying health promotion on multiple scales.

There is a general consensus that community gardens are beneficial to the health of those who use them. Armstrong (2000) provides the most comprehensive examination of the health benefits of community gardens. Armstrong (2000) points to such specific benefits as improved nutrition, physical activity, social well-being and psychological well-being. These benefits are echoed in several other works (Blair, Giesecke, & Sherman, 1991; Brown & Jameton, 2000; Hanna & Oh, 2000; Milligan, Gatrell, & Bingley, 2004; Myers, 1998). Community gardens also provide more peripheral, community-wide benefits that have been linked to health in a broader sense. These include improved social networks, enhanced community capital, better neighbourhood aesthetics, and reduced crime (Armstrong, 2000; Hancock, 2001). In addition, community gardens are among many grassroots programs that build communities' capacity to mobilize around broader issues related to public health (Armstrong, 2000; Twiss *et al.*, 2003). Furthermore, community gardens can be used as the basis of organized programs that target a wide range of populations and health related issues (Armstrong, 2000). Thus, it is evident how community gardens provide a convenient vehicle for health promotion and its positive perspective on health.

There are many links in the chain connecting community gardens to health and some of the links are weaker than others. This makes it difficult for researchers to make causal connections and provide direct evidence of benefits. Researchers have shown that improved health is a major motivation for people who choose to participate in community gardens (Armstrong, 2000; Holland, 2004). However, in terms of making specific

connections to health, researchers have had to rely on evidence from more scientific, quantitative studies related to health. Some of these connections are more straightforward than others. For example, while it may be quite clear that physical activity improves health it may be much more difficult to demonstrate that well-developed social networks also improve health. This is because the latter involves more subjective qualitative measures. Since qualitative evidence can be deemed less significant where health is concerned (Raphael & Bryant, 2002) a problem arises when attempting to 'prove' the health benefits of community gardens.

2.3.3 Community Gardens, Health Promotion and Canada's Population Health Approach

The population health perspective recognizes the importance of multiple environments in determining health and well-being (Hancock, 1999; Raphael & Bryant, 2002). These environments include the physical, social, political and economic, each of which has an influence on the other (Kindig & Stoddart, 2003; Northridge, Sclar, & Biswas, 2003). Community gardens are set in the physical environment, but can also have a significant influence on social and economic dimensions of the environment (Hancock, 2001). Therefore, when attempting to understand the connections between community gardens and health, the population health approach has a high degree of relevance.

While population health, as the name suggests, helps us to understand connections between health status and the determinants of health at the population level, in the context of Canadian health policy it also relies heavily on quantitative evidence to substantiate these connections (Raphael & Bryant, 2002). From a researcher's point of view, the difficulty of obtaining sufficient quantitative data regarding community gardens and health puts them at odds with current Canadian health policy that emphasises

quantitative research. Health promotion, to the extent that it supports qualitative research as a valuable way of understanding the determinants of health (Raphael & Bryant, 2002), offers some inroads for research on community gardens and their health promoting effects.

Canada was once at the forefront of health promotion. Over the past several years, however, economic concerns within the health care system have led to a reduction in research on health inequalities and other emerging issues concerned with health promotion (Glouberman & Millar, 2003). Furthermore, some researchers suggest that the influence of the Canadian Institute for Advanced Research (CIAR) over Canada's health policy has diminished the role of qualitative research in health research more generally (Raphael & Bryant, 2002). If policy makers would recognize the importance of health promotion as a goal and as a means of understanding the complexity between health determinants and the health implications of those determinants (as stressed by Raphael and Bryant (2002)), research into community gardens' effects on health would stand to gain resources, credibility, and importance.

2.4 Vulnerable Populations and Population Health

As discussed above, population health and more specifically the concept of health promotion, acknowledges the role of the individual in determining his or her own health. Population health also recognizes the existence of health inequalities and advocates programs to help empower individuals to improve their own health by affecting the determinants of health (WHO, 1986). This has particular resonance for vulnerable populations who are more susceptible to ill health. This section is devoted to the discussion of vulnerable populations and how their health can be improved through

health promotion programs, in particular community gardens. I will discuss what makes a population vulnerable and address two specific populations: seniors and food insecure individuals. I will then identify how a health promotion program can be tailored to suit the distinct needs of these populations.

2.4.1 What is a Vulnerable Population?

A vulnerable population is one that is at an increased risk for ill health (Flaskerud & Winslow, 1998). Income, age, physical health status, mental health status, socioeconomic class, and ethnicity are all factors considered when identifying a population as vulnerable (Flaskerud & Winslow, 1998; Leeman, Harrell, & Funk, 2002). Vulnerability stems from life circumstances, genetic predispositions, lifestyle habits and conditions in the physical environment (Joseph & Cloutier-Fisher, 2005). Seniors, people with low-incomes and people who are food insecure (i.e. people who lack access to healthy, safe, affordable food) all have barriers to optimum health and thus are all examples of vulnerable populations. In addition, these groups are not mutually exclusive; for example, a senior may have low income and be food insecure.

Vulnerable populations may lack the resources and physical or mental capacity to change the elements of their social and physical environments that have caused (or that perpetuate) their vulnerability. For some groups, especially those with chronic diseases, affecting such changes might even be deemed impossible. Health promotion programs focus on empowering individuals to change these environments to improve their health. Because of this, such programs can be valuable to many vulnerable persons. Furthermore, health promotion is sometimes linked to social justice (Wallerstein & Freudenberg, 1998)

which is particularly relevant when considering vulnerable populations because of the prevalence of health disparities among such populations (Flaskerud et al., 2002).

2.4.2 Benefits of Community Gardens for Vulnerable Populations

Although there has been a good deal of research on community gardens and health, only a limited amount has focused on their benefits for vulnerable populations (with the exception of Milligan *et al.* (2004) and Myers (1998)). This is surprising considering how important health promotion programs can be for vulnerable populations. To my knowledge, there is no published research on how multiple vulnerable populations can benefit from a single community gardening program. Community gardening programs are one way to mediate environmental inequalities in order to improve health for vulnerable populations. Furthermore, they can serve to educate and empower these populations to work for community change and to live healthier lifestyles. If one considers that community gardening programs provide a venue for increasing physical activity, reducing social isolation, and improving nutrition, then it is easy to see how such a program can meet some of the needs of vulnerable populations who may lack social support, opportunities for leisure and recreation, and access to healthy food.

2.5 New Directions For Community Gardens: Contested Spaces

In this final section I will discuss the need and opportunity for initiatives that break out of the more traditional models of community gardens. I will address the increasingly contested nature of community gardens and the existing solutions to this issue. This section will serve to justify my broad research topic and the pilot study that I have conducted as the basis for my research project.

2.5.1 Contested Spaces

In the face of rising land values and growing pressure for housing, community gardens have become 'contested spaces' where communities, businesses and municipalities clash over what to do with the spaces (Hanna & Oh, 2000; Schmelzkopf, 1995). With the very existence of many community gardens being in jeopardy one can only imagine how difficult it is to obtain land to create a new community garden. Furthermore, once a community has obtained land for a community garden they have great difficulty in obtaining long-term leases (Schmelzkopf, 1995). Most operate on yearly leases that are constantly under review and that cast a constant shadow over the gardens (Schmelzkopf, 1995). These problems are well recognized in the literature (Armstrong, 2000; Ferris et al., 2001; Hanna & Oh, 2000; Holland, 2004; Kantor, 2001; Schmelzkopf, 1995; Twiss et al., 2003) yet solutions are rarely addressed.

There is certainly merit in building a case for the preservation of community gardens based on their contribution to health and well-being. Even so, policy-focused research regarding how to preserve these gardens is also necessary and could be equally productive. Moreover, there has been very little research examining alternative forms of community gardens that would bypass land-use and policy conflicts. As discussed earlier, the concept of community gardens has been constantly evolving throughout history. It follows that the literature should evolve with it.

2.5.2 From Conflict to Harmony: Innovations and Changes

The very same issues that have put communities, governments and businesses in conflict can also bring them together. Community groups have been at the forefront of searching for alternatives that would allow more community gardens to exist. They have come up with some viable solutions. For example, a business can provide the money for a

community garden as part of its community investment budget, or a developer can incorporate aspects of community gardens into its own projects (Pearce & Robson, 2004). Partnerships like these lead to some creative and innovative ideas for community gardens. Another way to get around the conflicts facing community gardens has been to create them in unique spaces including schools, nursing homes, hospitals and apartment rooftops. Placing gardens within these environments not only protects them from outside economic forces, but also allows them to be tailored to the needs of specific vulnerable populations. The gardening project for this research was designed to turn private backyards into a communal resource for two populations who are vulnerable, either due to their age or their lack of access to food growing space. The results of this study will contribute to the limited literature on finding alternatives to traditional community gardens.

2.6 Conclusions

As is evident in this literature review, there are some potential difficulties in gaining recognition for qualitative health research within Canada's current biomedical approach to health care. It is also evident that the creation and maintenance of community gardens can be highly challenging. However, it is clear that there is great opportunity to develop community gardens as a means of promoting the health and well-being of vulnerable populations as well as the population as a whole. Through this research project I will endeavour to come to an understanding of how community gardening programs can meet the needs of multiple vulnerable populations. In doing so, I hope to address the research gaps I have identified in this area. In the following chapter I will provide a review of the specific methods I have used to address the gaps discussed here.

Chapter 3 Research Design and Methods

3.1 Introduction

For this study I designed and implemented a community gardening program whereby older homeowners shared a portion of their backyards with individuals who had barriers to accessing land to grow food. This project was designed to serve the needs of the homeowners and gardeners by providing an opportunity to garden and to harvest their own safe, healthy produce. This project adopts a health promotion approach in exploring how involvement in community gardening programs by vulnerable populations can promote their health and well-being.

3.1.1 Review of Research Questions and Objectives

My primary research purpose was to explore how participation in community gardening programs, such as this backyard-sharing project, promotes the health and well-being of vulnerable populations. To fulfill this purpose, I considered several targeted research questions relative to three specific objectives. With regard to the objective of improving personal health and well-being, I asked whether the sharing backyards program facilitated healthier lifestyle habits such as food choices and provision of time for physical activity and whether it helped to reduce social isolation and foster intergenerational ties. With regard to the objective of building community involvement, I asked whether the program improved awareness of and/or participation in other health promoting community programs. Finally, with regard to the objective of policy change and knowledge translation, I set out to identify challenges and areas of improvement for future applications of the project.

3.1.2 Qualitative Inquiry

This project describes a small-scale qualitative study. Qualitative techniques are frequently used in health and social research as a means of gaining a deep and thorough understanding of certain issues (Belgrave, Zaboltsky, & Guadagno, 2002; Crang, 2003) and they provide insights that could not be obtained through quantitative methods alone (Crang, 2003). For example, in my research, quantitative methods could help identify exactly how often a person goes outside to garden in a month, while qualitative methods can help us to understand why the person goes out into the garden at all and how he or she feels about the experience. For this research, I will be using a selection of different qualitative methods, including in-depth interviews and participant observation, to help me understand how a backyard-sharing program can impact the well-being and quality of life of the participants.

3.1.3 Standards for Rigor in Qualitative Research

In carrying out a qualitative research project, it is important to consider the implications of the interpretive nature of qualitative inquiry. As Miles and Huberman (1994) point out, “the apparent simplicity of qualitative “data” masks a good deal of complexity, requiring plenty of care and self-awareness on the part of the researcher” (p.9). There are a number of complications in the observational and interpretive process involved in qualitative research that can impact the final product of the research. To begin with, “facts” are often subject to multiple rounds of interpretation; first in relation to the interpretations and explanations put forward by those being studied, and second in relation to the interpretations and explanations developed by the researcher (ibid.). In some cases, research subjects may alter their actions (or words) in order to be seen in a certain way by the researcher (ibid.). Furthermore, the observations, and interviews used

in qualitative research are filtered through note taking and transcribing into a more limited format of what can be written down and read versus what can be heard and observed (ibid.) Finally, observations (and interviews) take place in a specific social and historical context that can have a significant impact on the researcher's interpretation (ibid.). Thus, the process of qualitative data collection results in the data being passed through several filters, which ultimately impacts what comes out at the other end.

In consideration of the aforementioned limitations, the necessity for rigor in qualitative research is evident. As Miles and Huberman point out, self-awareness is a place to start, but there are also more stringent guidelines that one may follow to ensure rigor in a qualitative research project. Baxter and Eyles (1997) identify four common strategies for rigor in qualitative research as drawn from their review of 49 qualitative studies in human geography: "the provision of information on the appropriateness of the methodology, the use of multiple methods, information on respondent selection and the presentation of verbatim quotations" (p.506). They also point out the use of standardized interview guides and lengthy field-work as strategies to enhance rigor (ibid.). All of the above methods have been taken into consideration in the planning, implementation and presentation of my own research. With regard to presenting one's data, Baxter and Eyles (1997) also suggest four criteria: credibility (accurate representations of experience), transferability (the relevance of the information outside of the study context), dependability (consistency of interpretation) and confirmability (acknowledging the potential for the researcher's interests to affect results) (ibid.). Once again, all of these criteria have been considered in the presentation of this research and will be addressed in the 'Limitations' section later in the chapter.

3.2 Two Qualitative Approaches

3.2.1 Community Based Participatory Research

Based loosely around principles of a Community Based Participatory approach, this research was initially intended to involve the input of participants and key community stakeholders throughout the project, with an end goal of improving health and well-being in the community. The term community-based research (CBR) is used to describe a process involving the collaboration of researchers and different stakeholder groups to address a need for change in the community (Hills & Mullet, 2000). A similar research approach is Participatory Action Research (PAR), which has its roots in Feminist and Humanistic Geography and involves the participation of community groups in every stage of the research (Johnston et al., 2000). As with CBR, PAR aims to create positive changes for communities (Johnston et al., 2000; Morris, 2002). In order to reduce confusion between these terms, Israel (2000) proposed a new term, 'Community-Based Participatory Research (CBPR)', which reinforces the participatory nature of Community Based Research.

This project was initially designed to reduce health inequalities through the application of a CBPR approach in creating a community gardening program tailored to senior homeowners and people who are food insecure. However, as the project progressed the participatory nature of the project became less feasible. In the end the type of "participation" extolled by proponents of CBPR extended only to include the input of community organizations in the planning stages to address issues of safety and feasibility of the study. The project did however require a high degree of involvement on the part of the individual participants who were made aware of the research purpose early on in the

project and who were encouraged to comment on their experience of the entire research process.

3.2.2 Ethnography

Because this project does not fit perfectly under the umbrella of CBPR, it was necessary to establish another methodological framework in which to properly situate this research. Therefore, the primary methodological framework that has informed this research is Ethnography. Considering my high level of involvement at all stages and in all aspects of this project and also considering the methods used, in particular participant observation, this research is well placed as employing an ethnographic approach.

The theoretical underpinnings of ethnography (as drawn from anthropology) are rooted in naturalism which holds the idea that phenomena should be observed in their natural settings and not in a laboratory (Atkinson & Hammersley, 1996). Naturalism (along with its defence of ethnographic research) emerged in reaction to the stringent quantitative standards and scientific method of the social sciences (Atkinson & Hammersley, 1996). Ethnography has evolved substantially from its roots in anthropology, being criticized and then adjusted and developed to suit the needs of other disciplines including human geography (Hoggart, Lees, & Davies, 2002). Ethnography can be viewed either as a philosophical paradigm that a researcher abides by entirely, a method to be used when desired or some combination of the two (Atkinson & Hammersley, 1996). As a method, the aim of ethnography is to “convey the inner life and texture of a particular social group or locality” (Johnston et al., 2000, p. 238). It is a holistic method of observation where the researcher immerses him or herself in the environment under study in order to gain a comprehensive understanding of what is

happening in that environment (Stewart, 1998). According to Cook and Crang (1995), there are four principal modes of collecting ethnographic data: Participant Observation, Interviewing, Photography or Video Recording and Focus Group Discussions. It is recommended that a researcher employ more than one of these methods in order to ensure consistency within results and to “look for new insights that one approach may cast on another” (Cook & Crang, 1995 p. 72). This project uses the first three of the aforementioned methods.

Questions of researcher subjectivity, partiality and positionality are of central importance in the practice of ethnography (Cook & Crang, 1995). The researcher must consider that “research on social relations inevitably arises out of social relations stretching between the field academy and beyond” (Cook & Crang, 1995 p. 72). In addition, it must be recognized that those being studied and the context within which they are being studied are not static entities that can be observed in isolation (ibid.). Rather research subjects have variable pasts, futures, and recollections, and the cultures in which they live have dynamic boundaries that may defy classification or identification (ibid.). Furthermore, within an ethnographic orientation, observations occur in a specific and unique context and therefore must be considered for their relevance in that context (Stewart, 1998).

As will become apparent through the rest of this thesis, I have used an ethnographic approach to support my study of the phenomena of food security, vulnerability, and health and well-being within three garden-sharing partnerships. Through the use of participant comments and my own observations, I will present a thorough account of the backyard-sharing project for each partnership. In addition, I will provide insights into the

experiences of the participants through my interpretation of in-depth interviews, participant observation and other methods.

3.3 Research Process

3.3.1 Planning and Recruitment

After drafting the initial proposal for the project, it was submitted for approval through the University of Victoria Human Ethics Committee. Ethics approval was received in March of 2005. Next I began to search for a community partner within the Capital Regional District. After some initial email contact, the Saanich Volunteer Services Society (SVSS) expressed interest in becoming a community partner for the project. It was agreed that SVSS would offer their help in recruiting, screening and offering future support for the participants of the project. Recruitment began by including a call for gardeners and homeowners in SVSS's column in the *Saanich Weekly News*. In addition to this, SVSS included an advertisement in their own seasonal newsletter and contacted some of their existing clients and volunteers by phone or email. I sent out additional emails through different list-serves in the University Community and through different non-profit organizations involved in gardening or community projects. I also contacted local community gardens to find out if they had waitlisted gardeners that might be interested in participating. Interested people contacted me directly and if they were a good fit for the project and a partner could be found, they were passed on to SVSS for more thorough screening. The original aim had been to create four partnerships, however, by the end of May three partnerships had been created. Although there had been more interest, it was not possible to find appropriate matches for all interested individuals.

3.3.2 Sample Characteristics and Matching Considerations

The participant group was selected based on a combination of project guidelines and SVSS screening policies. The basic criteria for the homeowner group stipulated that they should be older adults who have expressed concern with their ability to maintain their garden and/or who have garden space that would otherwise go unused. Homeowners had to become registered as clients with SVSS and thus had to be residents of Saanich. For the gardener group, the participants must have expressed a desire to grow their own food and must have a need for space to do so. Gardeners became registered as volunteers with SVSS and were not required to reside in Saanich. In addition to these basic criteria, the homeowners were required to have homeowner's insurance and the gardeners had to undergo criminal record checks through SVSS¹. Finally, I met with each of the participants to answer any questions they had about the project and to have them sign the participant consent form required by the Human Research Ethics Board (Appendix A).

The partnerships were established largely through the consideration of three elements: geographical location, personal preferences and planned garden contributions. An attempt was made to match participants in such a way as to reduce the amount of travel to the garden and also to ensure that the partners were compatible both in terms of their personalities (though this was difficult to judge at such an early stage) and the amount of work they wished to contribute to the garden. After determining an initial match the partners were introduced in an informal meeting at the homeowner's house where the gardener could view the garden space and both participants could discuss what might be grown, where supplies might come from, and how the food might be distributed (Appendix B). After this first meeting I contacted each of the participants individually to

¹ Once gardeners had been approved by SVSS they were protected under SVSS's volunteer insurance policy.

see if they were interested in working with the person they met. In all three cases the results of the first time meetings were positive and the participants decided to work together.

To finalize the partnerships each participant was asked to sign a waiver of liability stating that they would not seek legal action against their garden partner or the University of Victoria should an accident occur on the homeowner's property¹ (Appendix C). In addition, the participants signed an oath of confidentiality stating that they would not disclose the identity of their partners without permission (Appendix D). At this time the participants were given an information package containing Internet resources on gardening along with copies of all the documents they were asked to sign. Shortly after the launch of the project, grant funding was secured and participants were offered compensation for their gardening costs (some participants, however, declined this support).

3.3.3 Data Collection

3.3.3.1 Interviews

Instead of setting out specific questions with a limited range of specific answers (as with quantitative surveys), the qualitative interview functions more as a "guided conversation" where respondents have the opportunity to answer the questions in some depth (Johnston et al., 2000). The purpose of a qualitative interview is to interpret people's experiences (Warren, 2002) rather than to generalize the views of a population (Johnston et al., 2000). In addition, qualitative interviews are often based on a small purposive sample (Johnston et al., 2000) rather than a large random sample. The interviews for this research project were semi-structured interviews with predominantly

¹ This waiver was written in cooperation with a lawyer employed by the University.

open-ended questions. However, I used an interview guide (Appendix E) that served as an outline for each interview to ensure consistency within and across the interviews. The interviews were tape-recorded, transcribed immediately and later analyzed. Interview transcripts and recordings were stored using only the participant number (i.e. homeowner 1, gardener 1 etc.). Participants were assigned pseudonyms to protect their confidentiality when results were reported.

Two sets of in-depth interviews were conducted (introductory and concluding) with slight differences between the questions posed to the gardeners and those posed to homeowners. The majority of questions were open-ended and were organized into several categories including, general project information, gardening experience, food security, self reported health, stress levels, physical activity, housing, community awareness, and social networks. In addition, the interviews included a limited number of structured questions designed to gather standardized information regarding socio-demographic characteristics, diet and daily activities. Because of the small number of participants and the finite time frame (i.e. an 8-month growing season), two sets of interviews were conducted throughout the course of the project. In this type of qualitative study using multiple interviews can build knowledge and increase the validity of the findings (Gubrium & Holstein, 2002).

At the beginning of the project, even before gardening began in some cases, I conducted the introductory interview (Appendix E) with each of the participants to gain insight into why they chose to become involved in the project and their previous experience with gardening. These interviews were conducted in June of 2005. They were designed, in part, to obtain baseline information about health and well-being (as

categorized above) that could be compared with later interviews. The final interviews (Appendix F) were conducted in mid-October. These interviews encouraged the participants to reflect on how they benefited from the project, what their relationship with their garden partner was like and what kinds of challenges they encountered in their partnership. At this time I also followed up on the health-related questions addressed in the introductory interviews. This final interview formally closed the field phase of the project. I encouraged the participants to contact me following this meeting if they had any other questions or concerns.

3.3.3.2 Participant Observation

Participant observation is the second ethnographic technique employed by this project. Its purpose in this case is to gain insight into aspects of social interaction and partnership dynamics. During the project, I checked in with participants by phone at least once a month and visited each of the gardens two to three times during the growing season when possible. I tried to make at least one visit where both gardener and homeowner were present. During these visits and phone calls I asked questions about their experience of the project in an attempt to tap into their immediate thoughts about the project and to alert me to any issues that may have arisen regarding the sharing arrangement. During my visits I was actively engaged with participants rather than simply observing from a distance. Often little gardening activity took place during these visits; they were more like social calls where the participants poked around the garden briefly to water or weed or to show me something, and then we all sat down together and talked. I kept notes regarding my observations and impressions as the project progressed. This observation and monitoring allowed me to observe how the participants in the project interacted, and also illustrated where there was a lack of cooperation and

interaction. All my notes were typed in a journal format and later analyzed using the same coding scheme and technique as the interview data.

