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Community Gardens in Central Minnesota

by

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A Thesis

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Abstract

The focus of this work is to examine community gardens in Central Minnesota (specifically within the three-county area of Benton, Sherburne, and Stearns counties). This paper utilizes qualitative methodologies to compare and contrast community gardens in the area, with attention given to historic context, participation (or lack of) within the community gardening movement, and current community values. Emphasis is given to the differentiation between levels of community within the construct of community gardens as social spaces, as well as the development of the concept of the community garden network among the eighteen gardens studied.

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Chapter I: LITERATURE REVIEW

Introduction

The concept of community-based agricultural programs is not a new one, and has taken many forms over the years. Communities have begun to use small-scale food production as a way to strengthen social bonds and meet community needs throughout history. Community gardens are just one example of this. Concerns surrounding issues within global food systems (such as genetically modified foods, environmental concerns, and the obesity epidemic, just to name a few) have become increasingly salient. This has caused the growth of entities such as urban farms, organic farms, and community gardens (Lawson, 2005). In recent years, community gardens have emerged as an offshoot of the food movement within the United States. While individual gardens are as unique as the individuals who tend them, they often address (whether directly or indirectly) larger social justice issues.

Available literature surrounding the topic of community gardens is relatively fractured across several different disciplines, though the bulk of work can be found within the fields of sociology and land-use planning. Additionally, community gardens have been studied by researchers in public/community health and education as well. Generally speaking, the contemporary expressions of community gardens within the North American food system tend to be viewed as extensions of a larger entity which has come to be known as the "food movement". Often community gardens are created to address specific community needs such as human health, sustainability, and local food security (Ferris, Norman, Sempik, 2001; Macias, 2008; Firth, Maye, Pearson, 2011). Many researchers assert that the recent influx of community gardens, within the United States and across the globe, is a direct result of social dissatisfaction with the food system (Campbell, 2004; Macias, 2008; Firth, Maye, Pearson,

2011). As the public has begun to question its trust in industrialized agriculture, many have taken to the outlet of local food systems existing in their own backyards. Lyson deemed this phenomenon "civic agriculture", referring to agricultural systems that are community-based and localized (as opposed to "commodity agriculture") (Lyson & Guptil, 2004; Lyson, 2007). Community gardens find their place within this structure as they are, by definition, local enterprises.

Compared to other civic agricultural programs – such as CSAs (community supported agriculture) or farmers' markets – community gardens tend to be inclusive to a more diverse population, especially in terms of economic access. Macias provides a practical comparative analysis of these three types of programs based on criteria of food equity, social integration, and natural human capital, showing that community gardens are spaces which, overall, generate more community bonding and where participants are less likely to be hindered by financial barriers (Macias, 2008). Though most community gardens do not provide total alleviation from economic inequalities or food insecurity, in cases where alleviation is the goal, gardens may provide participants with a healthy supplemental food source. Gardens are sometimes portrayed as highly inclusive spaces (Lawson, 2005; Scanlan, 2009), however this assertion is relatively subjective and not always accurate. Of course the success of an initiative such as a community garden requires some level of support, participation, and cohesion, the level of inclusivity (particularly when welcoming – or not welcoming – new gardeners into the community) varies greatly (see Analysis and Discussion sections beginning on pages 23 and 42, respectively).

Defining Community

A sociological study of community gardens has an inherent obligation to explore definitions of the term "community". Here I would like to take the time to provide a brief

contextual examination of the forms of community that are important to the dialogue of community gardens. Due to the fact that the term will be used liberally throughout the course of my writing, I would like to provide a basis for the various ways in which the term "community" is used throughout the remainder of the literature review, analysis, and discussion. Throughout the course of this analysis, I will discuss community in terms of each individual garden and its gardeners, the network of gardens throughout the St. Cloud area, and the relation of each garden to its neighborhood and the St. Cloud area.