As a complement to the notes from my garden visits, I also took photographs while I was at each garden. The pictures that I took were not analysed in a formal way but rather, they served as an additional record of the partnerships and of the gardens' progress. They have been incorporated as a descriptive device throughout Chapter 4.

3.3.3.3 Additional Collection Techniques

The participants were asked to complete diet logs before the project and then again during harvest time. These were to be used to compare the consumption and source of fruits and vegetables in the participants diets, however, because of the inconsistent response rate and changes in the research design these were not included in the analyses. In addition the participants were given the opportunity to complete personal progress logs, however, only one participant chose to use this form of expression. The data from her journal were analyzed in the same way as the interview data.

3.4 Data Analysis

There are two general ways to analyze the content of a text (or transcript in this case). The first is to identify facts and the second is to identify meanings (Sofaer, 1999). In the case of the latter, the researcher draws meaning from assumptions, values, and priorities that are identified in the text. Thematic analysis is one way in which meanings can be found within texts, or in this particular case, within interviews. Boyatzis (1998) describes the process of thematic analysis as having three distinct steps, "seeing", "seeing as", and interpreting. In "seeing", the researcher identifies a pattern in the data, for example, a sentiment that is repeated over and over again that seems to be important. In

“seeing as” the patterns identified in “seeing” are classified or described allowing the researcher to conceptualize the patterns and see how they may be connected. These two steps set the stage for the researcher to further interpret and present the content under study.

Thematic analysis can be done at both manifest and latent levels (Boyatzis, 1998). At the manifest level, the analysis is based on the surficial elements of the text and is more descriptive in nature. At the latent level, the analysis is based on underlying elements of the content and is more interpretive in nature. Thematic analysis allows for the researcher to analyze data using both latent and manifest levels of analysis at the same time (Boyatzis, 1998).

The analysis of my interviews and observations parallels Boyatzis’ description of thematic analysis using both Latent and Manifest levels. Boyatzis suggests categorizing data and using samples from within each category for an initial coding exercise. He calls this categorization a criterion split; for example, one may have a criterion split between male and female participants in a particular study and would then use one interview from each of these categories to begin coding. Although I could have identified a criterion split either between the introductory and concluding interviews, or between the homeowner interviews and the gardener interviews, I chose to view my partnered interviews as a single unit of analysis with a sample of three partnerships. In cases where there is no criterion split, as Boyatzis suggests, it is advisable to combine theory driven, prior research driven, and data-driven (or inductive) approaches. My analytical process, on a general level, is consistent with the methods that Boyatzis suggests for these approaches. However, because Boyatzis’ approach seems to be based on large sample sizes, my

approach varies from what Boyatzis suggests. This variation relates back to ethnography's emphasis on depth (more information on fewer cases) as opposed to breadth (less information on more cases) In addition, because he includes considerations of study design and sampling in his methods, my method of analysis is not entirely parallel. The steps for my analysis, as adapted from Boyatzis are as follows:

3.4.1 Step 1: Becoming Familiar With the Data

In addition to personally conducting each interview, in order to familiarize myself with the interview data, I transcribed each one immediately after the interview. I reviewed the introductory interviews prior to conducting the concluding interviews and I reviewed each transcript before beginning my analysis.

3.4.2 Step 2: Choosing a Sub-Sample

I chose to use the full set of concluding interviews as the sub-sample for which I would develop my coding scheme. The reason for this is because the concluding interviews for the most part held the richest data with regard to my research questions and would be the primary source of interpretive material, in comparison with the introductory interviews, which contained primarily descriptive data that was either very simplistic, or very similar to what was covered in the concluding interviews.

3.4.3 Step 3: Identifying Themes Within the Sub-Samples

After reading through each transcript I began to re-read the concluding interviews and take notes on a separate piece of paper of the words or phrases that stood out as being important to some aspect of the project or some specific aspect of health & well-being. I typed all of these notes into a list and entered them into a spreadsheet. From this initial coding exercise I was able to identify three classifications that each observation could fit

into descriptive, process-oriented, and health-related observations. These classifications were derived from my research questions (theory driven) and from the information in the transcripts (data driven). Descriptive observations were data driven, and consisted of items at the manifest level that included very basic, superficial descriptive information, for example comments about their gardening experience, their personal character or their garden. Process-oriented observations were both data and theory driven and were primarily at the manifest level (though sometimes more latent) and referred to any comment related specifically to participants' experience of the project, for example how they got along with their partner, how the food was shared and challenges they may have encountered. Health-related observations were both latent and manifest and referred to any comment regarding the impact of the project on some aspect of health or well-being, for example, social, psychological or physical well-being. This category is the most directly theory-driven, in that I was purposefully looking to identify areas where health and well-being may have been improved.

3.4.4 Step 4: Creating a Code

In order to develop specific codes for each of these areas, I created a spreadsheet with the list of words and phrases from my initial coding on one axis and my three categories on the other axis. In addition to the three categories mentioned above, I added a column for "other" themes that did not fit neatly into any of the initial three categories. I reviewed my initial coding list and as I did so I attempted to classify each word or phrase into related themes (Table 1). I then reviewed this list to see where there might be possible overlaps, and amalgamated things where appropriate.

Table 1: Sample of code development spread sheet.

Descriptive	Process	Health Related	Other	Coding Notes for H1 Int 2
		Psychological		Change in outlook
	*	Physical (activity)		Time in the garden
		Physical (activity)		Getting out more
Enjoy people		Social		neighbourliness
	*		Personal experience	Gardening is a gamble
	Team dynamic	Psychological (empowerment)		Encouragement
	Obligation vs. Motivation	Psychological (stress, motivation)		Obligation vs Motivation

Note: Initially, notes were entered into the final column in the order in which they were drawn from the transcripts. Later they were reviewed and associated with a particular category in the first four columns.

3.4.5 Step 5: Ensuring Reliability and Validating the Code

Having developed a list of concrete themes (Appendix G) I returned to the transcripts and coded them using these new themes, making adjustments and additions to the themes in some cases. For the introductory transcripts some new descriptive themes were added as needed. After hand coding all the transcripts I turned to a qualitative analysis software program called NVivo© (version 2) to assist with the next stage of my analysis. I created text documents of all my interviews and field notes within NVivo©. I then entered my coding structure into the program and recoded the transcripts using the electronic coder that NVivo© provides. Re-entering this coding allowed me the opportunity to review how I had coded certain kinds of comments and to ensure that comments were being consistently coded at the same themes. It should be noted here that the analysis for this project was far from being a linear process, rather, I repeatedly returned to the data to re-think my interpretation of it in what could be called the movement of a hermeneutic circle (Johnston et al., 2000) or iteratively cycling back and forth to build up understanding.

3.4.6 Step 6: Using the Coded Data

By using NVivo© to code the documents I was then able to ask the program to produce reports showing for example, all passages of text coded at a specific theme (such as social interaction), or all passages of text for a specific interview organized theme by theme. These reports allowed me to look at the data in a different way and to see connections between certain themes. It helped me to move my themes to an even more interpretive level when I moved to the writing stage and sought out ways of conceptualizing my themes for my thesis. I was able pick out significant trends and amalgamate my themes into larger categories that became the main units for writing up my results.

3.5 Presentation of Data

The results presented in the subsequent chapters have been developed with criteria of credibility, dependability, confirmability and transferability in mind. To address the criteria of credibility, care was taken to avoid making assumptions and interpretive leaps in presenting the findings. In addition the use of direct quotes and the acknowledgment of “possible” interpretations of the interview data allow the reader to assess what information is supported by the data, and what is theorized by the researcher. With regard to dependability, transcripts passed through three different rounds of coding (initial coding, entry into Nvivo, subsequent review for writing) to ensure that passages were coded consistently at the appropriate theme. Awareness and acknowledgement of the inherent biases and assumptions that a researcher may bring to a study allows me to address the issue of conformability. Personally, I do not believe it possible for a researcher to avoid bringing personal biases into his or her work; however, it is possible to present one’s research honestly with the acknowledgement of potential bias. That

being said, it is important to acknowledge here that I was purposely searching for evidence that supports my research questions and objectives, thus both my data collection and interpretation was designed to identify benefits to health and well-being rather than the opposite. However, at the same time, I was equally interested in identifying problems with the project in order to be able to suggest areas for change and improvement. This duality in my research interest and design helped to balance my data collection and analysis. Finally, the criteria of transferability is addressed by the use of themes and codes that can be seen as relevant within many different disciplines and contexts.

3.6 Limitations

In beginning this project I was aware that there would be limitations in my ability to address my research questions. This is especially true given the nature of the central interest of this research; the idea of observing benefits to health and well-being. To illustrate, one issue of concern is the qualitative nature of the data – the health benefits presented in this thesis are based on comments and observations made by the participants themselves; they are not by any means standard clinical measures. In addition, the short observation time (only six months), limits my ability to ascertain whether the positive benefits people experienced would be long-term or merely temporary. For instance, it was not possible to determine whether they would continue to eat more fruits and vegetables, or walk more after the project concluded. Another notable limitation is that the majority of my data comes from interviews that are based on participants' recollections of a five to six month period, which, may not be entirely accurate or particularly detailed, especially due to the fact that one of my participants had a memory problem that caused her some frustration during the interviews. Finally due to my direct

involvement in the project and because the participants were all aware of the goals and purposes of my research, it is possible that my involvement in the interviewing process may have influenced the nature of the participants responses over time, either because they wanted to make sure that the project was reflected in a good light or because they wanted their contribution to be reflected in a particular way. Limitations such as these exist in every research project. By realizing and disclosing them, I was able to take them into consideration in my analysis of the interviews and observations and, in the end, convey them to you the reader so that you may be better equipped to judge the validity of the results.

Chapter 4: Results

4.1 Introduction

Each of the participants involved with the Harvesting Health Project had unique and varied experiences of the project and each partnership was distinct in how it developed, and how the participants interacted with one another and with the garden. The purpose of this chapter is to illustrate for the reader what each partnership was like, how each participant benefited and what made the partnerships succeed or fail. In this chapter I describe each partnership in detail including a description of the participants themselves beginning with the gardener and then the homeowner. I follow these initial descriptions with an overview of how the partnership began and how it developed. Following each descriptive section, I have included a selection of photographs from each garden along with captions to describe each picture and enrich the context of each partnership. Finally, I go on to examine key elements that influenced the success of each partnership and discuss the benefits that each participant experienced as a result of the project.

4.2 Partnership 1 - A Growing Success: Jolene and the Wilmots:

4.2.1 Jolene Jensen (Gardener Description)

Jolene is a retired nurse in her 50's who has done extensive work with seniors in the past. She is an active volunteer in her community, driving seniors to doctor's appointments and working with the local community association. Jolene seems to be an outgoing person. She has an active social life and she places great importance on building relationships with people. Jolene is health conscious and tries to stay active and eat healthfully. She and her husband travel often, and they love to sample different foods

from around the world. Jolene feels she has an excellent quality of life. She describes the things that give her satisfaction day to day:

“Caring for others, relating to others...being able to do the things that I enjoy personally, that give me a sense of well-being, like gardening, walking, being with my dog and my husband, having new experiences with food and travel, those are quality of life. If I can do those things I’m happy.”

Jolene has a yard but it is too shady to grow vegetables. She does, however, manage to do some container planting in her driveway where there is more sun. Jolene’s interest in growing food stems from her experience of growing up on a farm. “It’s in my blood ...I was born on the farm and so I [was] kind of in the garden with my mother and father [from the time] I could sit up.” Jolene has continued to garden for much of her life:

“Any chance I’ve had, if I’ve owned a house with some land I’ve grown something and if I haven’t [had land] I’ve found either a neighbour or a relative [with garden space] and I’ve always tried to grow something.”

She was a member of the local community garden and greatly enjoyed her experience there but since it was shut down due to the development of a housing complex she has had a difficult time finding a place to grow vegetables.

Jolene became involved in this project because she was interested in gardening, but more importantly because she wanted to lend a hand and make connections with seniors and with others in her neighbourhood: “I really enjoy working with seniors for one thing and I really am motivated to create neighbourhoods.” Another key motivation for Jolene was making sure that good land is not going to waste: “I like to make the best of land and if there’s a piece of land that isn’t being used for vegetables I would like to help. Even

though I may not get a lot out of it myself personally, it doesn't matter as long as the other person does too."

4.2.2 Albert and Nina Wilmot (Homeowner Description)

Albert and Nina are an older couple in their 70's. They live in a higher income neighbourhood in Victoria that is relatively inaccessible except by car. They are an active couple that enjoy their home and the outdoors, however they have a limited social network and are faced daily with the challenges presented by Albert's Parkinson's Disease.

Albert is the primary gardener in the family. A retired science professor, Albert has always had an interest in gardening and has been exposed to vegetable gardening since he was a young boy. He grew up in the UK and his family had an allotment garden (an assigned garden plot) that helped them through the rationing of wartime. Nina grew up in the same community and her family also had a garden, but she is not particularly involved in vegetable gardening with Albert. In the past, when his children were young Albert recalls, he was able to provide enough vegetables for his family of four during the growing season, only needing to get certain items from the grocery store to supplement what they had grown.

The Wilmots eat nutritiously and are concerned with the freshness and quality of their food. "We always think "is this healthy?" when we buy it; you know, "does that look healthy?" (Nina). A heightened concern for eating healthfully (in particular eating organic produce) arose from Nina's experience with colon cancer two years ago. When she was recovering from the cancer, they began to order groceries from an organic food

delivery company. In a similar way, gardening gives the Wilmots an opportunity to get fresh, healthy produce from their own backyard.

“The more gardening one does the more food secure you are because one doesn’t really know how the food you buy has been grown despite the fact that there are often claims of being organic, or this, that or the other. How can you be sure? You can really be sure about your own plants...”
(Albert)

Albert is passionate about gardening however his Parkinson’s Disease has taken a significant toll on his physical abilities, including his ability to garden. He was very keen to take part in the project, calling regularly to express his interest and his sense of urgency in beginning before it was too late in the growing season. He wanted to put his land to good use and to have someone lend a hand in the garden.

“I’ve got garden space I can’t manage, I can’t use...It seems a shame not to crop good land and we’d like to have fresh vegetables on the side...if I can’t maintain it, somebody’s got to help me maintain it.”

Albert also notes, “I find it very disconcerting to see good soil go to weeds and I’m a botanist so I like weeds... and this is part of the attraction of what your proposing, you’re suggesting that people come in and enjoy our garden with us, not just enable us to enjoy it but to enjoy it themselves so that it wasn’t being wasted.”

4.2.3 Breaking New Ground - Team Development

Jolene and the Wilmots lived only a few minutes walk from one another (Appendix H), and both were anxious to get started gardening by the time they contacted me about the project. The timing of their contact and their geographic proximity to one another made them a logical match. After an initial meeting where they discussed some issues around how their garden sharing would work, they both decided they could work well together and began gardening almost immediately.

Albert's garden is located around the side of his house (Appendix I – Garden 1). It is an area that he had reclaimed roughly four years ago, turning the barren rocky ground into a landscaped “compound” with two large raised garden beds (see Figures 1, 5 and 6). Albert had a large selection of gardening tools that he agreed to share with Jolene for the garden (see Figure 4). Jolene and Albert went through some seed catalogues to decide what they wanted to plant. Jolene also provided some seeds and seedlings from her own collection of heritage varieties (traditional seed varieties). Albert had already planted several types of greens including kale, chard and arugula) on one of the two beds in the yard (Figure 5). Both he and Jolene considered this his bed. For the remaining shared bed (Figure 1 and 6), Jolene was able to pick up some manure and bring it to the garden and both she and Albert worked together to prepare the soil. This bed was planted with tomatoes, cabbage, beans, peas, and beets. A third area of the garden was located on the south side of the house. Albert was responsible for this area. He planted some tomatoes and yellow zucchini squash (Figure 2).

4.2.4 Cultivating Relationships – Team Dynamics, Garden Progress and Future Plans

For the first month or so of the partnership during the planting and weeding season, Jolene visited the garden about once a week, but as the season went on she cut down on her visits, going only once every three weeks, or as Albert needed her. As the growing season progressed, Jolene brought her husband and her dog to visit on occasion. When it came time to harvest, she began to visit again more often but over the course of the project she never visited more than once a week. Furthermore, she never visited when Albert was not there. “I always felt I was trespassing without Albert there...I felt it was our garden not mine...like it was the two of us that should do it” (Jolene). Although there

were times when Jolene did not visit the garden very frequently, Albert often called to give her updates and to let her know if he would like her to come and help with anything.

Albert enjoyed working with Jolene very much. He was impressed with her style of working. “Jolene was such a cooperative person she would just arrive and say, ‘Hullo Albert, how are things’ and we’d immediately start to do things without any fuss and bother.” Both Albert and Nina felt that Jolene made them feel very safe and secure. For example in the beginning they were somewhat self-conscious about the garden space:

Nina: “We were kind of vulnerable about the space being kind of grotty, and you know, not nicely ready, but Jolene never made us feel that way did she?”

Albert: “No of course not. The way she brought compost and manure, and both of us digging away like farmers!”

The Wilmots also felt lucky to have been assigned Jolene as a partner “We mightn’t have been very lucky with the partner... We could easily have seen someone who was miserable, and maybe unconfident ...”(Albert). It was reassuring for Albert to have someone to work with. He describes working with Jolene as “very reassuring on all fronts.” He explains that Jolene was able to make him feel positive about the progress in the garden and the work they had done, even when things weren’t working out. And things did not always work out.

The team faced a number of challenges through the growing season. The late start in terms of planting (mid May), coupled with the relatively cool weather early in the summer, resulted in less than stellar production in the garden. They also battled with deer, and other pests that attacked certain plants. Albert recalled, “Well, in the beginning nothing went well. It went so slowly, the beans wouldn’t come up, the peas failed halfway through, the beet root only came up in patches” (Albert). Another challenge was

simply getting to know one another, and feeling out where boundaries existed or should exist in the relationship. Jolene notes,

“I think that one of the things I learned was I think I thought Albert knew a lot more about gardening than he did. So I learned that I probably gave him too much freedom, like he might have benefited from some more of my advice and so I regret maybe doing that...It was his garden and I wanted him to do his thing. I didn't want to be like 'I'm going to be the big person coming in and telling him what to do.' I didn't want to do that. But maybe there, I think he would have taken advice, he's the kind of person that would have taken advice...So that's what I would do different next time, I wouldn't be quite so shy or I'd maybe assess the knowledge a bit more and that way we could share it.”

But despite the challenges, the partnership went well on the whole. When speaking about Albert and Nina, Jolene notes: I'm sure we'll stay friends even if we might not do gardening...They're very nice people...and I think they need, they seem to really, not need, they enjoy the visits and the tea and the sharing you know?” Albert points out: “I think we found Jolene such an upbeat positive person that the interaction was very positive and very rewarding.” Jolene and Albert have already made plans to attempt the garden again during the next growing season, and perhaps their experience working together coupled with an earlier start in the season will make the partnership even more successful.

4.2.5 Scenes From Partnership 1:

(see next page)



Figure 1: Albert and Jolene's garden at its height of production



Figure 2: Yellow Zucchini Squash, Kale, and Arugula were just a few of the vegetables that thrived in the garden



Figure 3: Nina holds a bundle of beans that Jolene picked from the garden

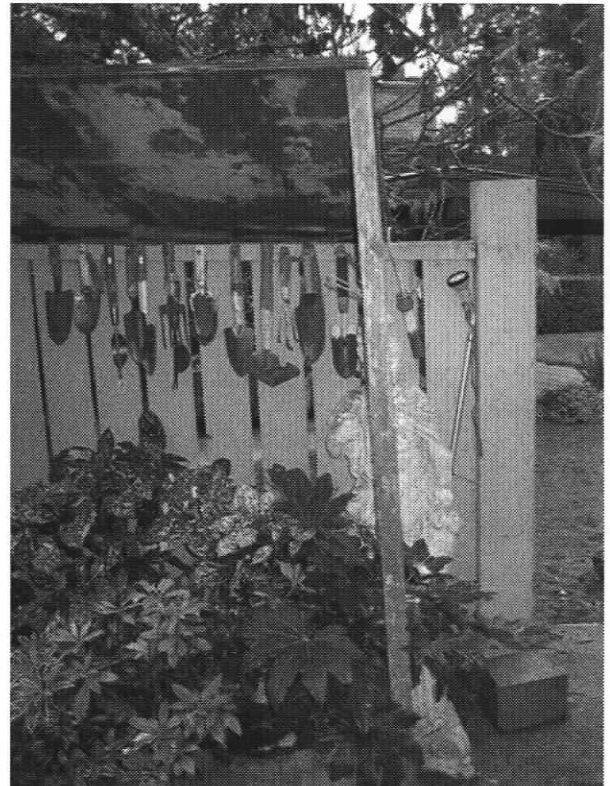


Figure 4: Albert's tools are hung in a row under a weathered shelter



Figure 5: There were two separate vegetable plots in the Wilmots' yard. This is the one that Albert was in charge of. He had constant problems getting the plants in this plot to come up, but eventually it took off. This shows the plot at three different stages – late spring, mid summer and early fall.





Figure 6: These three images show the progress of the cabbage in the second vegetable plot. Jolene helped with both plots but this one was considered the primary shared plot. Once again these photos show the plot's progress in late spring, mid summer and early fall.



4.2.6 Realizing the Harvest (Interpretation of Participant Benefits)

This partnership seemed to be the most successful of the three in the sense that everyone involved experienced some combination of benefits as a result of the project and the homeowners were particularly vocal about how positive the experience was. As will be explained in the following pages, the notable benefits for this partnership related to helping and being helped by others, finding confidence, motivation and empowerment, building new connections and relationships, connecting with their past and nourishing their bodies and minds. Certainly the food grown in this partnership seemed to be only the tip of the iceberg in terms of what Jolene and the Wilmots were able to harvest from this garden-sharing project.

4.2.6.1 Presence of Mutual Needs and Benefits

In Albert and Nina's partnership with Jolene a key factor has been the presence of mutual needs and benefits; the idea that all members of this partnership had a need that was being filled and also that they all experienced benefits as a result of having that need filled. A clear example of this can be seen in the Wilmots expression of their desire to have Jolene benefit from the partnership as much as they would. They were attracted to the project by the idea that someone could come in and not only share the work in the garden, but also take a share in the harvest. They seemed encouraged to participate because not only were they receiving a needed hand, they also had something to offer in return. As Albert pointed out in our final interview, "This is part of the attraction of what you're proposing; You're suggesting that people come in and enjoy our garden with us, not just enable us to enjoy it, but to enjoy it themselves..." As a result of this desire for a mutually beneficial relationship, it comes as little surprise that Albert was concerned when he wasn't able to contribute as much to the partnership as he would have liked to.

“I guess I was here in between times to do some weeding and I did some fertilising after we did our initial do over with manure...but my contribution wasn't as much as I'd like it to be.”

Another area of concern for the Wilmots was that Jolene did not take as much food as they thought she should have. When harvest time came, Jolene was not by often enough for them to regularly share the harvest and so the Wilmots were forced to harvest much of the food for themselves. Jolene was evidently either unable or uninterested in getting a share of the food they had worked together to produce.

Albert: “A lot of it would have gone overripe if we hadn't done it. We *had* to harvest it”

Nina: “Yeah because she wasn't here every day you know, things were happening every day.”

Albert: “She [did] a lot of traveling so she said ‘I'm not going see you for a while so you go ahead as you want'...No, no complaints about sharing, other than we would have liked for her to have more.”

Jolene did on occasion come and take some lettuce or beans, but the Wilmots would have liked her to have wanted more and felt that they certainly got the “lions share” of the produce.

Jolene on the other hand was not concerned with getting a share of the food. She was disappointed in the productivity of the garden, but wanted the Wilmots to have more of the produce. She did not need any harvest from the Wilmots garden because she had a small container garden where she grew some vegetables and she also received garden produce from friends and neighbours. For Jolene, more important than the food, was simply the opportunity to meet new people and to learn something from them. She has

had extensive experience working with the elderly and feels that while she has her own expertise to offer them, she also learns a great deal from working with them:

“Relationships are really important to me. I just love learning about other people especially people who are older. Their stories are so wonderful and interesting so I certainly benefited from that relationship. And getting to know someone else new in the neighbourhood – even though it’s at a bit of a distance that was really worthwhile.” (Jolene)

Another area of concern for the Wilmots was that because Jolene had such a busy social life, they felt that she had little room for them socially. As Nina points out, “I think Jolene has a wide circle of activities and friends though...I don’t know if she has room for any more.” However, although Jolene is a very socially active person, working with the Wilmots was certainly not a burden for her. They actually fulfilled a social need for Jolene in that she seems to thrive on building relationships with people and as expressed above, she felt that just getting to know the Wilmots was “worthwhile”.

4.2.6.2 Motivation Confidence and Empowerment

A major success of this partnership was the empowerment the Wilmot’s, and especially Albert, were able to gain from their involvement. Albert’s Parkinson’s disease has taken its toll on his balance and physical strength and stamina thereby greatly hindering his ability to keep up with the maintenance of a full-scale vegetable garden. Also due to his Parkinson’s disease, his vision has deteriorated, making it difficult to sow seeds and nearly impossible to thin out plantings while the seedlings are still small enough to benefit. As a result of these limitations Albert gave up gardening four years ago. The prospect of having a partner that could help him manage a vegetable garden

gave him a spark of encouragement that he would be able to resume his much-loved hobby.

As the project got underway, Albert enjoyed having a partner to share in decisions about what to plant in the garden and to share his enthusiasm for gardening. As things progressed, Albert found Jolene was a great source of both motivation and encouragement. He expressed that if it were not for having a partner to be accountable to he would not have gotten out in the garden nearly as much as he did:

“I’ve benefited greatly by having somebody to...let me put it this way: I wouldn’t have done it without a partner...I probably wouldn’t have felt I could have succeeded, so having a garden partner helped tremendously.”

“You’re on a time scale in which you have to do something, which, that maybe if you hadn’t a partner, [sic] you wouldn’t be pressed to do, but by being pressed you get it done.”

While he enjoys gardening immensely, he points out that it can also be a challenge. It was in this context that he stressed the dual nature of gardening, as both a joy and a chore, and as a source of both enjoyment and stress:

“it’s a chore to do some of the jobs...but it’s also a joy in that one gets fresh air and one sees the results”.

“ With any task [there is] a certain amount of “I must do that stress” but that was cancelled out by the satisfaction of getting it done”

He also noted that while having a garden partner added a degree of obligation, and thus added 'chores' to his to-do list, at the same time it helped to ease some of the chore-like aspects of gardening for him.

“When you have somebody else involved and you maybe don’t feel like doing it and you think “oh gosh I guess by tomorrow maybe Jolene will come over and I haven’t done

so and so” Its like being in class and doing a project with a with a professor; you know you’re always expected to do something and if you haven’t got it done in time it becomes a chore, it becomes a burden rather than a pleasure. But by and large this project turned out to be more of a pleasure than it was a burden.”

At times the slow progress of the garden was quite distressing for both Albert and Jolene. However, Albert felt that Jolene was always positive and always offered encouragement that things would eventually grow. In addition, Albert was inspired by Jolene’s ability to get things done when they needed to be done, without procrastinating or making things complicated. This challenged what he described as his own approach of making things more difficult than they needed to be: “If we see something that needs doing [sic], I usually take the [perspective] ‘oh I’ve got to go buy so and so’ or ‘I’ve got to get another of so and so’ and she would just find two pieces of string and do it.”

With the help of Jolene and despite the late start and the poor weather early in the growing season, the garden did end up being a reasonable success. This in itself provided the Wilmots a measure of encouragement and empowerment. Nina described how as you age, you have to drop more and more things; that you continually discover new things that you cannot do. In contrast, this project proved to both Albert and Nina that this was indeed something that they could do. Nina describes the encouraging nature of Albert’s involvement in the project

“When you’re older you think ‘oh, that’s something else that’s not working for me’ you know, because you’re very energetic when you’re younger, and then you start cutting things out and you think ‘oh dear I can’t even do that now.’ But it turned around....When you’re younger you have more optimism. You think ‘oh that’s going to work’ you know, but when you’re older you think ‘It’s not going to work! Its not going to work!’ So it’s a good lesson for us

really wasn't it?...A good lesson, to umm, not give up you know, be optimistic" (Nina)

And since it worked this time it is something the Wilmots are willing to try again next year. Instead of assuming it won't work – they will hope that it will work. Says Albert, "Well it worked this year, and if it worked we can try it again. If it hadn't worked I probably wouldn't want to try, to go to the trouble of trying again." Although Albert would not have done the garden without a partner, and it may not have worked with a different partner, having Jolene to work with him gave him the impetus to get started again and to feel good about their success.

In addition to feeling confident in their ability to have a productive vegetable garden, the Wilmots have also gained some confidence with regard to staying in their current home. With the garden area (they call it 'the compound') in use again, they feel that they have all the more reason not to move.

Albert: "I'd say we'll probably hang on to it longer than we would"

Nina: "Because we can see the use of the outside"

Albert: "If I had looked after the garden every year, well that would make us think 'lets keep it for another year, another year, another year,' whereas if the garden went to rot and ruin and started to get full of weeds we'd think 'oh well the garden's a nuisance its detracting the value of the home, lets move' ".

Using the garden benefits them and thus they feel justified in staying, and all the more opposed to moving. This justification gives them some degree of security in that they don't feel the same push or uncertainty around having to leave their home.

Having Jolene as a garden partner has also made the Wilmots and their son feel more comfortable about having Albert work in the garden. The uneven and sometimes slippery

terrain in the garden area, coupled with Albert's difficulties with balance, make falling a serious concern for him and those who care about him. As the Wilmots point out, having Jolene working there with him from time to time gives them the sense that someone has an eye out for him if something were to happen.

Another notable element of this partnership in terms of its aspects of confidence building and empowerment relates to the effect of Albert's success on Nina. Albert's Parkinson's has affected both their lives:

Nina: "I feel like we're not living the kind of life we thought we would at this age...I think it's more, it's a stress now because we're not living as we thought we would be living."

Albert: "We thought I would be fitter and we would be doing more traveling, now we have to be quite careful about what we decide to do with traveling."

Nina: "Because the Parkinson's affects us both, you know; we both live with it."

She has been very happy to see Albert's success with the project, and the enjoyment he gets out of it. It also has given each of them an opportunity to see a marked improvement in the amount of time he spends being active and getting outdoors.

4.2.6.3 Providing Social Support and Building Community Connections

Although they seem to enjoy socializing, the Wilmots are actually quite socially isolated. When asked how Jolene fit into their social circle they replied that they really did not have very many friends and noted, "you can't fit into something that does not exist." They have few friends in the neighbourhood and have expressed a desire for more social activity and more friends. They attribute their lack of connections in the city to

having emigrated from England as adults and having spent much of their pre-retirement life living in the country.

The Wilmots pointed out that they “would favour a social relationship with whoever came to garden with [them], not just Jolene” (Albert). However they did seem to form a close connection with her. The Wilmots noted that although they might not call her up about something unrelated to the garden, they certainly did consider her a friend. Jolene was often their only visitor of the day and Nina describes her as “a ray of sunshine” in their lives: “We certainly look forward to her coming, so that was, you know, a bright time in our day, and coming not just to say ‘hi’ and to have a cup of tea but to do something together, you know that was really good” (Nina). When asked to describe their relationship, the Wilmots used descriptors like, “upbeat”, “positive”, “cordial”, “cheering”, “rewarding” and “comforting”. Nina found it difficult toward the end of the growing season when they had less contact from Jolene. Because they had not yet made plans for the following year, she worried that it was just a “flash in the pan.” She commented “you start opening yourself up to someone and then its gone.” This illustrates concern and shows attachment to Jolene and the project.

For Jolene, connecting with the Wilmots meant more than simply helping in the garden. She finds great value in building and maintaining relationships with people especially older people. She enjoyed visiting the Wilmots and describes how she benefited from the relationship:

“their stories are so wonderful and interesting so I certainly benefited from that relationship...I was just so much interested in who they were and what they are now, and what they’re up to.”

Also, getting to know the Wilmots broadened Jolene's knowledge of people in the neighbourhood; "Getting to know someone in the neighbourhood – even though it's a bit of a distance that was really worthwhile, now I have somebody else I know here."

Albert and Nina had the same feeling regarding the benefit of connecting with someone new in their community. They have lived in their community for over 10 years but expressed a great deal of disappointment in the sociability of their immediate neighbours, noting that the majority of people keep to themselves and rarely acknowledge their neighbours. They felt that having Jolene drop by from time to time gave them the opportunity to exercise their neighbourliness, even though she was somewhat of a distant neighbour:

Nina: "The neighbours keep very much to themselves for some reason, whatever reason, so it's nice to have someone sort of come in and be an instant part of your family...it made us feel part of a community."

Albert: "A little bit more neighbourliness"

Nina: "That's right, we can exercise our neighbourliness, which is difficult here because everyone's quiet and contained to themselves."

In addition to the small-scale community the Wilmots built with Jolene, being involved in the project may also have opened up connections to the broader community for them. When asked if they could think of anyone else who might benefit from the project they thought of acquaintances in the broader community who they felt would enjoy it. One of those neighbours happened to be involved with the project already in another partnership. With that knowledge, if they choose to discuss it, they have a new common interest to share with that acquaintance. Potentially connecting people who participate in the project in the future could provide another small-scale community for

them to be a part of, or could give people an opportunity to connect with their own communities.

4.2.6.4 *Sharing Knowledge and Creating Common Ground*

The ability to connect with people over a common interest has arisen as a common theme amongst two out of three of the garden partnerships. In this particular case the establishment of common ground was instrumental in facilitating the connection between the two partners and thus in helping the partnership succeed. From the beginning, Albert and Jolene were able to relate over their interest in gardening. It gave them something to do together, to talk about, and to make plans for. However the creation of common ground was not necessarily entirely positive for all involved. Because Nina was not directly involved with the garden, the bond between Albert and Jolene left her somewhat out of the loop. While Albert had a very specific reason to interact directly with Jolene, Nina had to make a concerted effort to connect with Jolene. She pointed out to Albert, “You had the garden as your common interest too. I went out there to socialize so its different I think.”

At the same time this dynamic gave Nina a reason to take an interest in the garden, which is something that she hadn’t done when it was just Albert. Although Nina “wouldn’t think of going out” to see the garden when Albert was gardening in the past, she indicated that with Jolene around it was different, “I always go out to see her and you know, chat, so that was nice, that’s the only way I got to the garden really and I could see what was going on.”

Another way that the Wilmots were able to connect with Jolene was through sharing knowledge. On a very basic level Jolene and Albert exchanged their gardening knowledge in order to take better care of the garden. Occasionally Albert would phone

Jolene to give her updates on the garden – giving him the opportunity to connect with her even if there was no need for her to visit at the time. As noted earlier, Jolene felt she had held back her knowledge because she did not want to overstep Albert’s boundaries; but if Jolene wasn’t forthcoming with gardening advice she certainly was not reluctant to share her knowledge in other ways. On two of my site visits she shared different recipes with the Wilmots. This type of knowledge exchange brought Nina more into the fold, as she is the one who does most of the cooking in the household. On one of my later site visits, Jolene encouraged them to try making curry with some of their garden produce. She also pointed out that India has some of the lowest levels of Parkinson’s disease in the world and that researchers believe that it is due to the turmeric in curry. This exchange of knowledge brought some variety into the Wilmots diet and got them to try something new. For example, on a later visit, Albert commented that they had been doing a lot of currying because it was good for Parkinson’s Disease.

The garden sharing project not only served to connect the Wilmots with Jolene; it also allowed them to connect with their six-year-old granddaughter in a new and different way. When she came to visit she would go out to the garden and note how things were growing and she would see things that needed to be picked that Albert and Nina could not see:

Nina: “she thinks the garden is something really nice, she can go pick the peas.”

Albert: “they don’t have a vegetable garden you see”

Nina: “she really feels that’s special”

Albert: “she picks the beans, she was very pleased to have picked the beans, she gave me a handful of beans.

Nina: “oh that’s right! I said “there’s none left Danielle,” and she says “yea I can see one there grandma! Yea I got another one!”

Albert: “that would be a plus because one could see that if eventually she got interested in gardening that she could come out and do some gardening with us”

4.2.6.5 Connecting with Past Traditions and Nourishing Themselves

An interesting observation to come out of my interviews with both Jolene and the Wilmots is the way that gardening in the present, connected them with their garden memories from the past. As mentioned earlier Jolene grew up on a farm and both her parents were involved in gardening. Albert and Nina grew up in the UK and with war related rationing going on, a great deal of land was dedicated to allotment gardens. Albert spent quite some time reminiscing about his father’s garden and often compared his gardening experiences to his father’s. It was clear that Albert felt disappointed that he had never, even in his youth, been able to create as productive a garden as his father had.

“When I was a young kid my father had a fine vegetable garden and we were in wartime so the vegetable garden was very valuable. He had a big garden and he’d get literally half a ton of spuds and in fact he was able to sell small lots of vegetables to pay for his seed and fertilizer. I remember him giving baskets of vegetables to [sic] neighbours. We had a surplus of vegetables ... so my attitude is that I have not lived up to my father’s ability to supply the family with first class, better vegetables than you buy in a store.”

Another interesting point that Nina brought up relates to the idea of nourishing oneself by eating fresh organic food. As noted earlier, while recovering from colon cancer two years ago, she began ordering organic food delivered by a local company and she really felt that she was taking care of herself by doing so:

“I really found it a thing of nourishment because when you’ve gone through something like that you’re very

vulnerable, you know and you [think] ‘How did I catch it? Where’d it come from?’ you want to protect yourself a lot so you want to eat good stuff... I really felt it was, it was comforting nutritious food.”

Although she does not order organic produce anymore, having access to her own organically grown garden produce achieves the same purpose.

4.2.7 Conclusion for Jolene and the Wilmots

It is clear the Harvesting Health project benefited both Jolene and the Wilmots in a variety of different, and sometimes subtle, ways. The benefits to health in this project were not only physically manifest, but also manifest in the psychological, social and spiritual well-being of those who were involved. Most significant I think was the realization for both Albert and Nina that their old age (and the medical problems that accompany it) did not have to be a slippery downhill slope; that with the right kind of support, even something that they imagined they might never do again became possible.

4.3 Partnership 2 - Understated Abundance: Rachel and Betty:

4.3.1 Rachel Smith (Gardener Description)

Rachel is in her mid 20's and works as a research assistant in a university environment. She has done a significant amount of work related to older adults and aging, which is one reason why this project appealed to her. She is very active and health conscious, regularly biking to work and having a diet that emphasises whole and organic foods whenever possible. Rachel describes herself as having a very good quality of life. She describes the things that are important to maintaining her quality of life as follows: "Feeling like I'm part of the community, getting a balance between rest and work, making enough money to sustain myself...being in supportive relationships with people and taking care of my body."

Rachel lives in a suite in a large multi-plex house. The landlords had promised to set up an area in the yard for vegetable gardening, but seemed to be putting it off. While she does have a small balcony where she can do some container gardening, she wanted the opportunity to garden on a larger scale. She has gardened on and off in the past but always worked in cooperation with someone.

"When I was growing up we always had a garden so I kind of learned through that process, and the last place I lived...I lived underneath a family and we created and shared a garden that we made together, an organic garden so I learned a lot in that experience too."

Rachel became involved in the project when she heard about it from some colleagues at the university. She was interested in having access to the garden space but she also wanted to support the research project by volunteering as a participant:

“I enjoy gardening and I don’t have a garden. I don’t have any space to garden and...I knew it would help in the research part of it. I thought it was an interesting research project and I wanted to participate and support that initiative. So... it served a need in my life and I wanted to support the research.”

Rachel also has a great fondness for gardening on more than a simple superficial level: “Planting the seed and watching it grow and become something you can harvest and eat and working with the earth: I just love that process of nourishing myself and working with the earth, it’s very self sufficient.”

4.3.2 Betty Jamison (Homeowner Description)

Betty is an elderly woman of 83 who lives alone in the suburban neighbourhood that she has called home for 45 years. Betty’s husband passed away five years ago and her main social support is her daughter, the only one of her three children that lives in the area. Betty has moderate memory problems that cause her some frustration in her day-to-day life. “My memory’s so bad. My mind goes a blank. When I want to think of something my mind goes a blank. [It’s] so embarrassing.” Despite this challenge to her psychological health she lives independently in her own home and tries to stay both physically healthy and socially active. She walks every day with her dog, Maggie, and she has very well established healthy eating habits. She has some friends within the community, maintains positive connections with most of her neighbours, and is involved with senior’s activities through local churches and senior’s centres. Even so, she notes that she does get lonely, and she wishes there were more senior’s activities she could participate in.

Betty’s daughter saw an announcement about the Harvesting Health Project in the local paper and passed the information on to Betty. Betty liked the idea of having the

garden used and she was very interested in the project “It’s always been a vegetable plot,” she says, “Even after my husband died we had a couple come and do [the garden], but they moved away unfortunately and since then its been overgrown so I thought it’d be a good idea to have a vegetable plot in the garden.” She welcomed the opportunity to have the garden used again but had little intention of being involved in the gardening itself. “I was spoilt, my husband did all the gardening and I’m afraid I’m too old to start now.” But as the partnership progressed, Betty did become a gardener in some small ways.

4.3.3 Breaking New Ground - Team Development

Rachel’s special training and sensitivity to senior’s issues made her a great person to match with any older adult. In this particular case, having a gardener with that kind of sensitivity was significant because of the memory problems Betty had been experiencing. In addition, the proximity of the garden to both Rachel’s home and place of work made the partnership a viable match. I arranged for Rachel and Betty to meet one another to discuss how their partnership might work. Both partners decided they would like to work together and so we began to plan for the garden. Because this garden (Appendix I – Garden 2) was completely over grown with grass, it needed to be tilled mechanically by a hired landscaper, which Betty paid for¹. Once this was done, some minor preparatory work was required on Rachel’s part and then she could begin planting in late May.

Rachel and Betty met to discuss what types of things they might plant, and Rachel went ahead and bought seeds, seedlings and soil amendments. From here the plants and

¹ All participants in all three partnerships were offered compensation for gardening costs; some however declined this support.

the relationship began to grow. Rachel describes her feelings at this early stage of the partnership:

“It’s building community in a way that I feel is really natural and so once you get into it feels really good and there’s a lot of openness about it. You don’t know exactly how much each party is going to participate and how the balance is going to work out but I see it as being a really, really nice experience. I’m really grateful for it, and my plants are growing...”

4.3.4 Cultivating Relationships - Team Dynamic

Normally, Rachel would come to the garden about four or five times a week to water and weed, and eventually harvest (Appendix H). She would always let Betty know when she was coming, or knock on the door when she arrived. Betty often would go out to say hello and see how the garden was coming along and on occasion she would ask Rachel to come in for tea. Betty helped with the watering when Rachel wasn’t able to make it out to the garden. She also kept an eye out for deer, and when deer did start to cause problems in the garden she came up with a temporary solution (putting plastic bags over the plants) until Rachel could get supplies to make a fence, which were covered by project funding. She took an active interest in the garden; “I go and you know, look at everything and see how its growing and oh yes, yes, I’m interested in that of course” (Betty).

In addition to Betty taking an interest in the garden, a number of other people became involved with the garden, which is something that makes this partnership unique. For example, Rachel’s husband Justin would come with her to the garden from time to time and help with additional tasks such as picking the fruit from various trees in Betty’s yard. Betty’s neighbour, Mrs. Smith, also became involved in the project (see figure 10). At 98, Mrs. Smith is still an avid gardener with a very large, very productive garden. She would offer extra produce, gardening advice, and even whole plants on one

occasion. Finally, Mrs. Smith's adult nephew, who often stays with her, helped Rachel construct a fence around her garden when deer became a problem (see Figure 7). The involvement of all these people seemed to create a small community itself that supported the success of this partnership.

This partnership was relatively successful in terms of the interaction between participants and the others who became involved along the way. However, as shown in the closing interviews as well as in my ongoing observations, certain challenges did arise in this partnership. For instance, while it was understood from the partnership agreement that Betty would help with the watering, there were times when she consciously chose not to. Rachel described a time when she called and asked if Betty could water that day, and Betty declined to help. From Betty's perspective, it was unclear what she could and could not ask Rachel to help with. At one point, Betty was encouraged by her neighbour to ask Rachel to clean out the raspberry patch, but Rachel felt that she was not required and not able to do so.

Much of the misunderstanding in this partnership relates to Betty's perception of what was grown and how it was shared. Betty and Rachel planted yellow tomatoes, Roma tomatoes, orange tomatoes, big tomatoes, eggplant (no eggplants produced), broccoli, cabbage, basil, lettuce, mesculin mix, cauliflower, sweet peas, red runner beans, celeriac, red peppers (that never turned red) dill, basil, sunflowers (see Figures 8 and 9). Betty commented on the amount of space Rachel used and how she could have planted more; that she harvested things using strange methods and that she planted unusual things and neglected to plant others; "I suppose there were a few things she (Rachel) could have grown, though she only had so much room, mind you she could have had much more

room than she took...I think she could grow more things like carrots, potatoes, things like that..." (Betty). Rachel was happy with the way the food was distributed and thought that Betty was happy as well; however, this was not the case. Although they had discussed what would be planted early in the partnership, in the end, Betty was unsatisfied with the produce she received stating, "It's just the salad that [I] got, and broccoli and beans and that's about it."