In the broad sense of the term, a community simply refers to a group of people – presumably with something in common. These are the groups that make up the substance that is the study of society and social groups (aka sociology). Sociologists also recognize that an individual may belong to multiple groups simultaneously and may move throughout those groups. In the context of the community garden, individuals come together around the common agricultural practice of small-scale food production. It is also safe to assume that those involved in a particular community garden are also members occupying a relative geographic area as well.

Flora and Flora (2004) describe three forms of the term "community" as it is used by sociologists. Firstly, it is used in reference to a physical place which fosters the social interactions of the group; secondly, as a more fluid social system through which the group is able to achieve their needs; and thirdly as a group with a shared sense of identity. Some communities may include portions of all three descriptions as they are not exclusive of one another. Flora and Flora's text places an emphasis on the idea of community groups sharing a sense of place – as in a physical or geographic area. This lens is necessary when studying rural communities, as their inherent rurality (their location) is the premise of the research. This is similar to the study of

communities who garden together - the research conducted for this thesis focus initially on a community of place (the garden itself is a physical space). However, each garden also has its own sense of identity (some more than others) and each gardener inevitably subscribes to multiple communities and community identities.

I also draw from Oldenburg's (1989) concept of "third places". These are conceptualized as physical spaces where members of a particular society can enjoy social interaction away from the confines of work, family, etc. – or as Oldenburg states, a "home away from home" (p. xi). The idea of third places is also characterized as informal gathering areas that hold and promote social interaction. While the purpose of this research is not to track the communities each individual gardener is involved in, it does look into the various connections and interactions the community garden (as a group) has with other organizations and community groups. This will be discussed in greater detail later.

A Brief History of Community Gardening in the United States

Throughout their history, community gardens have taken many forms and have had many titles. Though humankind has been participating in agricultural food production methods for thousands of years, it is in times of hardship that "community gardens" tend to emerge. As Lawson states so perfectly, "although garden programs seem to be perennial – appearing in times of crisis and disappearing in times of plenty – their constant reinvention begs the question of sustainability and the need for ongoing support" (Lawson, 2005, p.xv). One example of this are World War I era liberty gardens, and World War II era victory gardens (both are also known as war gardens). Supported and encouraged by the United States government, these were gardens planted both in private residences and in public areas (Murphy, 1991; Armstrong, 2000; Von Hassell, 2002; Lawson, 2005). The purpose was to relieve pressure and food demands by

prompting citizens to grow food for themselves, for their communities, and for their country. Indeed, by the mid-1940s, over 40% of fresh produce consumed in the United States had been grown by citizens in some 20 million gardens (Bassett, 1981; Walter, 2013). Garden projects such as victory and liberty gardens were prompted out of need for food as well as drawing citizens toward a common national identity. Participating in these gardens allowed citizens to provide for themselves as well as their country, satisfying both basic nutritional needs and a desire for social inclusion.

Walter includes war gardens as the second of four phases in the history of community gardens in the United States. The first wave began during the late 1890s with a push towards self-sufficiency and urban reform[1] (Lawson, 2005; Walter 2013). These projects were proposed as an alternative to welfare or charity programs, and had a tendency to target low-income and immigrant populations. While these gardens were used to foster the growth of skills and education (Lawson, 2005), they were also used to instill hegemonic behavioral norms (i.e. what makes a "self-sufficient" American-) (Walter 2013). This last point is one way in which the grassroots community gardens of the present day differ from institutionalized garden programs.

The third phase of community gardening took place between 1960 and 1980, and was hatched from both the social justice and environmental movements of the time (Lawson, 2005; Martinez, 2010; Walter, 2013). During this time there was a shift towards urban renewal and community development. This included beautification projects and reclaiming vacant lots for gardening (Breslav, 1991; Lawson, 2005), and focused on fostering community as well as the aesthetic transformation of urban areas. These transformative projects were often sponsored by local and federal governments in favor of residents having the ability to produce food for themselves, and were built on government controlled properties.

During the 1970s, as the environmental movement was coming to popularity gardens were constructed on land with little market value. However, as Schmelzkopf points out in her study of the community gardens of Loisaida, in New York City, when those lots became profitable once again, the government had a tendency to withdraw support and refocus efforts on the profitable real estate development of former gardens (1995).