For the most part, it seems that these perceptions reflect misunderstandings, previously held ideas and a lack of communication. For instance, Rachel gave Betty mainly salad items (i.e. lettuce and tomatoes) from the garden because she knew that Betty ate a lot of salad; she also believed that Betty was not interested in trying some of the more unusual things that were planted. Another example of misunderstanding relates to the cutting down of the garden; Rachel felt that it was a neat experience for Betty to be able to see the garden grow and then be "cut back down to the earth" when in reality, Betty was slightly alarmed that Rachel pulled everything out of the garden at the end of the summer and mulched over the garden when things were still growing. However, for Rachel, this was a logical thing to do; as the weather was turning and she would no longer be able to visit the garden during the winter. Despite these challenges and misunderstandings, both partners had a positive feeling overall about the project. Both partners are also looking forward to working together again in the next growing season.

4.3.5 Scenes From Partnership 2

(see next page)



Figure 7: Rachel works in her garden surrounded by a deer fence she built with the neighbours nephew, while to the right, marigolds help keep the smaller pests at bay.

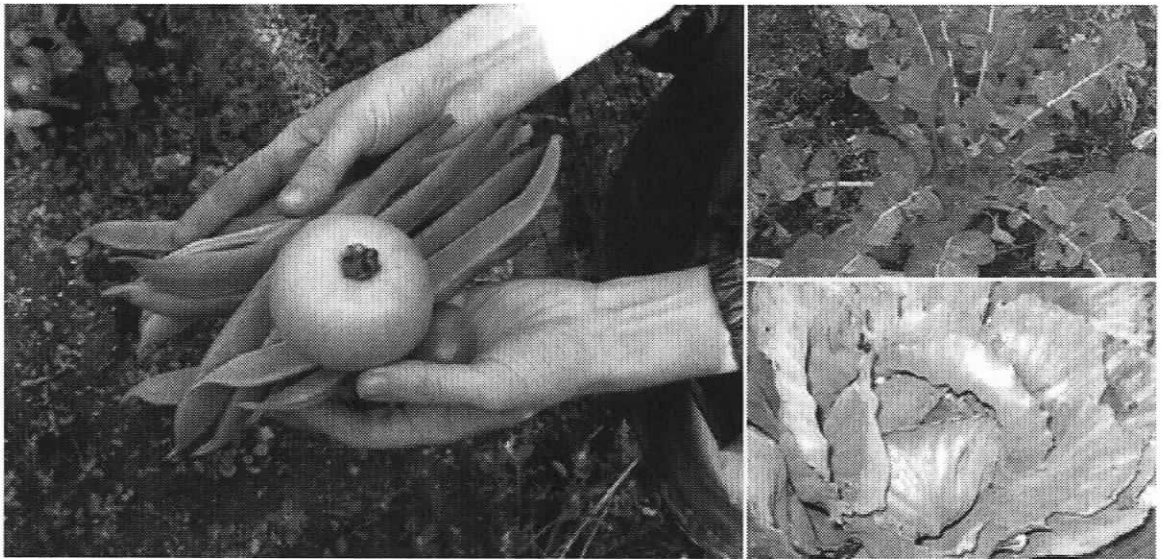


Figure 8: Just a small sampling of the bounty from Rachel and Betty's garden. Clockwise from left: Rachel holds runner beans and a few tomatoes, a young broccoli plant, and a very purple, growing cabbage.

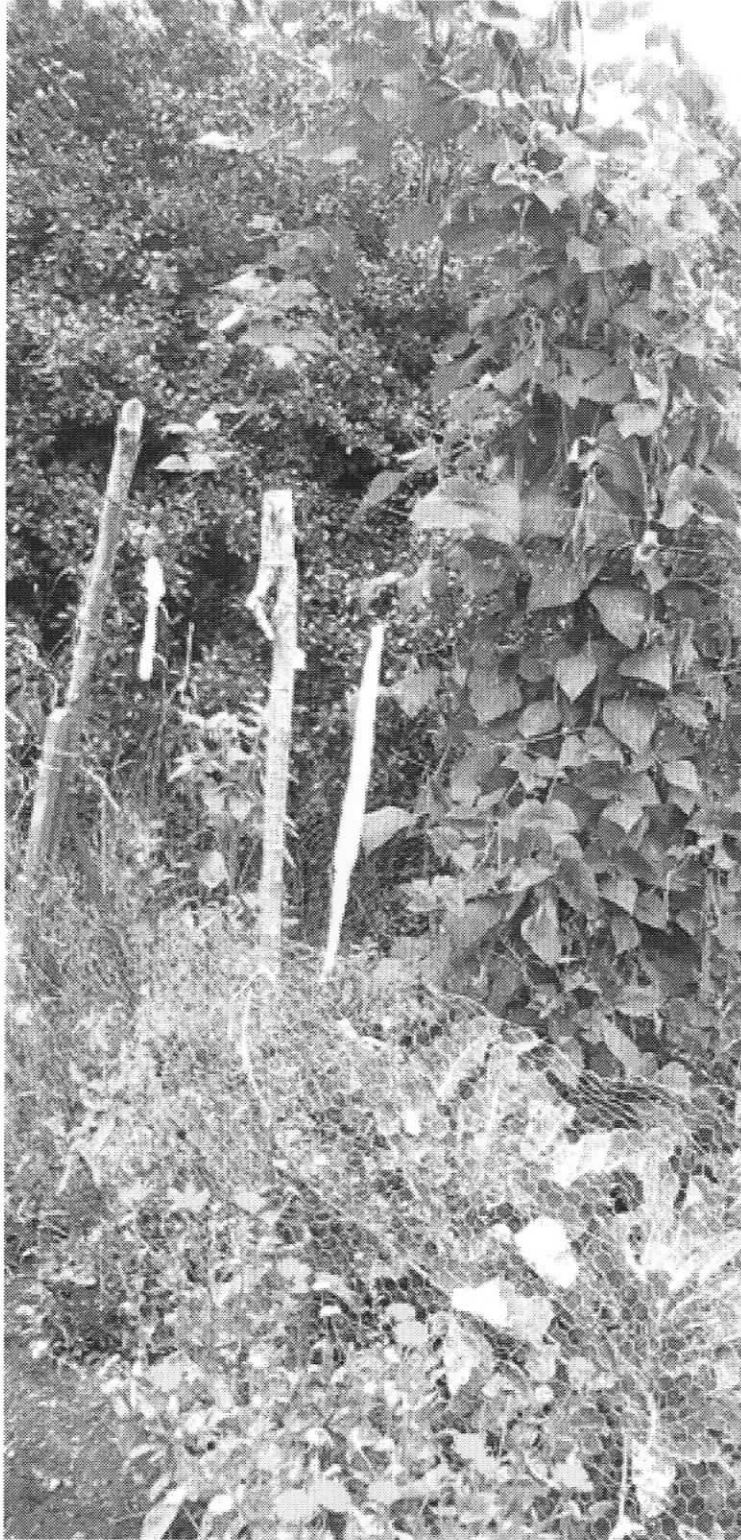


Figure 9: This tower of beans produced so well that Rachel had to give some away beyond the partnership. She had never grown runner beans before and Betty showed her how to prepare and store them properly.

Figure 10: Below is Betty's neighbour Mrs. Smith's Garden. She is 98 and is an expert gardener. The strawberry plant to the right was given to Rachel and Betty by Mrs. Smith as an addition for next season's garden.



4.3.6 Realizing the Harvest

Betty and Rachel's partnership was also a great success, though compared to Jolene and the Wilmots, the benefits that both participants experienced in this case were perhaps

more subtle. While Rachel was quite expressive in articulating her experience of the project, Betty was much less so, often finding it difficult to recall memories, or to find words for what she wanted to say. Both participants however, gave thorough accounts of the events of the growing season, making it possible to interpret how each may have benefited from their involvement. The following discussion examines factors in the success of this partnership, including the creation of community and common ground, the presence of social support and social interaction, the benefits of being helped and helping others, the opportunity of connecting with nature or with the past, and the benefits to the physical health of both partners.

4.3.6.1 Creating Common Ground and Building Community

The idea of building a small-scale community, which emerged in the case of Jolene and the Wilmots, played an even more significant role in the partnership between Betty and Rachel. Although Betty was not directly involved in the gardening, having Rachel working in the garden created a bond between Betty and her 90 year old neighbour, Mrs. Smith, who happens to be an avid gardener. They began to talk more because Mrs. Smith was very interested in the garden. Mrs. Smith also had Rachel and her husband over for tea from time to time thus extending the relationships beyond the partnership. Also Mrs. Smith gave Rachel and Betty some strawberries for the garden for next year. On one of my site visits Mrs. Smith was out in her garden and came over to the fence to offer us some lettuce. Rachel felt that the mutual connection between herself, Betty and Mrs. Smith helped to create a community atmosphere among the three of them:

“I think that Betty and her neighbour ... began to develop more of a relationship because I was there and I was interested in gardening, and her neighbour was interested in gardening, and so I think that [sic] it facilitated more of a

connection between everybody and more of a community feeling” (Rachel)

The garden-sharing project also created opportunities for both Rachel and Betty to connect with people in their broader community. For Rachel, her new interest in gardening allowed her to connect with co-workers who were also interested in gardening. She became more involved with workshops related to gardening in the city. Furthermore, because her gardening activities had encouraged her interest in creating compost, she worked together with neighbours in her complex to create one for their building. In Betty’s case, if she so chooses, the opportunity to connect with others in the community who have been involved in this project may allow her to feel more connected to the broader community.

4.3.6.2 Social Support and Interaction

For Betty, the greatest benefit that she perceived from her involvement in the project was having company and someone to talk to. “It was nice to have her; somebody coming you know and talking. She’s a nice girl.” (Betty) Rachel’s experience working with older individuals and her sensitivity to their unique and varied situations made her, in many ways, an ideal garden partner for Betty. Rachel described Betty as being very kind and generous to her, even giving her gifts on occasion. However, during the personal interviews Betty seemed quite reserved in acknowledging her regard for Rachel. Rachel describes her relationship with Betty as being “friendly”, “supportive”, “respectful” and “mutually beneficial.” Rachel even developed a nickname for Betty; “Bee” which, she describes, implies that she puts Betty “in a different category, like a friend.”

For Rachel, as was true for Jolene, the opportunity to work with and get to know an older adult is very rewarding. “They offer me a lot of wisdom and support and I think I

offer them some energy and freshness,” She says. “It’s just one of the things I love to do. To connect with people of an older generation...and being in their presence I think is very soothing and it makes me feel good.” She felt the garden-sharing project would be positive for anyone but especially for older adults: “that...seems like a really great fit, and provides some companionship. Its just a really nice way of working together.”

4.3.6.3 Presence of Mutual Needs and Creation of Mutual Benefits

As with the case of Jolene and the Wilmots, mutual needs and benefits played a significant, though perhaps more subtle role in this partnership. In this case the balance of give and take was related not only to the garden itself, but also to a variety of additional demonstrations of helpfulness and caring that took place throughout the growing season. For example, when Betty was away visiting family, Rachel and her husband Justin were able to keep an eye on things, and collect the mail when they came to the garden. It is possible that this could have given Betty the opportunity to potentially relax more while being away. Another form of help that Rachel and Justin were able to provide, was to harvest the produce from Betty’s fruit trees (pear, plum and cherry) for her. In return they got a share of the fruit harvest to take home. For Betty this extra help gave her access to a resource that could potentially have been neglected without the help of Rachel and Justin.

From another perspective, in addition to providing the garden space for Rachel to use, Betty regularly helped with the watering and kept an eye out for deer. Betty took a keen interest in the garden, watching out the window, and going out to see how things were growing. This is significant because on first impressions she seemed disinterested in having an active role in the garden. For someone who was “too old” to start gardening, she did become more engaged with the garden than she had intended and thus she played an essential role in the success of their garden.

4.3.6.4 Connecting with Nature, Connecting with the Past

It is evident in this partnership that both Rachel and Betty offered more to the project than they may have expected to initially, and contributed more than they directly acknowledged. In addition to this, it is evident from their interviews that they may also have been able to benefit from their involvement in the project in more subtle ways on a more personal or spiritual level as was seen through Rachel's desire to connect with nature, and through Betty's associations between gardening and her late husband.

For Betty, the fact that her husband was such an avid gardener, always using the entire width of the backyard for his garden, may have been one motivating factor in her seeing the space being used again. This past history may also be illustrative of why she was disappointed in the garden because the way her husband gardened differed from the way Rachel gardened, specifically in the sense that he used more of the space and that he grew different things. Also interesting is that Betty particularly enjoyed having Rachel's husband Justin come to visit. Rachel noted that both Betty and Mrs. Smith were at times quite flirtatious with Justin. Betty speaks well of him in interviews and in conversation, and appreciated his role in helping with the fruit trees. She notes "I always hoped to have a son-in-law who would be able to help with these things, but he (her own son-in-law) is not the type." It is possible then that Betty sees Justin as filling a role that no one else had been willing or able to fill since her husband passed away. The connection Betty makes between her late husband and the garden could also explain some of her strong conflicting feelings around Rachel's gardening methods.

For Rachel, the opportunity to connect with natural cycles as the garden developed was very important. As noted earlier, she greatly enjoys the process of seeing something

grow and nurturing it and then seeing it go back to the soil. This project gave Rachel the opportunity to connect with nature on a regular basis and so she was able to enjoy the therapeutic effects that gardening had to offer her.

“It was such a valuable opportunity... It was like space to connect with creating something you know; a space to connect with creation.”

4.3.6.5 Active Lifestyle and Healthy Eating

In addition to the social, psychological and spiritual benefits discussed above, there were also benefits to physical health and well-being to be realized from this project. The project provided Rachel in particular with the opportunity to become more active, and to eat well. Rachel felt the food she grew, though not plentiful enough to substantially supplement her grocery list, was “good and healthy”. She also learned how to preserve some of the vegetables she grew, which will allow her to enjoy her harvest in the fall and winter seasons. A notable physical benefit for Rachel was the increased activity she experienced as a result of being involved in the project. Not only was she active in the garden but she also increased her travel time via bicycle because of the commute to the garden. “There are two components, the actual gardening and getting to the garden; the added travel time from cycling. So I think that it did become a considerable amount especially in the main harvesting and growing time.”

4.3.7 Conclusion for Rachel and Betty

Like Jolene and the Wilmots, Betty and Rachel experienced benefits to their health and well-being on many different levels. Through their partnership they fostered the development of a small but unique community around them, made up of their neighbours and family members. They also built bridges to the broader communities they interact with in their neighbourhoods and at work. The pair have made plans to garden together in

the coming season. Hopefully, as they work together in the coming season, they will build upon these connections and continue to harvest health benefits for themselves and those close to them.

4.4 Partnership 3 – The garden of good and evil: Sarah and the Browns

4.4.1 Sarah (Gardener Description)

Sarah is a recent high school graduate who lives with her family in a suburban neighbourhood in the CRD. She has a strong interest in helping others and has been a committed volunteer at the Saanich Volunteer Services Society for over a year. She wants to go to school to become a resident care worker in the future. Sarah is slightly overweight and she feels she has little choice in what she eats because her family provides her with most of her meals. Her family is a significant source of stress in her life; her parents have been divorced for seven years and she does not get along well with her younger sisters. She also describes herself as being “painfully shy”, which makes it difficult for her to make friends and participate in certain community activities. However, despite her shyness, and despite some tension among her own neighbours, Sarah indicated a strong desire to be active in the community: “I’ve always wanted to help people. I’ve always thought that what I should do is give back to the community even if they haven’t been overly cooperative,” (here she is referring to the fact that her neighbourhood has had some feuds in the past).

Sarah has gardened with her family before but has never had a garden of her own. Her family only ever had a vegetable garden twice during the seven years they had been in their current home. Even then, Sarah’s involvement consisted mainly of watering. She was ready to try something more involved: “I [would] enjoy helping out those that cannot grow their own vegetables. I also would like to grow a vegetable [garden] to teach myself what I would have to do to help feed myself and a family because I will soon be living on my own.”

4.4.2 Patty and Greg Brown (Homeowner Description)

Patty and Greg are an older couple in their early 80's who live in a very close knit community. They have an extensive family and social network and are seldom without visitors. While both Patty and Greg are relatively active people for their age, they do suffer some health problems which are beginning to infringe on their day-to-day activities. This is especially true for Greg who, like Albert, has Parkinson's disease. Although Greg was involved in the project to a small extent and was present during both interviews, Patty was the primary participant, and answered the interview questions on her own for the most part.

Both Patty and Greg are Canadian Air Force veterans and they receive assistance with housekeeping and landscaping from Veterans Affairs. However, this help does not extend to vegetable gardening. Patty is the "gardening guru" among her friends and neighbours and she maintains an extensive and beautiful flower garden in both her front and back yard (part of which can be seen in Figure 13). She loves gardening and describes it as her mainstay. She notes, "If I couldn't garden I don't know what I'd do." On more than one occasion Greg humorously noted that Patty placed her garden above even him in terms of the things she most values in her life: He said, "She worries about her plants more than she worries about me." She has always maintained a large vegetable garden consisting of six raised beds (raised by about eight inches). This year however, she decided to give up her vegetable beds because she felt she would not be able to keep up with it. She got involved with the project because she felt that the space should be used: "I had the space and I wasn't using it and I wanted to share it."

4.4.3 Breaking New Ground (Team Development)

Sarah and Patty were not matched until mid-June, which was quite late in the growing season. After being unable to find more ideal partners for each of them I decided that they would make a reasonable match and that they should work well together. Sarah was initially to be matched with a socially isolated older woman with mobility problems, however, because she did not have homeowners insurance and also because the woman's adult son already kept up the garden and visited her often, I decided to match Sarah with Patty and Greg whose garden would not otherwise be used. Their garden was made up of raised beds, which only needed to be weeded in preparation for planting and they also had a built-in irrigation system (Appendix I – Garden 3). I considered that both of these features would make it easier for Sarah as a first time gardener.

Patty had initially requested to be matched with a couple so that there would be a male who Greg could talk with and relate to. However, I was not able to find a couple to match her with. As a consolation she asked that whomever she be matched with would be willing to garden independently without needing help or advice. Although Sarah was a beginner gardener she expressed that she would be happy to work independently and so I set up a meeting to introduce Sarah and Patty. In the initial meeting Patty showed Sarah the area of the garden she would be using and we sat down together and went through the agreement guidelines. It was decided that Sarah could use any of their tools, but otherwise was on her own with the garden unless she needed occasional help with the watering during holidays. Patty also made it clear that she did not want any of the produce that Sarah would grow in the garden because she felt Sarah should have it all (see Figure 15). Sarah purchased some tomato plants and some pea and bean seeds and set about preparing the garden (see Figure 11).

4.4.4 Cultivating Relationships (Team Dynamic)

From the moment she was matched with Sarah, Patty seemed convinced that things would go wrong with the partnership. She was very concerned that Sarah had not yet come to plant anything, feeling that it was too late in the season to start anything. However when asked if she would rather not participate she maintained that she wanted to continue with it. After a few weeks, when Sarah eventually put in her plantings, things seemed to be going well for the partnership. Although they did not interact very much when Sarah came to the garden the Browns, whose gardener had recently moved away, hired Sarah to do additional yard work. This continued for about a month until Sarah got a part time job. At this point Patty began to express concern that Sarah never came to water or weed and that she was worried about the plants so she watered them herself. When harvest time came Patty noted that Sarah never came to pick any of her tomatoes. According to Sarah however, she had been to the garden at least a few times a week and had harvested many tomatoes from the garden and was enjoying cooking different things with them. At the end of the season, Patty seemed relieved that the project was over and just wanted Sarah to come and clean out her beds (see Figure 14). Sarah on the other hand was happy with the experience and felt encouraged to have her own garden the following year.

4.4.5 Scenes from Partnership 3:

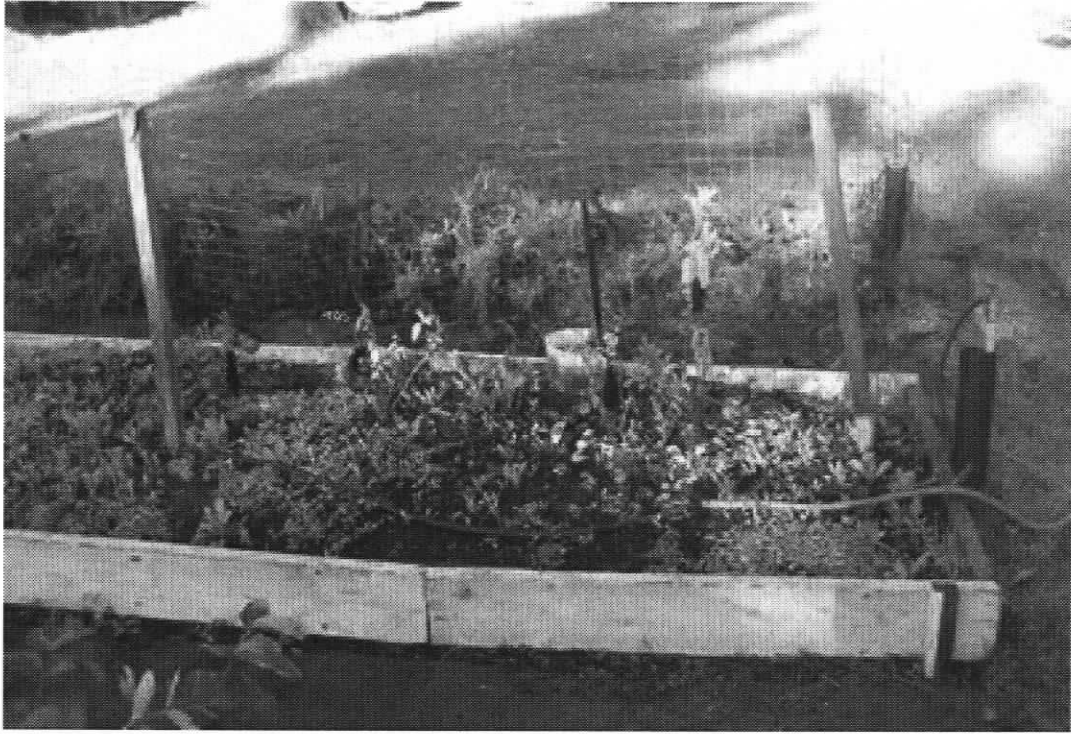


Figure 11: Sarah's vegetable bed was used primarily for tomato plants, which, she reported, were very productive. This photograph shows the garden in late summer when production was waning.



Figure 12: This is one of the beds that the Browns paid Sarah to clear out



Figure 13: This is just one of the many ornamental beds in Patty's garden. She truly is the gardening "guru" of the neighbourhood



Figure 14: Patty complained that Sarah's garden was an eyesore because of the stockings she had used to tie up her tomato plants. Patty explained to me (though not to Sarah) that she should have cut them into thin, invisible strips; "Someone told her the wrong thing"



Figure 15: Patty said at the beginning that she did not want a share in the food that Sarah grew, instead she planted her own vegetables in some containers in another part of the garden.

4.4.6 Realizing the Harvest (Key Findings)

Out of all the partnerships this one was the most challenging, with misunderstandings and inaccurate perceptions abounding. While Sarah experienced benefits to her physical and psychological well-being, the Browns appeared to distance themselves from the project to the point that it became nothing more than an

inconvenience for them. Patty in particular developed a negative attitude toward the project early on, and this attitude seemed to permeate all aspects of the Browns' experience of the project including their perceptions of Sarah. The discussion of this partnership will focus mainly on exploring the issues within this partnership and the possible reasons why those problems arose. These problems will be discussed in the context of three different factors including negative attitudes and perceptions, lack of mutual needs and benefits, and weaknesses of the match. In addition, I will address the benefits that Sarah experienced from the project, and the limitations involved in interpreting the interviews from Sarah and the Browns.

It is important to note here that there were some significant limitations and challenges in my analysis of the experiences of both Sarah and Patty. In interviews, they both gave different accounts of how the project went, how often Sarah visited the garden, and how often the Browns had been required to help water it. In addition, because of these inconsistencies, and because of irregularities in her own interview responses, I got the sense from Sarah that she was trying to give me answers that may have reflected a more positive experience than what she actually had. For example when asked how the project may have affected certain aspects of her health she would often preface her answers with "probably", or "most likely" followed by vague explanations, for instance, of how she was "just more active" or she "can now identify what [foods in grocery stores] are not too bad sort of thing". I tried to consider the aforementioned limitations in my analysis of the interviews.

4.4.6.1 Negative attitudes and perceptions of the partners

Patty's disappointment with the project began early on when an 'ideal' garden partner (i.e. a mature couple who was experienced with gardening) could not be found

and she was matched with Sarah rather late in the growing season. At this point it seemed that she continued to participate only out of obligation rather than out of her own desire to be involved. Although she insisted on participating, her negative attitude toward the project carried on throughout. She had little faith in Sarah's ability to garden independently and was averse to the idea of offering anything but the most minimal help or advice. In the closing interview she remarked several times that she felt sorry for Sarah, because she was probably disappointed with the way the garden turned out.

“I think the girl that came might have been disappointed...Really she needed someone to teach her how to garden and umm, if that's what she had been looking for well, I let her down...I don't know whether she realized how gardening went, she was inexperienced and all she did was plant her five tomato plants and then left.”

This perception however contrasted sharply with Sarah's perception of her own experience. Sarah stated that she was impressed with her own ability to garden and that the experience encouraged her to have her own garden in the future. This made me wonder about how much they actively communicated with each other.

Sarah expressed that she experienced some discomfort with working in the Browns' garden. She noted that she did not feel entirely comfortable going into their garden; she recalled thinking on her first visit to the garden, “[I] hope they don't mind.” While Sarah's feelings of discomfort could be partially attributed to the fact that she is rather shy and self-conscious and young, they may also be an astute perception of Patty's overall negative attitude toward the project. Although the Browns seem on the whole to be very welcoming and social people, Patty clearly did not welcome the project and Sarah did not feel overly welcomed when the project began. From early on Patty felt that

the partnership would not work out; this may have become, at least in part, a self-fulfilling prophecy.

4.4.6.2 Lack of mutual needs and benefits

Just as the presence of mutual needs and benefits played an important role in the success of the previous two partnerships, the lack of these elements may have been a significant determinant in the lack of success in the partnership between Patty and Sarah. It was clear from my interviews with Sarah that she has a strong desire to help people by volunteering. "I just enjoy volunteering, and [sic] helping in general," Sarah says. The opportunity for Sarah to help the Browns however did not materialize in this partnership. Patty and Greg were not looking for someone to help them with their garden, but rather, they simply wanted to allow someone to use it (although Patty was hoping there would be a male gardener who could socialize with Greg). And although Sarah was interested in gardening, her initial motivation for participating (as mentioned earlier) was to help someone who needed assistance with his or her garden.¹

A second lost opportunity for mutual benefit in this partnership was the fact that the Browns had no desire to take any share of the food. Had the Browns wished to share the food, Sarah may have been given an opportunity to feel needed; even if the Browns did not actually need help gardening it would have helped Sarah to feel her work was valued if they had wanted a share of the food she produced. This kind of mutual support and interest may have motivated Sarah to spend more time in the garden and to plant a wider variety of vegetables.

¹ As it turned out the Browns did need some help with a portion of their garden because their usual gardener had moved on to other things (see Figure 12). However the Browns actually hired Sarah to do this as paid work supplemented by Veterans Affairs. Although she appreciated the money, the work could not have really fulfilled Sarah's philanthropic aspirations.

A final point with regard to the lack of mutual needs and benefits in this partnership relates to the social aspect of the backyard-sharing project. The Browns were not in need of additional social interaction. Patty especially, is a highly social person. She and Greg have a very strong and extensive network of friends, family and neighbours who visit often. Patty pointed out that they get visitors every day and they often have family staying with them. She and Greg know all their neighbours and their neighbours' relatives as well:

“This is the most excellent neighbourhood.” Patty says, “We’re always together. We have barbeques; we have potluck dinners, Oh, its just fantastic, absolutely! They all come in and I always get a hug, from men and even the young teenagers. [For] one of the young girls across the street, I’m grandma Pat, and the 18 year old next door he calls me Miss Patty, and we’re his surrogate grandparents, so there you are!”

Had an ideal garden partner been available for the Browns the opportunity for an exchange of benefits may have been more likely to present itself. As noted earlier, Patty had initially noted that it would be nice to have someone who could relate to and interact with Greg who has Parkinson’s disease. Patty may have been more welcoming to a gardener who could fulfill this role.

4.4.6.3 Mismatched

Considering the above issues, one can easily see the number of negative factors at play in this partnership. A key factor in producing all this negativity is the fact that all in all this was simply not an ideal match. Because of the limited choice of gardeners and homeowners, there was little choice but to match these people together. At first glance it may have worked: Patty wanted someone who could garden on their own and Sarah was willing to garden independently. As well, the beds needed little preparation and were

irrigated to make watering easier – ideal for a beginner gardener. However, in reality the distance Sarah had to travel (about 45 minutes each way by bus), and the limited opportunity for her to feel that she was helping someone were warning flags that there would be challenges in this partnership (Appendix H). Also, although the Browns stated they were open to having anyone come to use the garden, they also had a certain kind of person in mind as a garden partner, and they were more attached to that idea than they initially let on to be. Greg points out that the project might have gone better for them if Sarah was a more experienced gardener “who would get right down and grow stuff [and who] wouldn’t need to worry about our being here.” Patty explains, “I would love to have had a couple and they could have come with their chairs and sat in the shade and brought their lunch and come whenever they liked.” It is clear that Patty had developed a vision of what a good garden partner would be, and her vision was not easily shaken nor was it one that Sarah fit into.

4.4.6.4 Benefits for Sarah

Although Patty made it clear that neither she nor her husband benefited in any way from the project, Sarah had quite the opposite experience. The project produced multiple benefits for her in relation to physical activity, food awareness, and self-confidence.

Getting to the garden required Sarah to walk some distance to and from the bus. This increase in activity became a habit for Sarah and now she gets out more and is more active in general. In addition, Sarah has become more aware of her personal choices of fruits and vegetables in the grocery store. While it was not entirely clear in the interview how or why she became more aware of better food choices, she said simply “Probably after growing my own [food] I can identify what kind of vegetables are [sic] not too bad.” Also, Sarah enjoyed the availability of fresh food produced in her garden. “Now that I

have access to my own vegetables its just easier to get at them and actually make things with them.”

Another significant benefit for Sarah was the apparent growth in her confidence about her gardening abilities. At the start of the project she had never gardened on her own, but she was surprised at how well she did, and it encouraged her to try again next year¹. This experience may encourage her to try other new things that she perhaps feels uncertain about trying as well.

“I’m better at gardening than I thought I was... before I would sit there and go “how deep do I plant that?” I had no idea what I was doing and I figured out “well that works and that didn’t...I’ve come to the conclusion that I’m going to probably have my own garden next spring...I think I could probably handle having my own now.”

4.4.7 Conclusion for Sarah and the Browns

It is clear that the Browns would have been happier working with an experienced gardening couple and that Sarah’s initial intention of being a help to someone in need was not realized in this partnership. But while this partnership may not have been a resounding success, it was not without its merits. Sarah, at least, experienced some small benefits from the project. Furthermore, gaining insight into why this partnership did not work well is just as significant as the more positive outcomes of the other partnerships. This more challenging partnership does not reflect a lack of success for the broader project. Rather, it allows for the development of recommendations that will help in the

¹ Though it would be at home or in a larger scale community garden rather than in a one on one backyard sharing situation.

future application of such initiatives. In addition it permits consideration of a range of areas that need attention in the establishment of meaningful partnerships.

4.5 Chapter Conclusion

The Harvesting Health Project was designed to promote health and well-being for all those who took part. In this results chapter I have tried to encapsulate for the reader the details of each of these three unique partnerships and to illustrate the experience of each participant as I have come to understand it. All, save one, of the participants experienced some kind of benefit from being involved in the project. Some experienced benefits to their physical health by getting more active, or eating better. Others felt the benefits more internally on a psychological or spiritual level through their interaction and success with the garden. Still others benefited socially from the interaction they had with their garden partner, or through making new connections in the communities in which they live, work and socialize. In most cases, individuals experienced some kind of combination of these benefits, though some were more prevalent than others. Of the three partnerships involved in this project, two were highly successful, and plan to continue to garden together in seasons to come. The third partnership was less successful, providing a contrast to the others that illuminates many of the key factors at play in making these garden partnerships thrive.

Overall, when benefits to health and well-being were evident they seemed to be manifest in a variety of different ways. As Albert Wilmot puts it:

“I think...in a more philosophical sense we have harvested not just the food and the vegetables, but the communication, the well-being, the social contact...and so Harvesting Health; its simply health on different levels.”

Chapter 5: Conclusion: Reflections, and Limitations

5.1 Introduction

As illustrated in the previous chapter, each of the three partnerships in the Harvesting Health project was unique in itself, with its own distinct characteristics and dynamics. In each of the partnerships, there were certain common elements that stood out as being closely tied to promoting the health and well-being of the participants. In addition, each partnership revealed important considerations and challenges that should be taken into account in future applications of the project. This chapter will begin with a discussion of the aforementioned “stand-out” elements in the specific context of their benefits to physical, social and psychological health and well-being. With reference to the literature, I will highlight how certain elements may be particularly important in creating positive, health-promoting garden sharing partnerships. Following the discussion of the key benefits, I will go on to consider the challenges and possibilities for fostering health-promoting elements in future projects of this kind.

5.2 Health Promoting Elements

As outlined in the literature review, community gardens can help to improve diet, physical activity, social health and well-being, and psychological health and well-being. The majority of my research questions and objectives related to whether or not a backyard sharing project could produce benefits similar to community gardens, specifically, with respect to whether this project could improve the participants’ physical, psychological and social health and well-being and whether it would build community involvement. This section will address how the benefits expressed by participants relate specifically to my research questions.

5.2.1 Physical Health and Well Being

The benefits to physical health in this project were simple to observe. Although the research was not designed to quantify increases in physical activity, it was intended to gather the participants' own impressions of the status of their physical activity¹. My first research question related to whether involvement in the backyard-sharing program could facilitate healthier lifestyle choices with respect to diet and physical activity. In the initial interview, participants were asked to estimate the average amount of time they spent being active each week. In the closing interview, they were asked if this initial amount had changed at all. Among the participants, two of the gardeners and one of the homeowners reported having increased their amount of physical activity. For the homeowner, the increase was attributed specifically to time spent in the garden. For gardeners, the increase was related both to time spent in the garden and time spent traveling too and from the garden. For one of the gardeners, her participation in the project lead her to adopt the habit of being more active in general, specifically walking more than she had in the past.

Anticipated benefits to participants' diets were not realized as fully as expected. Although most participants reported enjoying the food from the garden, in most cases there was no marked change in the amount of fruits and vegetables consumed or the amount they purchased at the grocery store. There were two exceptions to this: the Wilmots, who felt they needed to buy fewer vegetables as a result of the project; and Sarah, who reported eating better and being more conscious of her options to buy fruits and vegetables in the grocery store.

¹ Because these physical benefits were self-perceived and rather straightforward, there is no need to link them to literature.

5.2.2 Psychological Benefits

In addition to the benefits to physical health and well-being discussed above, there have also been benefits to psychological well-being. Although this topic was not addressed specifically in my research questions, it is an important aspect of the holistic concept of health adopted by this project and defined by the World Health Organization as a state of complete mental, social and physical well-being. Three main themes arose in my findings that can be linked to potential benefits of a psychological nature, these include personal and spiritual benefits; increased confidence and independence; and mutual needs and benefits.

5.2.2.1 Personal and Spiritual Benefits

First, and perhaps most abstract, are the ideas of connecting nature and connecting to the past. Four of the participants involved in the project made some kind of connection with their gardens on a spiritual or emotional level. For one participant in particular, the opportunity to connect with nature through the garden was very significant as illustrated by her comments in the interview. In addition to this, two people related gardening to memories of their parents and their childhoods, while the fourth connected the garden space in her backyard with memories of her deceased husband who had always maintained it in the past. While in the latter case, the participant used this past connection as a source of criticism of her current garden partner, the spiritual and emotional connections made by these participants were, by and large, reflected upon in a positive way.

5.2.2.2 Confidence and Independence

Another area of improvement to psychological well-being is with regard to feelings of self-confidence and independence. This was a significant factor for two of the

participants in the project, one gardener (Sarah) and one homeowner (Albert). For Sarah, the experience of creating and nurturing a productive garden improved her self-confidence about having her own garden in the future. For Albert, having the opportunity to successfully reintegrate an activity he had given up years before (due to his declining physical health) improved his confidence in his ability to maintain a vegetable garden, and his outlook on his ability to do other things as well. In addition, he and his wife Nina feel more confident about staying in their current home now that the garden space is being used to their benefit.

5.2.2.3 Mutuality and Reciprocity

One of the key themes prominent in all three partnerships was the importance of the presence and range of mutual needs and benefits within a partnership. Everyone involved in this project was a volunteer. Not only were they simply volunteering to participate in a research project, they also volunteered their knowledge, their physical labour, their land, and/or their time for the benefit of their garden-sharing partner. This sense of volunteerism and altruism was apparent in two sentiments that were particularly prominent in two of the partnerships; first, that the participants felt they stood to benefit from the project in some way and second, that they genuinely wanted their partners to benefit at least as much as they did. So the partners benefited both by being helped and by helping others.

Central to this discussion of mutuality and reciprocity is the question of addressing vulnerability. One of the initial goals in my research was to use the Harvesting Health Project to meet the needs of vulnerable populations, specifically older and low-income populations. This goal became less important as difficulties arose in finding enough participants (especially gardeners) who could be considered “vulnerable”. However,

through my analysis, the importance of this element of vulnerability has again come to the forefront. While it was not possible to exclusively involve participants that were vulnerable in the broad, traditional sense, it did become clear that the majority of them had needs that could be interpreted as vulnerabilities in one way or another. Participants in this project had vulnerabilities related to physical ailments and frailties, social isolation and social anxiety, independence and self-confidence and access to safe healthy food or land in which to grow it. The participants' various vulnerabilities provided them with opportunities to benefit from the project.

In keeping with the principles of health promotion is the idea that in addition to addressing a person's vulnerabilities, it is equally important to address their abilities. While a person may have many vulnerabilities, he or she can at the same time have many abilities or assets. In this way the participants in the Harvesting Health project were able to address their vulnerabilities as well as to realize their assets. Each participant contributed to the project as much or more than they benefited from it and the benefits they experienced were only made possible through these contributions. Understanding the value of their contributions could lead the participants to feel proud of their accomplishment. Perhaps feeling needed may actually be a remedy for feeling needy. Everyone has something to offer, and everyone has needs to be filled.

5.2.3 Social Well-Being

The final health oriented questions for this research relate to whether the project could foster intergenerational ties, reduce social-isolation and improve community involvement. Beginning with the question of social isolation, a key goal of the project was to create social support for the participants, particularly the homeowners. Social

support is known to provide “a buffer against adverse life events and living conditions” and has the potential to improve an individual’s quality of life (Nutbeam, 1998). As I have already mentioned, two out of the three homeowners were relatively socially isolated and expressed a wish for more social contact. Interestingly, in the third partnership between Sarah and the Browns, Sarah was socially isolated as a result of the discord within her own family and her extreme shyness. While the potential was there for the Browns to open up to her (particularly with Patty being so outgoing), that potential was never realized.

In the first two partnerships, it was apparent that in both cases the homeowners felt that their garden partners satisfied their wishes for increased social interaction to some degree. Furthermore, in both cases, the gardeners reported satisfaction with the social contact they had with the homeowners, feeling that it benefited them as well. In effect then, the harvesting health project improved the social capital of the participants in these two partnerships¹.

As noted in the literature review, social capital relates to “the processes between people which establish networks, norms and social trust and facilitate coordination and cooperation for mutual benefit.” As Nutbeam (1998) points out, social capital is present in “informal community networks and in the norms of volunteerism, altruism and trust.” Nutbeam (1998) also notes that the strong social networks foster cooperation for mutual benefit within communities. From Nutbeam’s description it is clear to see how the Harvesting Health project has helped to foster social capital through the development of small-scale social networks for participants in the first two partnerships. Those two

¹ In the case of the Wilmots, this was further demonstrated through their feelings of concern around not having Jolene come by anymore, which reveals the importance that this relationship had for them.

partnerships evolved into small-scale communities where the participants were able to work together for their mutual benefit. If their intention to continue gardening together in the coming season is any indication of the strength of their partnership, it seems they will continue to reap the benefits of their rich relationships. In addition, in the first two partnerships, it was clear that the project did indeed foster intergenerational ties. In the case of the Wilmots, they were able to connect with their young granddaughter who took an interest in the garden. In the case of Rachel and Betty, Rachel especially appreciated the opportunity to connect with a person from an older generation.

With regard to the question of community involvement, in addition to building intergenerational ties and social capital within their own small-scale garden sharing communities, some of the participants also built stronger connections to the broader community. These connections were particularly evident for Rachel and Betty. Through the project Betty was introduced to Saanich Volunteer Services Society and has continued to make use of their services. Meanwhile, Rachel's involvement in the project piqued her interest in other gardening related activities through which she was able to connect with neighbours and co-workers, who had similar interests. These connections could potentially lead Rachel and Betty to cooperate with others in their communities on future projects related to health, food security or environmental sustainability (for instance, the composting efforts in Rachel's building).

5.2.4 Interconnections

In this discussion I have attempted to neatly encapsulate each of the health promoting elements that arose in the project; however, it is important to realize that in reality things are not so neatly contained. In many cases the realization of one benefit comes hand in

hand with another. For example, for Albert Wilmot, his increased self-esteem was partially tied to his achievement of physically tending to the garden. Such experiences illustrate the fact that there are complex social and personal processes at play in the development of these partnerships that shape the dynamics necessary to produce positive outcomes. The question that remains is how can these processes be reproduced to ensure the success of future projects? The following section will describe some challenges for making this kind of project work well, and some possibilities for ensuring greater success in future projects of this kind.

5.3 Challenges and Possibilities

An important objective for this project was related to knowledge translation and policy change; specifically, to provide information to governments, academics and organizations to develop more effective health-promotion and food security programs and to guide community and regional policy in the areas of community development, housing, land-use and public health. This objective correlates with the final sub-question for this research: to identify challenges and areas of improvement for the future application of similar projects.

In reflecting on my experience over the duration of this project, it became evident that there were four specific areas that seemed vital to the project's success: making good matches, establishing clear guidelines within the partnerships, providing support for the participants, and finding community support for the project. In this section, I will outline the barriers and challenges I encountered within each of these areas, and suggest possible ways to ensure greater success in the future. These suggestions, as well as a summary of

the general results, will be presented to participants, community partners and other interested organizations in a brief report following the completion of my thesis.

5.3.1 Making Good Matches

The most important initial consideration in making a backyard sharing project function well is creating good partnerships, which implicitly means making good matches to begin with. Although I put a great deal of thought into matching the participants for this project, realistically there was limited choice in who was matched together. This was due to a combination of factors, including the short recruitment period, the large geographical area for recruiting, and considerations around security and insurance. Several people who had expressed an interest in volunteering for the project could not be matched and those who were matched came from a very limited pool of volunteers and homeowners. This, in part, contributed to the lack of success of the third partnership. If both Sarah and Patty had been found more appropriate partners, both of them may have had very different experiences of the project.

My matches for this study were based primarily on geography (i.e., the proximity of the volunteer gardeners to the garden) and the specific preferences of the individual participants (e.g. the type of person they wished to work with, the amount of involvement they wanted to have in the garden, etc.). By analyzing these partnerships, I am able to make additional suggestions as to matching criteria. First, location in terms of the volunteer's proximity to the garden and mode of transportation is very important. If the participants have to spend too long traveling or go too far off their daily travel route, they simply will not visit the garden often enough. The importance of this element would likely be dependent on how much gardening the gardener would be doing (i.e., they may

only want or need to come occasionally). However, in my consideration, a location either very close to the gardener's home or very close to their place of work would be ideal.

A second factor to consider relates to the needs and assets of both the gardener and homeowner, as well as their individual preferences. As I learned with Sarah and Patty, if a participant states explicitly what their ideal partner would be, it is best to find them someone as close to that ideal as possible, as it may be better to give them no partner at all than to give them a partner they don't want. For instance, if the homeowner simply wants to lend out their garden and have minimal involvement, it would be important to have a gardener that wants a high measure of involvement and independence in the garden and has the time to fill that role. If the homeowner simply needs an extra hand in the garden, it would be important to have a gardener who was open to playing more of an assistive role, rather than cultivating their own independent garden. Here, it would also be important to consider the vulnerabilities of each participant and the capacity of their potential garden partners to address those vulnerabilities. These considerations could be made more accurately by someone with experience in this area, for instance, a volunteer services coordinator.

A final, and more broad consideration for making matches for this kind of project, is to host it in an area that has a mixed demographic. For example, an ideal location would be one that has both single-family dwellings to provide gardens and high-density apartment style dwellings to supply gardeners within a walkable distance. This way there would be a larger pool of potential homeowners and gardeners to draw upon. These suggestions are probably just a few of the potential criteria to consider when making a match for this kind of project.

5.3.2 Establishing Clear Guidelines

Establishing clear guidelines within a partnership is another important element to consider in creating successful partnerships. Participants were given the opportunity to review a list of considerations (Appendix B) for the partnership including who would do the watering, what would be planted, how often a gardener could visit and whether or not they could use the homeowner's bathroom. Most participants were very accommodating when reviewing the considerations and as a result created a very open garden sharing agreement. As the project progressed, it became evident that leaving things open resulted in some tension around what people's responsibilities should encompass. For instance, in the case of Rachel and Betty, Betty asked Rachel to tidy up a raspberry bush, but Rachel declined to help, which caused Betty some discomfort and confusion. Small problems and conflicts will always arise, so it is important to negotiate things upfront. The need for very clear guidelines, as well as a protocol for formally amending those guidelines if necessary, is vital.

5.3.3 Providing Necessary Support

Another key consideration in the Harvesting Health project was to provide support for all the participants. As the creator and coordinator of the project, it was my job to make sure things continued to move along smoothly after making the initial matches. This meant not only being a facilitator but also in some cases being an educator and a fundraiser. As a facilitator, I helped the participants to create a partnership agreement (Appendix A) that addressed what to plant, where supplies came from, how the work would be distributed, as well as many other issues that that might be encountered during the course of the project. I also 'checked in' regularly with the gardeners and homeowners to see how the project was going, and to make sure no problems had arisen.

Furthermore, I was available should any participant want to contact me by phone or email for any reason. As an educator, I shared my (limited) gardening knowledge when needed and helped to point participants to websites or organizations where they could get more information. As a fundraiser, I applied for grants and solicited donations in order to supply seeds, plants and other materials when needed. Although all this seemed quite straightforward at the time, I did not realize how much the participant's valued this level of support. Some participants noted they were happy they had someone to contact if something went wrong, while others felt that they received encouragement that motivated them to put a good effort into the project.

While it is evident that providing direct support to the participants is an important ingredient in ensuring better success for this project, it is important to note that on a larger scale and with the constraints of time it might not be possible to always provide the same level of support in future applications of the project. However, if the number of partnerships is greater and if the geographical area finite, it may be possible to create a support network among the pool of participants themselves. One way of building this additional support would be to bring groups of participants together for monthly potlucks, featuring produce grown in their gardens, to share experiences and knowledge and possibly hosting guest speakers. Another possibility would be for the host organization to create a website where participants could access useful information and post their own questions and comments.

5.3.4 Finding Community Support

Another important ingredient in making my project work was gaining the support of community organizations that had the resources to move this project forward. Without

the support of a community organization I would not have been able to provide as much support for the participants. In the planning stages of the project, I was challenged by issues of how to find participants, how to screen them and how to ensure their personal and physical security. Originally these issues were not immediately apparent to me. It became clear that these were not tasks I could undertake on my own, considering my limited experience and infrastructure, and I considered giving up the project entirely. I had already contacted a range of community organizations involved with gardening and food issues in the area and support from these groups was not forthcoming. Luckily however, a new avenue of support opened up that I had not considered: the voluntary sector.

I had put out queries to local volunteer organizations to solicit advice on recruitment, screening and insurance issues and found their responses to be very helpful. In following up with some of these groups, I also enquired as to whether they would be interested in partnering with me on this project. Such a partnering seemed logical to me given that they had volunteers and elderly clients and I needed both. After receiving a positive response from the Saanich Volunteer Services Society (SVSS), I made a formal proposal in late April 2005 and we immediately began working together. They advertised the project in their seasonal newsletter and in their weekly column in the local newspaper. The participants contacted me and I made initial matches and referred them to SVSS for more thorough screening through interviews, reference checks and criminal record checks. When the screening was complete the partnerships began. SVSS had an insurance policy that protected their volunteers in case of any injury. They also helped me to draft a waiver of liability that all participants were asked to sign. In addition, SVSS

offered their facilities to accommodate any recruitment or participant meetings. I was very impressed by the willingness of the staff at SVSS to accommodate this project, given their own tight schedules and budgets and limited human resources. Partnering with SVSS also insured that the participants would have some form of support if they wanted to continue working together after the research project was completed.

Ultimately, the support of the SVSS was of integral importance to the success of the project; indeed, the project may not have happened without their support. Such community support would be important in any future application of this project, especially if it is to be carried out on a larger scale. Volunteer organizations are already well trained and equipped to carry out participant recruitment and screening. In addition, with minor adjustments to their insurance policies in consideration of such a program, the need for participants to have their own insurance and to sign waivers of liability would be managed more efficiently. In future, to reach a greater base of volunteers and participants, and to have the added benefit of gardening expertise, volunteer organizations might consider partnering with food security groups to enhance the program further by providing gardening expertise and support to participants.

A key selling point for this project with the SVSS was the small-scale of the project that would result in very little additional work for staff. However, when presented with the potential benefits for both their clients and volunteers, SVSS may be more inclined to invest further in such a project. It is obvious that the voluntary sector makes a perfect venue for backyard sharing projects targeted at senior populations, but it is equally obvious that the non-profit organizations that dominate that sector have limited resources. The challenge will be to convince them of the value of such projects and to reduce the

workload on individual organizations by finding avenues for partnerships that would allow multiple organizations to pool their resources and efforts.

5.4 Closing Thoughts – Putting it all to bed

Reflecting back on this project, I am surprised to see how many of the research questions I was able to address with the data I collected. Although I began this project with high hopes, there were low-points where I wondered what, if anything, I would have to write about and who would care. The Harvesting Health Project set out with the primary goal of improving the health and well-being of those involved. For the majority of the participants, that goal was met. Although more detailed field notes, and more reflections from participants in their personal garden journals would have enriched the results, the in depth interviews, the ongoing participant observations and the documentary photographs provided an array of descriptive information that seemed to promote a greater understanding of the participants' experience in detail.

For the most part, the benefits materialized as expected by increasing opportunities for social interaction, providing motivation for physical activity, bettering access to and awareness of healthy food, offering opportunities to interact with nature and the past and improving self-esteem and confidence. For all but one of the participants, the project facilitated positive lifestyle changes, reduced social isolation, fostered intergenerational ties and/or helped create connections with the broader community. Moreover, this summary has identified ways that the project might better achieve these benefits through making well-matched partnerships, establishing clear guidelines within those partnerships, providing support to participants, and finding community support for the project itself.

Much of what I found through this research was unexpected. For instance, many benefits (especially those falling under the category of psychological well-being) were seen that did not fall neatly under any one of my research questions, but fit perfectly within the broader goals of the project. While I may have begun with more lofty goals of improving the food system as a whole, I have come to realize the impact a project like this can have on the lives of individuals. This impact is just as important and substantial as any community-wide, nation-wide or even global benefits. Though I had only a short-term glimpse into this project, I can already see how its effects may ripple out into the broader community, encouraging people to offer help to their neighbours, to seek out help for their own needs, to share their knowledge, grow their own food, compost, and buy locally and organically. In fact, during the course of this study, I have met many people who expressed interest in the project for themselves or for others who they felt could benefit from being involved in such a project.

In summary, it is evident that backyard-sharing projects can indeed produce health benefits that are similar to community gardens, though in slightly different ways. Whereas community gardens generally involve several people at any given time, the backyard-sharing project involves very few active participants, which means that any benefits that materialize will initially be seen on a much smaller scale. It is clear that this kind of project fits well within the mandate of health promotion activities, especially with respect to the concepts of mutuality and reciprocity and with regard to its potential to spur on health promotion activities in other community initiatives. With such positive potential, it is easy to see how the final two goals of this project (policy change, and knowledge translation) might be fulfilled.

Although many challenges arose in trying to initiate this project successfully, in the end it was launched and can be considered a reasonably successful pilot study. With attention to key considerations and the right support, this project can be repeated with equal or even greater success. Although there is no guarantee that future attempts at the project would be entirely successful, this does not mean that it should not be attempted. There is clearly a need and a demand for this type of project; and while such a demand exists, we should try to meet it. Issues of aging, food insecurity and land scarcity are not likely to disappear soon. Further exploration of alternative community gardens and other community based programs that can address the needs of vulnerable populations must be explored in order ameliorate these issues. It is hoped that this work will be a springboard to individuals and community groups to seek out support to initiate other Harvesting Health projects within their own communities. As organized backyard-sharing projects arise on larger scales, opportunities for larger, more comprehensive studies will also arise. Hopefully this research project will serve as a foundation for future research studies of its kind.

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Appendix A Consent

Gardener

Harvesting Health:

Sharing backyards to promote health and well-being among vulnerable populations.

Graduate Student Investigator

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Consent to participate (gardener)

You are invited to participate in a study for a Master's thesis in the Department of Geography at the University of Victoria. Participation is entirely voluntary and you may decide not to participate or to withdraw from the study at any time. In addition you are free to refuse to answer any question. If you agree to participate, the information that you provide will be tape-recorded and transcribed and will be used by graduate students and faculty involved in the Harvesting Health project. If possible you will be interviewed at least twice over the course of the next eight months. At any time you may ask for taped information to be erased and for sensitive information not to be divulged. To make sure that you continue to consent to participate in this research, I will verbally remind you of your freedom to withdraw or refrain from answering questions every two months and before each interview.

Purpose

The purpose of this project is to explore the health-promoting benefits of a sharing backyards project for seniors who can no longer take care of their backyard gardens and individuals who lack the space to grow their own fresh produce. While seniors may be compelled to move out of their homes if they are unable to maintain their property, individuals may benefit from the opportunity to grow food and spend time outdoors. This project will demonstrate how goals of improving nutrition, encouraging physical activity, reducing loneliness, and fostering diverse social ties can all be connected through a sharing backyards project. If successful, the project will serve as a model for communities and local governments to create future programs that will improve health and quality of life for vulnerable populations.

Procedures

You are being asked to participate in this study because you have expressed a need and desire for access to space to grow food. If you agree to participate you will be asked to consent to a criminal record check as well as to provide two personal references and a

waiver of liability. This project will take place over the growing season from April to November and will involve your continued participation throughout. You will be asked to take part in two transcribed interviews that will last approximately 60-90 minutes and will be tape-recorded. You will also be asked to form an agreement with the homeowner, outlining how much time you may spend in the garden, how you may use the garden space, and how the food that is produced in the garden will be allocated. You will also be invited to attend a group meeting at which potential guidelines will be discussed and where you can meet with the homeowner and the other project participants. You will be expected to spend at least three hours per week in the garden and to ensure that it is well maintained. At the completion of the study you will be sent a summary of the results if you would like them.

Potential Benefits

Since this is a health promotion project, it is hoped that you may experience benefits to your well-being and quality of life by participating. Potential benefits are: improved social networks, stress relief, increased physical activity and improved food security. In addition the results may provide important information for developing better programs to help promote the health of vulnerable populations, improve our urban environment and reduce food insecurity.

Foreseeable Risks

There may be potential risks to discussing your experiences in that these discussions may bring up unexpected reactions. If this happens, the researchers can provide you with a list of support persons (e.g. referral or counseling services in your area). In addition there are potential risks to working outdoors and gardening, we recommend all volunteer participants maintain health insurance. As well, the possibility that you and the homeowner may have disagreements to exist, if not resolved easily you will be responsible for reporting this to the Graduate Student Investigator. As well, volunteers are required to sign a waiver of liability.

Confidentiality

Any information resulting from this study will be kept strictly confidential. All documents will be identified only by a code number or pseudonym and will be kept in a locked filing cabinet at the University of Victoria. The audiotapes and interview transcripts will have all identifying information removed and your name will not be used in any reports. Two years after the end of the study, the audiotapes will be destroyed. Due to the nature of the research project, researchers and other participants may be aware of your identity and so you will not be completely anonymous. However, to protect your confidentiality all participants, researchers and research assistants will be required to sign a confidentiality agreement.

The overall results of this research project may be presented in a town hall meeting at the end of the study and at academic conferences. The typed transcripts with identifying information removed will be retained by the investigators to be used for additional

education and research purposes. After five years, the original questionnaires will be shredded.

If you have any question or concerns at any time during this study, you may contact Analisa Blake at (250) 472-4472 to seek further information and/or clarification about the study and/or your role in it. You may also contact the Associate Vice-President, Research at the University of Victoria at (250) 472-4545.

I have read the above information and have had an opportunity to ask questions to help me understand what my participation will involve. I freely consent to participate in the study and I have been told that a copy of my consent form will be left with me and a copy will be taken away with the researcher.

Name of participant

Signature

Date

Homeowner

Harvesting Health:

Sharing backyards to promote health and well-being among vulnerable populations.

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Consent to participate (homeowner)

You are invited to participate in a study for a Master's thesis in the Department of Geography at the University of Victoria. Participation is entirely voluntary and you may decide not to participate or to withdraw from the study at any time. In addition you are free to refuse to answer any question. If you agree to participate, the information that you provide will be tape-recorded and transcribed and will be used by graduate students and faculty involved in the Harvesting Health project. If possible you will be interviewed at least twice over the course of the next eight months. At any time you may ask for taped information to be erased and for sensitive information not to be divulged. To make sure that you continue to consent to participate in this research, I will verbally remind you of

your freedom to withdraw or refrain from answering questions every two months and before each interview.

Purpose

The purpose of this project is to explore the health-promoting benefits of a sharing backyards project for seniors who can no longer take care of their backyard gardens and individuals who lack the space to grow their own fresh produce. While seniors may be compelled to move out of their homes if they are unable to maintain their property, individuals may benefit from the opportunity to grow food and spend time outdoors. This project will demonstrate how goals of improving nutrition, encouraging physical activity, reducing loneliness, and fostering diverse social ties can all be connected through a sharing backyards project. If successful, the project will serve as a model for communities and local governments to create future programs that will improve health and quality of life for vulnerable populations.

Procedures

You are being asked to participate in this study because you have experienced difficulty maintaining your garden and are interested in giving someone the opportunity to use this valuable resource. If you agree to participate you will be asked to take part in two transcribed interviews that will last approximately 60-90 minutes and will be tape recorded. You will also be asked to form an agreement with the volunteer gardener outlining how much time he or she may spend in the garden, how they may use the garden space, and how the food that is produced in the garden will be allocated. You will also be invited to attend a group meeting at which potential guidelines will be discussed and where you can meet with your volunteer and the other project participants. Though the interview sessions are the only required time commitment, this project will take place over the growing season from April to November and will involve your continued participation throughout. You can expect the volunteer to spend at least three hours per week in the garden (at a time that will be agreed upon by the both of you). At the completion of the study you will be sent a summary of the results if you would like them.

Potential Benefits

As this is a health promotion project, it is hoped that you may experience benefits to your well-being and quality of life through participation. Potential benefits are: improved social networks, alleviation of stress and improved food security. In addition to these personal benefits, the results may provide important information for developing better programs to help promote the health of vulnerable populations, improve our urban environment and reduce food insecurity.

Foreseeable Risks

There may be potential risks to discussing your experiences in that these discussions may bring up unexpected reactions. If this happens, the researchers can provide you with a list of support persons (e.g. referral or counseling services in your area). In addition there are potential risks to sharing your backyard space and accepting the volunteer as a trustworthy individual. To guard against these risks, the research team will ensure that criminal record checks are completed on all volunteers (gardeners) going into another

persons home. However, we still recommend all homeowner participants have in effect home owners' insurance to cover any property and liability issues that could arise. In an attempt to increase participation, we have attached a waiver of liability for both volunteers attending someone's home (gardeners) and homeowners.

Confidentiality

Any information resulting from this study will be kept strictly confidential. All documents will be identified only by a code number or pseudonym and will be kept in a locked filing cabinet. The audiotapes and interview transcripts will have all identifying information removed and your name will not be used in any reports. At the end of the study, the audiotapes will be destroyed. Due to the nature of the research project, researchers and other participants may be aware of your identity and so you will not be completely anonymous. However, to protect your confidentiality all participants, researchers and research assistants will be required to sign a confidentiality agreement.

The overall results of this research project may be presented in a town hall meeting at the end of the study and at academic conferences. The typed transcripts with identifying information removed will be retained by the investigators to be used for additional education and research purposes. After five years, the original questionnaires will be shredded.

If you have any question or concerns at any time during this study, you may contact Ms. Analisa Blake at (250) 472-4472 or her supervisor Dr. Denise Cloutier-Fisher at (250) 721-6289 to seek further information and/or clarification about the study and/or your role in it. You may also contact the Associate Vice-President, Research at the University of Victoria at (250) 472-4545.

I have read the above information and have had an opportunity to ask questions to help me understand what my participation will involve. I freely consent to participate in the study and I have been told that a copy of my consent form will be left with me and a copy will be taken away with the researcher. I know that I am free to withdraw from this study at any time.

Name of participant

Signature

Date

Appendix B

Gardens Sharing Considerations

*From Lifecycles Sharing Backyards Project
Considerations for Sharing your Backyard Garden

There are a number of issues that you might want to consider when making arrangements to share your gardening space with another member of your community.

Time Considerations

- How many hours per week will the garden space be available?
- On which days of the week?
- What time(s) of the day?

Tool Considerations

- Do you have tools to share?
- Where will they be stored?

Soil Considerations

- Is there enough soil?
- Who will pay for soil amendments?
- What types of amendments or additives are acceptable?

Seeds / Transplants

- Who will provide the seeds and/or transplants?
- How will decisions be made about what is grown?

Water Considerations

- Can the gardener use the hose and water?
- Who does the watering?
- When?

Harvest Considerations

- Who will harvest the food?
- How will the harvest be distributed?

Privacy and Security Considerations

- Who can enter the garden? (children, partners, friends, pets)
- What space can be used? (shed, basement, bathroom)
- What about locks and gates?
- Emergency contact numbers?

Appendix C Waiver

Gardener

WARNING! BY SIGNING THIS DOCUMENT YOU WILL WAIVE CERTAIN LEGAL RIGHTS, INCLUDING THE RIGHT TO SUE.

RELEASE OF LIABILITY
AND ASSUMPTION OF RISKS

NAME OF PARTICIPANT:

ASSUMPTION OF RISK

I am aware that by volunteering to be a gardner in the Harvesting Health Project has many inherent risks, including but not limited to:

GENERAL:

theft, vandalism or loss of personal property
any manner of injury resulting from falls on steep, icy, slippery or uneven terrain or from impact or contact with trees, rocks, obstructions or other people or participants, visible or non-visible;
any injury or illness resulting from exposure to cold, wet or windy weather, or the effects of heat and strong sunlight;
injuries from falling rocks or trees limbs, floods, mud slides, lightening, etc.

I freely accept and fully assume all such risks, dangers and hazards and the possibility of personal injury, death, property damage or loss, resulting therefrom.

RELEASE OF LIABILITY AND WAIVER OF CLAIMS

In consideration of participating in this project I agree as follows:

TO WAIVE ANY AND ALL CLAIMS that I have or may have in the future against volunteers occupants allowing me onto their premise to complete gardening tasks, Saanich Volunteer Services Society and the University of Victoria, its governors, its officers, employees, agents, support personnel and other representatives (all of whom hereinafter collectively will be referred to as "the Releasees");

2. TO RELEASE THE RELEASEES from any and all liability for any loss, damage, injury or expense that I may suffer, or that my next of kin may suffer as a result of my participating in this study due to any cause whatsoever;

3. This agreement shall be effective and binding upon my heirs, next of kin, executors, administrators, assigns and representatives in the event of my death or incapacity.

In entering into this Agreement, I am not relying upon any oral or written representations or statements made by the Releasees other than what is set forth in this Agreement.

I HAVE READ AND UNDERSTOOD THIS AGREEMENT AND I AM AWARE THAT BY SIGNING THIS AGREEMENT I AM WAIVING CERTAIN LEGAL RIGHTS, INCLUDING THE RIGHT TO SUE, WHICH I OR MY HEIRS, NEXT OF KIN, EXECUTORS, ADMINISTRATORS AND ASSIGNS MAY HAVE AGAINST THE RELEASEES.

Signed this _____ day of _____, 2_____

 SIGNATURE OF PARTICIPANT SIGNATURE OF WITNESS (Non Family Member)

Homeowner

WARNING! BY SIGNING THIS DOCUMENT YOU WILL WAIVE CERTAIN LEGAL RIGHTS, INCLUDING THE RIGHT TO SUE.

RELEASE OF LIABILITY
 AND ASSUMPTION OF RISKS

NAME OF OCCUPANT: _____

ASSUMPTION OF RISK

I am aware that the use of my property in the Harvesting Health Project while beneficial to me, has many inherent risks, including but not limited to:

GENERAL:
 theft, vandalism or loss of personal property
 bodily injury

I freely accept and fully assume all such risks, dangers and hazards and the possibility of personal injury, death, property damage or loss, resulting therefrom.

RELEASE OF LIABILITY AND WAIVER OF CLAIMS

In consideration of participating in this project, I agree as follows:

TO WAIVE ANY AND ALL CLAIMS that I have or may have in the future against volunteers I am allowing on my premises to complete gardening tasks, Saanich Volunteer Services Society and the University of Victoria, its governors, its officers, employees, agents, support personnel and other representatives (all of whom hereinafter collectively will be referred to as "the Releasees");

2. TO RELEASE THE RELEASEES from any and all liability for any loss, damage, injury or expense that I may suffer, or that my next of kin may suffer as a result of my participating in this study due to any cause whatsoever;

3. This agreement shall be effective and binding upon my heirs, next of kin, executors, administrators, assigns and representatives in the event of my death or incapacity.

In entering into this Agreement, I am not relying upon any oral or written representations or statements made by the Releasees other than what is set forth in this Agreement.

I HAVE READ AND UNDERSTOOD THIS AGREEMENT AND I AM AWARE THAT BY SIGNING THIS AGREEMENT I AM WAIVING CERTAIN LEGAL RIGHTS, INCLUDING THE RIGHT TO SUE, WHICH I OR MY HEIRS, NEXT OF KIN, EXECUTORS, ADMINISTRATORS AND ASSIGNS MAY HAVE AGAINST THE RELEASEES.

Signed this _____ day of _____, 2_____

SIGNATURE OF PARTICIPANT SIGNATURE OF WITNESS (Non Family
Member)

Appendix D Oath of Confidentiality

Oath of Confidentiality

As participant in the Harvesting Health research project, I understand that I may have access to information about other study participants. By signing this statement, I am indicating my understanding of my responsibilities to maintain confidentiality and agree to the following:

- I understand that names and any other identifying information about study participants are completely confidential.
- I agree not to make known any information obtained in the course of this research project that could identify the persons who participated in the study.
- I understand that all information about study participants obtained by me in the course of this project is confidential. I agree not to divulge or otherwise make known to unauthorized persons any of this information, unless specifically authorized to do so by the investigators.
- I agree to notify the investigators immediately should I become aware of an actual breach of confidentiality or a situation that could potentially result in a breach, whether this be on my part or on the part of another person.

I have read the above information and have had an opportunity to ask questions to help me understand the rules of confidentiality involved in this project.

Name of participant

Signature

Date

Name of witness

Signature

Date

Appendix E Interviews

Gardener

Harvesting Health: Interview questions for gardeners

(part 1 - early in the project)

A. About the project

This section refers to your motivations for participation in the project and your expectation for the project.

Why did you decide to participate in this project?

Why do you want to grow your own food?

Why do you need space to garden?

B. Gardening

This section deals specifically with gardening and what gardening means to you

How would you describe your experience and knowledge of growing food?

How would you describe your experience and knowledge of preserving food?

What kinds of options are available to you for gardening and what kind of space is available for gardening in your current residence?

Have you ever had a garden before? y / n.
Briefly describe your past garden experience.

Have you ever had a plot in a community garden if no, why not, if yes, what was your experience like? y / n

Have you experienced any challenges accessing space for gardening (explain)?

C. Food Security

This section deals with food issues and habits

Food security is defined here as physical and financial access to , healthy, culturally acceptable foods.

i. Self-Assessment

Based on the above definition would you describe yourself as food secure or insecure (explain)? food secure / food insecure

Would you say that you have easy physical access to affordable food y / n

healthy food y / n
 culturally acceptable food y / n
 Would you say that you have easy financial access to
 affordable food y / n
 healthy food y / n
 culturally acceptable food y / n

ii. Shopping:

Where do you do your grocery shopping? _____
 How far do you have to travel? _____
 How do you get there? _____
 Do you have anyone who helps you with your shopping (eg. Provides a ride)? y / n.

Would you benefit from this kind of help? y / n.
 Do you ever have to buy less food in order to carry it home? y / n
 If so do you make extra trips to the grocery store to make up for this? y / n
 About how much of your income do you spend on groceries (percentage)?
 10% 20% 30% 40% 50% 60% 70%
 Are you always able to buy the food you want? y / n (explain why or why not)

What kinds of foods are you least likely to buy?

iii. Nutrition/Diet

a. General Information

How would you describe your eating style –
 I don't eat any animal products (Vegan)
 I don't eat meat, dairy or eggs (Vegetarian)
 I don't eat meat but I do eat dairy and eggs (Ovo-Lacto Vegetarian)
 I eat very little meat (Flexitarian)
 I eat all kinds of food meat included (Omnivore)
 Other: (please specify) _____

How would you describe a healthy diet?

Are you able to eat this way regularly (if not why not)? y / n

b. Fruits and Vegetables

How many fruits and vegetables do you eat on average each day? _____.

How many vegetables do you eat on average each day? _____.

Do you feel this is enough? y / n

If not, why don't you eat more?

How do you feel about the cost of this type of food?

iv. Food attitudes, perceptions and behaviors

a. Cultural Diets

Did you grow up in another country? y / n.

If yes were you able to eat the same foods when you moved here? y/n (explain)

Would you say you have a culturally influenced diet? y / n. _____

Are you able to access culturally acceptable foods? y / n.

b. Organic Food

What do you know about organic food (ie what is it, why is/isn't it good)?

Do you make an effort to buy organic food? y / n.

If yes, why is it important to you to have access to organic food

Are you able to access organic food when desired? y / n (explain)

c. Local Food

Do you make an effort to buy locally produced foods (why or why not)? y / n
 _____ If yes why is it important to you to have access to locally produced food?
 Are you able to access local food when desired? y / n (explain) _____

The following sections (self reported health, stress levels, physical activity) relate to your general health and quality of life.

D. Self Reported Health

For this study, health is defined as a state of complete physical, mental, and social well being.

How would you rate your health in comparison to the general population
 excellent very good good fair poor

For your age would you say your health is
 excellent very good good fair poor

Do you suffer from any health problems that affect your daily living? y / n

If yes what are those problems and issues?

Quality of life is a measure of your contentment and happiness in your daily life.
 What do you view as the main things that effect your quality of life in a positive way?

What do you view as the main things that effect your quality of life in a negative way?

Overall, how would you rate your quality of life?
 excellent very good good fair poor

E. Stress Levels

How would you describe your stress level?
 very high, high, medium, low, very low

What are the main things that cause you stress or make you feel upset or worried?

What do you do to relax when you are feeling very stressed?

What do you do to reduce your stress in every day life?

F. Physical Activity

How much physical activity do you do in a week (hours)? _____.

What kinds of activities do you do for exercise?

Are you able to exercise as much as you would like why/why not? y / n

Do you prefer to exercise in or out doors? _____.

Do you have any physical problems that prevent you from exercising? y / n

What are those problems? _____

Would you consider gardening exercise? y / n. (explain)

G. Housing

In this section I am going to ask you about your living situation

What is your community of Residence? (eg. Hillside-Quadra) _____.

How long have you lived in this community? _____ years.

How long have you lived in your current residence? _____ years.

What were your reasons for moving to this community/residence?

Why type of housing do you live in? (eg. apartment, house) _____.

Do you live with someone? y / n.

If so, who? _____.

If not, how long have you lived alone? _____ years.

Are you satisfied with your living environment? y / n

Why or why not?

Is there anything you would you change if you could?

H. Community awareness

In this section I will ask about your community and how you feel about it.

In your opinion what makes a good community?

Could you briefly describe the community you live in

What do you see as important changes in your community in the last 5-10 years?

What kinds of things have affected your day-to-day life and your community as a place to live?

Do you participate in any community activities or programs? y / n (which ones)

Are you a member of any clubs or organizations in the community? y / n (which ones)

What kinds of community services and groups are you aware of in this community?

Why/why don't you participate?

What kinds of programs do you think your community needs?

Do you do any volunteer work in the community (if so where)? y / n

Would you like to participate in more community groups, events or activities? y / n.
If no, what is preventing you from participating?

I. Social Networks

In this section I will ask you about your social networks and family ties.

i. General

Do you feel you have ample opportunity to socialize? y / n.

How often do you get to socialize (per week)? _____.

Is there anything that prevents you from socializing as much as you'd like to? y / n

Do you ever feel lonely at home? y / n.

Do you have friends and family that you can talk with about private matters? y / n

Do you have friends and family that you can call on for help? y / n

ii. Neighbors

Do you know many people in your neighborhood? y / n.

How many neighbors do you know? _____.

Would you like to know more people? y / n.

Do you get along well with your neighbors? y / n.

Do you know them well? y / n.

iii. Family

Do you have any family? (if so how big?) y / n _____.

Do they live in Victoria? y / n.

How often do you see them? _____.

iv. Friends

Do you have many friends that live in and outside of the neighborhood? y / n.

How often do you get to see them? _____.

Would you like to see them more? y / n.

If yes, why don't/can't you? _____

v. Multigenerational ties

Do you have friends and family members that are significantly older or younger than you? y / n. _____

Do you have good relationships with these people? y / n. _____

Do you think there is a benefit to having friends and family of different ages (explain)?
y / n.

J. Personal Information

This section deals with some general personal information

Year of Birth _____.

Marital Status – single – married – common-law – widowed - divorced

Education (highest level obtained) _____.

Financially would you describe yourself as very comfortable, comfortable or not very comfortable?

Would you like to explain?

Homeowner

Harvesting Health:

Interview questions for gardeners
(part 1 - early in the project)

A. About the project

This section refers to your motivations for participation in the project and your expectation for the project.

Why did you decide to participate in this project?

Why do you want to grow your own food?

Why do you need space to garden?

B. Gardening

This section deals specifically with gardening and what gardening means to you

How would you describe your experience and knowledge of growing food?

How would you describe your experience and knowledge of preserving food?

What kinds of options are available to you for gardening and what kind of space is available for gardening in your current residence?

Have you ever had a garden before? y / n.
Briefly describe your past garden experience.

Have you ever had a plot in a community garden if no, why not, if yes, what was your experience like? y / n

Have you experienced any challenges accessing space for gardening (explain)?

C. Food Security

This section deals with food issues and habits

Food security is defined here as physical and financial access to , healthy, culturally acceptable foods.

i. Self-Assessment

Based on the above definition would you describe yourself as food secure or insecure (explain)? food secure / food insecure

Would you say that you have easy physical access to
affordable food y / n

healthy food y / n

culturally acceptable food y / n

Would you say that you have easy financial access to
affordable food y / n

healthy food y / n

culturally acceptable food y / n

ii. Shopping:

Where do you do your grocery shopping? _____.

How far do you have to travel? _____.

How do you get there? _____.

Do you have anyone who helps you with your shopping (eg. Provides a ride)? y / n.

Would you benefit from this kind of help? y / n.

Do you ever have to buy less food in order to carry it home? y / n

If so do you make extra trips to the grocery store to make up for this? y / n

About how much of your income do you spend on groceries (percentage)?

10% 20% 30% 40% 50% 60% 70%

Are you always able to buy the food you want? y / n (explain why or why not)

What kinds of foods are you least likely to buy?

iii. Nutrition/Diet

a. General Information

How would you describe your eating style –

I don't eat any animal products (Vegan)

I don't eat meat, dairy or eggs (Vegetarian)

I don't eat meat but I do eat dairy and eggs (Ovo-Lacto Vegetarian)

I eat very little meat (Flexitarian)

I eat all kinds of food meat included (Omnivore)

Other: (please specify) _____.

How would you describe a healthy diet?

Are you able to eat this way regularly (if not why not)? y /n

b. Fruits and Vegetables

How many fruits and vegetables do you eat on average each day? _____.

How many vegetables do you eat on average each day? _____.

Do you feel this is enough? y / n

If not, why don't you eat more?

How do you feel about the cost of this type of food?

iv. Food attitudes, perceptions and behaviors

a. Cultural Diets

Did you grow up in another country? y / n.

If yes were you able to eat the same foods when you moved here? y/n (explain)

Would you say you have a culturally influenced diet? y / n. _____

Are you able to access culturally acceptable foods? y / n.

b. Organic Food

What do you know about organic food (ie what is it, why is/isn't it good)?

Do you make an effort to buy organic food? y / n.

If yes, why is it important to you to have access to organic food

Are you able to access organic food when desired? y / n (explain)

c. Local Food

Do you make an effort to buy locally produced foods (why or why not)? y / n

_____ If yes why is it important to you to have access to locally produced food?

Are you able to access local food when desired? y / n (explain) _____

The following sections (self reported health, stress levels, physical activity) relate to your general health and quality of life.

D. Self Reported Health

For this study, health is defined as a state of complete physical, mental, and social well being.

How would you rate your health in comparison to the general population
excellent very good good fair poor

For your age would you say your health is
excellent very good good fair poor

Do you suffer from any health problems that affect your daily living? y / n

If yes what are those problems and issues?

Quality of life is a measure of your contentment and happiness in your daily life.

What do you view as the main things that effect your quality of life in a positive way?

What do you view as the main things that effect your quality of life in a negative way?

Overall, how would you rate your quality of life?

excellent very good good fair poor

E. Stress Levels

How would you describe your stress level?

very high, high, medium, low, very low

What are the main things that cause you stress or make you feel upset or worried?

What do you do to relax when you are felling very stressed?

What do you do to reduce your stress in every day life?

F. Physical Activity

How much physical activity do you do in a week (hours)? _____.

What kinds of activities do you do for exercise?

Are you able to exercise as much as you would like why/why not? y / n

Do you prefer to exercise in or out doors? _____.

Do you have any physical problems that prevent you from exercising? y / n

What are those problems? _____

Would you consider gardening exercise? y / n. (explain)

G. Housing

In this section I am going to ask you about your living situation

What is your community of Residence? (eg. Hillside-Quadra) _____.

How long have you lived in this community? _____ years.

How long have you lived in your current residence? _____ years.

What were your reasons for moving to this community/residence?

Why type of housing do you live in? (eg. apartment, house) _____.

Do you live with someone? y / n.

If so, who? _____.

If not, how long have you lived alone? _____ years.

Are you satisfied with your living environment? y / n

Why or why not?

Is there anything you would you change if you could?

H. Community awareness

In this section I will ask about your community and how you feel about it.

In your opinion what makes a good community?

Could you briefly describe the community you live in

What do you see as important changes in your community in the last 5-10 years?

What kinds of things have affected your day-to-day life and your community as a place to live?

Do you participate in any community activities or programs? y / n (which ones)

Are you a member of any clubs or organizations in the community? y / n (which ones)

What kinds of community services and groups are you aware of in this community?

Why/why don't you participate?

What kinds of programs do you think your community needs?

Do you do any volunteer work in the community (if so where)? y / n

Would you like to participate in more community groups, events or activities? y / n.
If no, what is preventing you from participating?

I. Social Networks

In this section I will ask you about your social networks and family ties.

i. General

Do you feel you have ample opportunity to socialize? y / n.

How often do you get to socialize (per week)? _____.

Is there anything that prevents you from socializing as much as you'd like to? y / n

Do you ever feel lonely at home? y / n.

Do you have friends and family that you can talk with about private matters? y / n

Do you have friends and family that you can call on for help? y / n

ii. Neighbors

Do you know many people in your neighborhood? y / n.

How many neighbors do you know? _____.

Would you like to know more people? y / n.

Do you get along well with your neighbors? y / n.

Do you know them well? y / n.

iii. Family

Do you have any family? (if so how big?) y / n _____.

Do they live in Victoria? y / n.

How often do you see them? _____.

iv. Friends

Do you have many friends that live in and outside of the neighborhood? y / n.

How often do you get to see them? _____.

Would you like to see them more? y / n.

If yes, why don't/can't you? _____

v. Multigenerational ties

Do you have friends and family members that are significantly older or younger than you? y / n. _____

Do you have good relationships with these people? y / n. _____

Do you think there is a benefit to having friends and family of different ages (explain)? y / n.

J. Personal Information

This section deals with some general personal information

Year of Birth _____.

Marital Status – single – married – common-law – widowed - divorced

Education (highest level obtained) _____.

Financially would you describe yourself as very comfortable, comfortable or not very comfortable?

Would you like to explain?

Appendix F
 Closing Interview
 Gardener
 Harvesting Health:
 Interview questions for gardeners
 (part 2 – end of project)

The following sections (self reported health, stress levels, physical activity) relate to your general health and quality of life. I asked you some of these questions earlier in the project, now I want to see how that may have changed. Then we will move on to the less structured sections.

A. Self Reported Health

For your age would you say your health is – excellent, very good, good, fair, poor?

How would you rate your health in comparison to the general population – excellent, very good, good, fair, poor?

Has your health changed since the beginning of the project and if so how? How would you rate your quality of life (excellent, very good, good, fair, poor)?

Has this changed since the project began and if so how?

B. Stress Levels

Have the following things changed since the project began and if so how?
 stress level (yes no if yes how?)

causes of stress (yes no if yes how?)

ways to relieve stress (yes no if yes how?)

C. Physical Activity

Have any of these things changed since the project began and if so how:
 hours or intensity of physical activity? (yes no if yes how?)

type of physical activity? (yes no if yes how?)

D. About the project

This section refers to your motivations for participation in the project and your expectation for the project. This is the more informal stage of the interview where I'm looking to find out more about your experience of the project in some depth.

General Thoughts

Has the project turned out as you expected? (yes no explain?)

Have you encountered any problems? (yes no explain?)

What things went well?

What do you think could use improvement? (explain)

What have you learned anything from your involvement in the project?

Would you participate in another project of this type again?

Can you think of anyone else who would benefit from this project? How/Why?

The name of this project is "Harvesting Health" after experiencing the project, do you think this name is relevant, especially with the aspect of health?

Relationship With Homeowner

Could you describe what your relationship with the homeowner was like? (give an alternative example as a cue)

Garden Participation

About how often did you visit the garden and for how long?

Did the homeowner take part in any of the gardening?

Do you know why or why not?

Division Of Food

How was the food divided?

How did you feel about the way it was divided?

Garden Contract

Can you recall what kinds of rules you set out in your contract with the homeowner? (yes no explain?)

What rules worked and what rules didn't work? Why?

Other Thoughts

Do you have any other thoughts on the project?

E. Housing

In this section I am going to ask you about your feelings about your home and whether or not this project has influenced your experience of home at all.

Has having access to garden space changed the way you feel about your own home at all? (yes no explain?)

Are you considering moving to another place? (yes no explain?)

F. Community awareness/involvement

In this section I will ask about your feelings about your community and about your involvement

Has your opinion of your community changed since the project began? (yes no explain?)

Has your awareness of community services and activities changed since the project began? (yes no explain?)

Has your participation in community services and activities changed? (yes no explain?)

Cues: community programs? clubs or organizations? community services and groups?
reasons for community participation or lack of it? assessment of your community's needs (clubs, programs etc.)? amount of volunteer work you do? desire/ability to participate in more community groups, events or activities?

G. Social Networks

In this section I will ask you about your social networks and family ties.

i. General

Does the homeowner fit into your social circle of friends and acquaintances at all? (yes no explain?)

ii. Neighbors

Has your relationship with any of your neighbors changed?

Did the garden project affect your relationship with your neighbors in any way? (yes no explain?)

iii. Family

Did the garden project affect your relationship with your family in any way? (yes no explain?)

iv. Friends

Did the garden project affect your relationship with your friends or acquaintances in any way? (yes no explain?)

Have you made any new friends or acquaintances as a result of the project began?

v. Multigenerational ties

How do you feel about working with a person who is from another generation?

H. Gardening

This section deals specifically with gardening and what your garden means to you

What did it mean to you to have access to this shared garden space?

Did it effect your lifestyle in any way? (yes no if yes how?)

If you had to make the choice, would you rather share a backyard or have a plot in a community garden?

Do you have any other comments on the garden?

I. Food Security

This section deals with your food attitudes, habits and access.

i. Food Security Self-Assessment

Has your ability to access food both changed at all since the project began? (yes no explain?)

Can you comment on your ability to access for physically?

Can you comment on your ability to access financially?

ii. Grocery Shopping:

Have your shopping habits changed since the beginning of the project? (yes no explain?)

iii. Nutrition/Diet

a. General Information

Has your eating style changed since the beginning of the project? (yes no explain?)

Has your idea of a healthy diet changed? (yes no explain?)

Do you eat more fruits and vegetables since the project began? (yes no explain?)

iv. Food attitudes, perceptions and behaviors

a. Cultural Diets

Has your access to culturally acceptable foods changed since the project began?

Can you explain?

Has your concept of acceptable food changed at all since the project began?

b. Organic Food

Has your knowledge of / use / access to organic foods changed since the project began?

Can you explain?

c. Local Food

Has your knowledge of / use / access to local food changed since the project began?

Can you explain?

J. Additional Information

Please feel free to add any comments about the project and its outcomes at this point.

**Harvesting Health:
Interview questions for gardeners**

(part 2 – end of project)

The following sections (self reported health, stress levels, physical activity) relate to your

general health and quality of life. I asked you some of these questions earlier in the project, now I want to see how that may have changed. Then we will move on to the less structured sections.

A. Self Reported Health

For your age would you say your health is – excellent, very good, good, fair, poor?

How would you rate your health in comparison to the general population – excellent, very good, good, fair, poor?

Has your health changed since the beginning of the project and if so how? How would you rate your quality of life (excellent, very good, good, fair, poor)?

Has this changed since the project began and if so how?

B. Stress Levels

Have the following things changed since the project began and if so how?
stress level (yes no if yes how?)

causes of stress (yes no if yes how?)

ways to relieve stress (yes no if yes how?)

C. Physical Activity

Have any of these things changed since the project began and if so how:

hours or intensity of physical activity? (yes no if yes how?)

type of physical activity? (yes no if yes how?)

D. About the project

This section refers to your motivations for participation in the project and your expectation for the project. This is the more informal stage of the interview where I'm looking to find out more about your experience of the project in some depth.

General Thoughts

Has the project turned out as you expected? (yes no explain?)

Have you encountered any problems? (yes no explain?)

What things went well?

What do you think could use improvement? (explain)

What have you learned anything from your involvement in the project?

Would you participate in another project of this type again?

Can you think of anyone else who would benefit from this project? How/Why?

The name of this project is "Harvesting Health" after experiencing the project, do you think this name is relevant, especially with the aspect of health?

Relationship With Homeowner

Could you describe what your relationship with the homeowner was like? (give an alternative example as a cue)

Garden Participation

About how often did you visit the garden and for how long?

Did the homeowner take part in any of the gardening?

Do you know why or why not?

Division Of Food

How was the food divided?

How did you feel about the way it was divided?

Garden Contract

Can you recall what kinds of rules you set out in your contract with the homeowner? (
 yes no explain?)

What rules worked and what rules didn't work? Why?

Other Thoughts

Do you have any other thoughts on the project?

E. Housing

In this section I am going to ask you about your feelings about your home and whether or not this project has influenced your experience of home at all.

Has having access to garden space changed the way you feel about your own home at all? (yes no explain?)

Are you considering moving to another place? (yes no explain?)

F. Community awareness/involvement

In this section I will ask about your feelings about your community and about your involvement

Has your opinion of your community changed since the project began? (yes no explain?)

Has your awareness of community services and activities changed since the project began? (yes no explain?)

Has your participation in community services and activities changed? (yes no explain?)

Cues: community programs? clubs or organizations? community services and groups?

reasons for community participation or lack of it? assessment of your community's needs (clubs, programs etc.)? amount of volunteer work you do? desire/ability to participate in more community groups, events or activities?

G. Social Networks

In this section I will ask you about your social networks and family ties.

i. General

Does the homeowner fit into your social circle of friends and acquaintances at all? (yes no explain?)

ii. Neighbors

Has your relationship with any of your neighbors changed?

Did the garden project affect your relationship with your neighbors in any way? (yes no explain?)

iii. Family

Did the garden project affect your relationship with your family in any way? (yes no explain?)

iv. Friends

Did the garden project affect your relationship with your friends or acquaintances in any way? (yes no explain?)

Have you made any new friends or acquaintances as a result of the project began?

v. Multigenerational ties

How do you feel about working with a person who is from another generation?

H. Gardening

This section deals specifically with gardening and what your garden means to you

What did it mean to you to have access to this shared garden space?

Did it effect your lifestyle in any way? (yes no if yes how?)

If you had to make the choice, would you rather share a backyard or have a plot in a community garden?

Do you have any other comments on the garden?

I. Food Security

This section deals with your food attitudes, habits and access.

i. Food Security Self-Assessment

Has your ability to access food both changed at all since the project began? (yes no explain?)

Can you comment on your ability to access for physically?

Can you comment on your ability to access financially?

ii. Grocery Shopping:

Have your shopping habits changed since the beginning of the project? (yes no explain?)

iii. Nutrition/Diet

a. General Information

Has your eating style changed since the beginning of the project? (yes no explain?)

Has your idea of a healthy diet changed? (yes no explain?)

Do you eat more fruits and vegetables since the project began? (yes no explain?)

iv. Food attitudes, perceptions and behaviors

a. Cultural Diets

Has your access to culturally acceptable foods changed since the project began?

Can you explain?

Has your concept of acceptable food changed at all since the project began?

b. Organic Food

Has your knowledge of / use / access to organic foods changed since the project began?

Can you explain?

c. Local Food

Has your knowledge of / use / access to local food changed since the project began?

Can you explain?

J. Additional Information

Please feel free to add any comments about the project and its outcomes at this point.

Homeowner

Harvesting Health:

Interview questions for homeowners

(part 1 - early in the project)

A. About the project

This section refers to your motivations for participation in the project and your expectation for the project.

Why did you decide to participate in this project?

Why do you want help with your garden?

Why do you think it is important to allow someone to maintain your garden and produce food?

B. Gardening

This section deals specifically with gardening and what your garden means to you

What does your garden mean to you?

How would you describe your experience and knowledge of growing food?

How would you describe your experience and knowledge of preserving food?

Would you describe gardening as a joy or a chore (explain)?

Has this perception changed over time? y / n (explain)

Have you cut back the scale of your garden, if yes, why? y / n

Can you describe what you used to grow in your garden?

How much food were/are you able to produce in your garden?

Who would you say was/is most involved with the garden, you or your spouse or was it equal? _____.

C. Food Security

This section deals with food issues and habits

Food security is defined here as physical and financial access to , healthy, culturally acceptable foods.

i. Self-Assessment

Based on the above definition would you describe yourself as food secure or insecure (explain)? food secure / food insecure

Would you say that you have easy physical access to
affordable food y / n

healthy food y / n

culturally acceptable food y / n

Would you say that you have easy financial access to
affordable food y / n

healthy food y / n

culturally acceptable food y / n

ii. Shopping:

Where do you do your grocery shopping?

How far do you have to travel?

How do you get there?

Do you have anyone who helps you with your shopping (eg. Provides a ride)? y / n.

Would you benefit from this kind of help? y / n.

Do you ever have to buy less food in order to carry it home? y / n

If so do you make extra trips to the grocery store to make up for this? y / n

About how much of your income do you spend on groceries (percentage)?

10% 20% 30% 40% 50% 60% 70%

Are you always able to buy the food you want? y / n (explain why or why not)

What kinds of foods are you least likely to buy?

iii. Nutrition/Diet

a. General Information

How would you describe your eating style –

I don't eat any animal products (Vegan)

I don't eat meat, dairy or eggs (Vegetarian)

I don't eat meat but I do eat dairy and eggs (Ovo-Lacto Vegetarian)

I eat very little meat (Flexitarian)

I eat all kinds of food meat included (Omnivore)

Other: (please specify) _____.

How would you describe a healthy diet?

Are you able to eat this way regularly (if not why not)? y /n

b. Fruits and Vegetables

How many fruits and vegetables do you eat on average each day?

_____.

How many vegetables do you eat on average each day? _____.

Do you feel this is enough? y / n

If not, why don't you eat more?

How do you feel about the cost of this type of food?

iv. Food attitudes, perceptions and behaviors

a. Cultural Diets

Did you grow up in another country? y / n.

If yes were you able to eat the same foods when you moved here? y/n (explain)

Would you say you have a culturally influenced diet? y / n.

Are you able to access culturally acceptable foods? y / n.

b. Organic Food

What do you know about organic food (ie what is it, why is/isn't it good?)?

Do you make an effort to buy organic food? y / n.

If yes, why is it important to you to have access to organic food

Are you able to access organic food when desired? y / n (explain)

c. Local Food

Do you make an effort to buy locally produced foods (why or why not)? y / n
 _____ If yes why is it important to you to have access to locally produced food?
 Are you able to access local food when desired? y / n (explain)

The following sections (self reported health, stress levels, physical activity) relate to your general health and quality of life.

D. Self Reported Health

For this study, health is defined as a state of complete physical, mental, and social well being.

How would you rate your health in comparison to the general population
 excellent very good good fair poor

For your age would you say your health is
 excellent very good good fair poor

Do you suffer from any health problems that affect your daily living? y / n
 If yes what are those problems and issues?

Quality of life is a measure of your contentment and happiness in your daily life.
 What do you view as the main things that effect your quality of life in a positive way?

What do you view as the main things that effect your quality of life in a negative way?

Overall, how would you rate your quality of life?
 excellent very good good fair poor

E. Stress Levels

How would you describe your stress level?
 very high, high, medium, low, very low

What are the main things that cause you stress or make you feel upset or worried?

What do you do to relax when you are feeling very stressed?

What do you do to reduce your stress in every day life?

F. Physical Activity

How much physical activity do you do in a week (hours)?

What kinds of activities do you do for exercise?

Are you able to exercise as much as you would like why/why not? y / n

Do you prefer to exercise in or out doors? -

Do you have any physical problems that prevent you from exercising? y / n
What are those problems?

Would you consider gardening exercise? y / n. (explain)

G. Housing

In this section I am going to ask you about your living situation

What is your community of Residence? (eg. Hillside-Quadra) _____.

How long have you lived in this community? _____ years.

How long have you lived in your current residence? _____ years.

What were your reasons for moving to this community/residence?

Why type of housing do you live in? (eg. apartment, house) _____.

Do you live with someone? y / n.

If so, who?

If not, how long have you lived alone? _____ years.

Are you satisfied with your living environment? y / n

Why or why not?

Is there anything you would you change if you could?

Do you find it difficult to take care of your home? y / n .

Can you explain why/why not?

What do you find the most difficult?

Are you/would you consider moving to a smaller place? y / n.

If so why, and how do you feel about the prospect of leaving home?

If not why not?

H. Community awareness

In this section I will ask about your community and how you feel about it.

In your opinion what makes a good community?

Could you briefly describe the community you live in

What do you see as important changes in your community in the last 5-10 years?

What kinds of things have affected your day-to-day life and your community as a place to live?

Do you participate in any community activities or programs? y / n (which ones)

Are you a member of any clubs or organizations in the community? y / n (which ones)

What kinds of community services and groups are you aware of in this community?

Why/why don't you participate?

What kinds of programs do you think your community needs?

Have you ever had assistance from a volunteer before? y / n

Do you do any volunteer work in the community (if so where)? y / n

Would you like to participate in more community groups, events or activities? y / n.
If no, what is preventing you from participating?

I. Social Networks

In this section I will ask you about your social networks and family ties.

i. General

Do you feel you have ample opportunity to socialize? y / n.

How often do you get to socialize (per week)? _____.

Is there anything that prevents you from socializing as much as you'd like to? y / n

Do you ever feel lonely at home? y / n.

Do you have friends and family that you can talk with about private matters? y / n

Do you have friends and family that you can call on for help? y / n

ii. Neighbors

Do you know many people in your neighborhood? y / n.

How many neighbors do you know?

Would you like to know more people? y / n.

Do you get along well with your neighbors? y / n.

Do you know them well? y / n.

iii. Family

Do you have any family? (if so how big?) y / n

Do they live in Victoria? y / n.

How often do you see them?

iv. Friends

Do you have many friends that live in and outside of the neighborhood? y / n.

How often do you get to see them?

Would you like to see them more? y / n.

If yes, why don't/can't you? _____

v. Multigenerational ties

Do you have friends and family members that are significantly older or younger than you? y / n. _____

Do you have good relationships with these people? y / n. _____

Do you think there is a benefit to having friends and family of different ages (explain)? y / n.

J. Personal Information

This section deals with some general personal information

Year of Birth _____.

Marital Status – single – married – common-law – widowed - divorced

Education (highest level obtained) _____.

Financially would you describe yourself as very comfortable, comfortable or not very comfortable?

Would you like to explain?

Harvesting Health:

Interview questions for homeowners

(part 2 – end of project)

The following sections (self reported health, stress levels, physical activity) relate to your general health and quality of life. I asked you some of these questions earlier in the project, now I want to see how that may have changed. Then we will move on to the less structured sections.

A. Self Reported Health

For your age would you say your health is – excellent, very good, good, fair, poor?

How would you rate your health in comparison to the general population – excellent, very good, good, fair, poor?

Has your health changed since the beginning of the project and if so how? How would you rate your quality of life (excellent, very good, good, fair, poor)?

Has this changed since the project began and if so how?

B. Stress Levels

Have the following things changed since the project began and if so how?
stress level (yes no if yes how?)

causes of stress (yes no if yes how?)

ways to relieve stress (yes no if yes how?)

C. Physical Activity

Have any of these things changed since the project began and if so how:
hours or intensity of physical activity? (yes no if yes how?)

type of physical activity? (yes no if yes how?)

D. About the project

This section refers to your motivations for participation in the project and your expectation for the project. This is the more informal stage of the interview where I'm looking to find out more about your experience of the project in some depth.

General Thoughts

Has the project turned out as you expected? (yes no explain?)

Have you encountered any problems? (yes no explain?)

What things went well?

What do you think could use improvement? (explain)

What have you learned anything from your involvement in the project?

Would you participate in another project of this type again?

Can you think of anyone else who would benefit from this project? How/Why?

The name of this project is "Harvesting Health" after experiencing the project, do you think this name is relevant, especially with the aspect of health?

Relationship With Volunteers

Could you describe what your relationship with the gardener was like? (give an alternative example as a cue)

Garden Participation

Did you take part in any of the gardening (if not why not)? y / n (explain)

If so, how did you feel when you were out in the garden?

What did you like best about it or what did you not like about it?

Division Of Food

How was the food divided?

How did you feel about the way it was divided?

Garden Contract

Can you recall what kinds of rules you set out in your contract with the homeowner? (yes no explain?)

What rules worked and what rules didn't work? Why?

Other Thoughts

Do you have any other thoughts on the project?

E. Housing

In this section I am going to ask you about your feelings about your home and whether or not this project has influenced your experience of home at all.

Has having a garden partner changed the way you feel about your home at all? (yes no explain?) (enjoyment of home, stress of upkeep etc)

What about your ability to keep up with general maintenance and upkeep of your home, has this project altered that in any way?

Are you considering moving to a smaller place? (yes no explain?)

F. Community awareness

In this section I will ask about your feelings about your community

Has your opinion of your community changed since the project began? (yes no explain?)

Has your awareness of community services and activities changed since the project began? (yes no explain?)

Has your participation in community services and activities changed? (yes no explain?)

Cues: community programs? clubs or organizations? community services and groups?
 reasons for community participation or lack of it? assessment of your community's needs (clubs, programs etc.)? amount of volunteer work you do? desire/ability to participate in more community groups, events or activities?

G. Social Networks

In this section I will ask you about your social networks and family ties.

i. General

Does your garden partner fit into your social circle of friends and acquaintances at all? (yes no explain?)

ii. Neighbors

Has your relationship with any of your neighbors changed?

Did the garden project affect your relationship with your neighbors in any way? (yes no explain?)

iii. Family

Did the garden project affect your relationship with your family in any way? (yes no explain?)

iv. Friends

Did the garden project affect your relationship with your friends or acquaintances in any way? (yes no explain?)

Have you made any new friends or acquaintances as a result of the project began?

v. Multigenerational ties

How do you feel about working with a person who is from another generation?

H. Gardening

This section deals specifically with gardening and what your garden means to you

Has your perception of your garden changed since the project began? (yes no explain?)

Do you spend more or less time in your garden?

If you had to make the choice, would you rather scale back your garden or have a volunteer come to share the space?

Do you have any other comments on the garden?

I. Food Security

This section deals with your food attitudes, habits and access.

i. Food Security Self-Assessment

Has your ability to access food both changed at all since the project began? (yes no explain?)

Can you comment on your ability to access for physically?

Can you comment on your ability to access financially?

ii. Grocery Shopping:

Have your shopping habits changed since the beginning of the project? (yes no explain?)

iii. Nutrition/Diet

a. General Information

Has your eating style changed since the beginning of the project? (yes no explain?)

Has your idea of a healthy diet changed? (yes no explain?)

Do you eat more fruits and vegetables since the project began? (yes no explain?)

iv. Food attitudes, perceptions and behaviors

a. Cultural Diets

Has your access to culturally acceptable foods changed since the project began?

Can you explain?

Has your concept of acceptable food changed at all since the project began?

b. Organic Food

Has your knowledge of / use / access to organic foods changed since the project began?

Can you explain?

c. Local Food

Has your knowledge of / use / access to local food changed since the project began?

Can you explain?

J. Additional Information

Please feel free to add any comments about the project and its outcomes at this point.

Appendix G Code List

NODE LISTING

Nodes in Set: All Nodes

Created: 11/29/2005 - 2:10:10 PM

Modified: 11/29/2005 - 2:10:10 PM

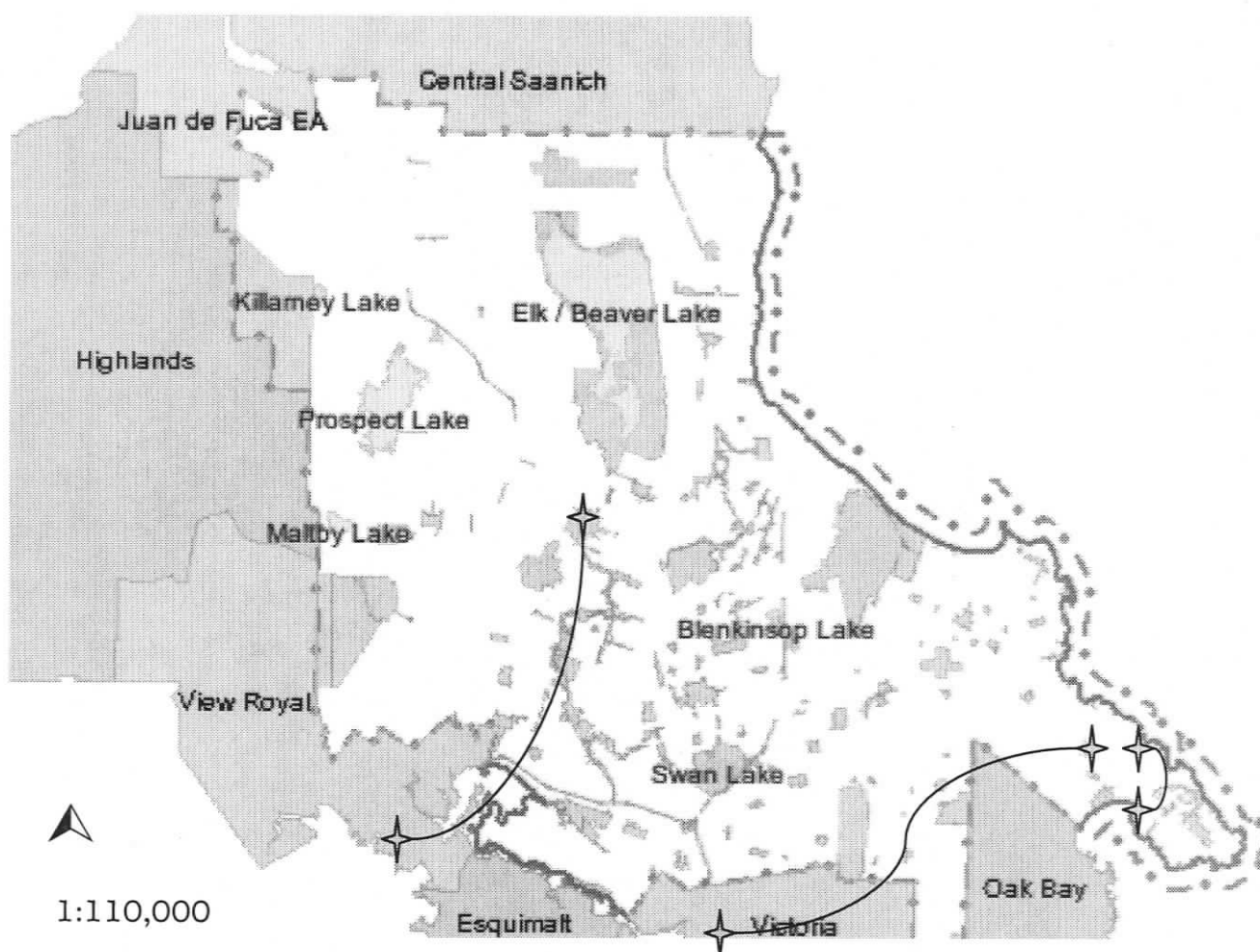
Number of Nodes: 100

- 1 (1) /Descriptions
- 2 (1 1) /Descriptions/gardener of homeowner
- 3 (1 2) /Descriptions/gardener of self
- 4 (1 3) /Descriptions/homeowner of self
- 5 (1 4) /Descriptions/homeowner of gardener
- 6 (1 5) /Descriptions/interviewer of gardener
- 7 (1 6) /Descriptions/interviewer of homeowner
- 8 (1 7) /Descriptions/Initial expectations
- 9 (1 8) /Descriptions/motivations
- 10 (1 9) /Descriptions/homeowner of garden
- 11 (1 10) /Descriptions/gardening
- 12 (1 11) /Descriptions/homeowner of community
- 13 (1 12) /Descriptions/interviewer of partnership
- 14 (1 13) /Descriptions/homeowner of neighbor
- 15 (1 15) /Descriptions/Health status
- 16 (1 15 1) /Descriptions/Health status/QofL
- 17 (1 15 2) /Descriptions/Health status/Stress
- 18 (1 15 3) /Descriptions/Health status/physical activity
- 19 (1 16) /Descriptions/connection with past
- 20 (1 17) /Descriptions/Food Security ~before~
- 21 (1 17 1) /Descriptions/Food Security ~before~/nutrition before
- 22 (1 17 2) /Descriptions/Food Security ~before~/access before
- 23 (1 17 3) /Descriptions/Food Security
~before~/preparation~preservation before
- 24 (1 17 4) /Descriptions/Food Security ~before~/awareness~attitudes
before
- 25 (1 18) /Descriptions/gardening and health
- 26 (1 19) /Descriptions/community before
- 27 (1 20) /Descriptions/social before
- 28 (1 21) /Descriptions/intergen
- 29 (2) /Process
- 30 (2 1) /Process/team development
- 31 (2 2) /Process/food sharing
- 32 (2 3) /Process/team dynamics

- 33 (2 4) /Process/contract~agreement
- 34 (2 5) /Process/waiver
- 35 (2 6) /Process/visits frequency
- 36 (2 7) /Process/visits descriptive
- 37 (2 8) /Process/project support~infrastructure
- 38 (2 9) /Process/contributions self
- 39 (2 10) /Process/contributions partner
- 40 (2 11) /Process/participation~activity
- 41 (2 12) /Process/challenges
- 42 (2 13) /Process/perceptions of partner
- 43 (2 14) /Process/relationship
- 44 (2 15) /Process/garden
- 45 (2 16) /Process/future
- 46 (2 17) /Process/expectations
- 47 (2 18) /Process/Contributions team
- 48 (2 19) /Process/attitude
- 49 (3) /Health
- 50 (3 1) /Health/Physical
- 51 (3 1 1) /Health/Physical/Activity
- 52 (3 1 1 1) /Health/Physical/Activity/outdoor~fresh air
- 53 (3 1 1 2) /Health/Physical/Activity/gardening
- 54 (3 1 1 3) /Health/Physical/Activity/new activity
- 55 (3 1 1 4) /Health/Physical/Activity/transportation
- 56 (3 1 1 5) /Health/Physical/Activity/motivation
- 57 (3 1 2) /Health/Physical/Food Security
- 58 (3 1 2 1) /Health/Physical/Food Security/nutrition
- 59 (3 1 2 2) /Health/Physical/Food Security/access physical
- 60 (3 1 2 3) /Health/Physical/Food Security/access financial
- 61 (3 1 2 4) /Health/Physical/Food
- Security/preparations~preservations
- 62 (3 1 2 5) /Health/Physical/Food Security/awareness
- 63 (3 1 2 6) /Health/Physical/Food Security/attitude
- 64 (3 1 2 7) /Health/Physical/Food Security/access general
- 65 (3 2) /Health/Psychological
- 66 (3 2 1) /Health/Psychological/self esteem~confidence
- 67 (3 2 2) /Health/Psychological/independence~security
- 68 (3 2 3) /Health/Psychological/pushing personal boundaries
- 69 (3 2 4) /Health/Psychological/change in routine
- 70 (3 2 5) /Health/Psychological/challenges
- 71 (3 2 6) /Health/Psychological/learning
- 72 (3 2 7) /Health/Psychological/providing help
- 73 (3 2 8) /Health/Psychological/stress
- 74 (3 2 9) /Health/Psychological/stress positive
- 75 (3 2 10) /Health/Psychological/stress negative
- 76 (3 2 11) /Health/Psychological/interaction with garden~nature
- 77 (3 3) /Health/Social

- 78 (3 3 1) /Health/Social/Gaps
- 79 (3 3 2) /Health/Social/Interactions
- 80 (3 3 2 1) /Health/Social/Interactions/relationship
- 81 (3 3 2 2) /Health/Social/Interactions/social interaction
- 82 (3 3 3) /Health/Social/Well Being Related
- 83 (3 3 3 1) /Health/Social/Well Being Related/general well being
- 84 (3 3 3 2) /Health/Social/Well Being Related/mutual need
- 85 (3 3 3 3) /Health/Social/Well Being Related/common ground
- internal
- 86 (3 3 3 4) /Health/Social/Well Being Related/common ground
- external
- 87 (3 3 3 5) /Health/Social/Well Being Related/problem solving
- 88 (3 3 3 6) /Health/Social/Well Being Related/sharing~caring
- 89 (3 3 3 7) /Health/Social/Well Being Related/intergenerational ties
- 90 (3 3 3 8) /Health/Social/Well Being Related/community internal
- 91 (3 3 3 9) /Health/Social/Well Being Related/community external
- 92 (3 3 3 10) /Health/Social/Well Being Related/friends
- 93 (3 3 3 11) /Health/Social/Well Being Related/family
- 94 (4) /Other
- 95 (4 1) /Other/Others who might benefit
- 96 (4 2) /Other/general comments
- 97 (4 3) /Other/general questions
- 98 (4 4) /Other/Community Gardens vs Backyard sharing
- 99 (4 5) /Other/Rationale for match
- 100 (4 6) /Other/limitations of study

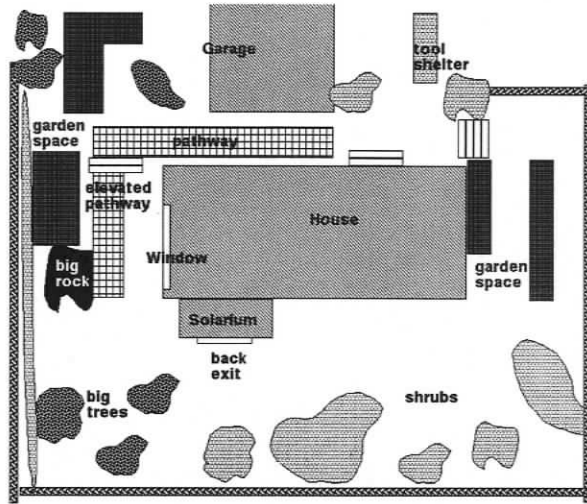
Appendix H Map of Relative Travel Distance



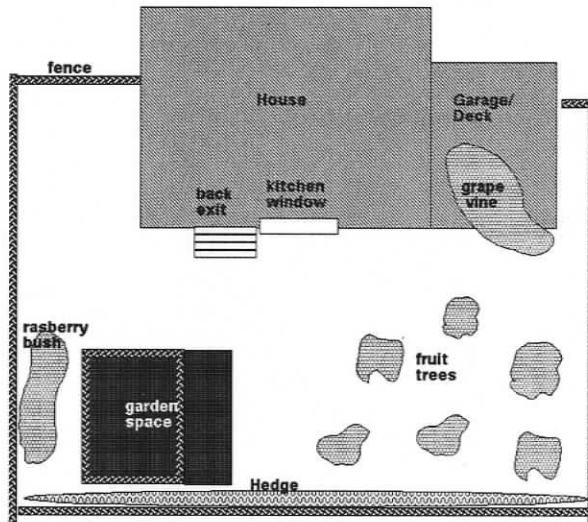
This map shows the relative distances between gardeners and homeowners. The locations are only representations of the participant's actual residences and are unlabeled in order to preserve anonymity.

Appendix I Garden Maps (approximations)

Garden 1



Garden 2



Garden 3