The fourth, and current, wave of community gardens, though similar to and borne from the grassroots campaigns of third wave of gardens, are often developed with differing motives. Of course every garden is different and unique in and of itself, contemporary gardens (1990 – today) are often viewed as part of a social movement towards a healthier and more sustainable food movement (Levkoe, 2006; Flammang, 2009; Pollan, 2010). Today's community gardens have arisen from widespread concerns associated with food production practices and environmentalism (Von Hassell, 2002; Flachs, 2013). This is a variation of the community garden movement that took place between the 1960s and the 1980s. Though both movements exhibit dedication to fostering and cultivating community growth and social bonds, the contemporary garden movement is also deeply concerned with the social justice of local food production.

A Look at Community Gardens Today

Modern community gardens have taken on many shapes and purposes. For many years, community gardens have acted as spaces where individuals and organizations are able to come together and work towards common goals. Part of the beauty that lies within the fundamental nature of a community garden is its overarching flexibility to fulfil the needs of those who have created and maintained it. Community gardens also touch on several aspects of urban development such as food security, food access, agricultural education, and civic beautification

(Lawson, 2005; Scanlan, 2009). Though the program objectives of individual gardens have certainly changed over time and location, there are various recurring goals that have emerged. Some of these target interests include the use of community gardens as a way to channel desires to be closer to or return to nature (Pollan, 1992; 2006), as tools for education, and as ways to create social cohesion and the bringing together of groups surrounding an area of mutual interest.

Generally speaking, food production, while remaining a benefit of the urban agricultural landscape, is usually not the end goal of most community garden programming. Rather, agendas are more focused on positive social, educational, and economic objectives (Lawson, 2005). As previously discussed, community gardening in its current form has been building steam since the 1970s, and are often viewed as venues which have aided in fostering the emergence of sustainable regional and local food systems (Von Hassel, 2002; Feenstra & Wilkins, 2009; Turner, 2011).

According to Von Hassell, community gardens should be seen as "points of junction, expression of, and battleground for the emergence of new sets of ideas of living in cities, providing a setting and context for a new praxis of urban community activities, community action, citizenship, and activism" (2002, p. 8). Lawson places contemporary community gardens into four separate and distinct categories: (1) neighborhood gardens, (2) community food security gardens, (3) school gardens, (4) and job training or entrepreneurial gardens (Lawson, 2005, pp. 264 – 286). Of these, neighborhood gardens remain the most common type of garden found in the United States today. They are also the most diverse type of garden. Lawson emphasizes the difficulty that comes with attempting to generalize these gardens saying that "people who use neighborhood gardens vary as much as the plants that are grown in them"

(Lawson, 2005, p. 266). Though every garden is unique, gardens can usually be generalized into two different organizational models.

The first of these are "plot-based" (or "plot-allotment") gardens. In this type of garden each gardener (or group of gardeners) is allowed to garden in a designated "plot". In some cases, the gardeners in plot-based gardens may be required to pay a fee in order to use the land, in other cases use of the garden plot may be free of charge (Von Hassell, 2002; Lawson, 2005). Plot space may be dispersed among families, individuals, or groups. Though Macias suggests that poorly weeded plots can be harmful to neighboring gardens, people are generally able to garden in peace (2008), making this design a beneficial one for monitoring and managing garden governance and regulating conflicts.

The second model of community gardening is the "communal" garden model. In these cases all gardeners share a common space in which everyone shares responsibility (in one way or another) for the well-being of the garden. The communal garden design revolves around the idea of the community as a group that must work together to create one garden (Von Hassell, 2002; Lawson, 2005; Macias, 2008). While the success of a plot garden falls on the shoulders of the individual gardener, in a communal garden the entire garden community is responsible. Essentially all of the gardeners share the labor and reap the harvest together. They share in their successes and failures as a group. Communal gardens also tend to have a higher potential for conflicts which may arise as a result of governance issues. This type of garden may require a higher level of communication among gardeners in order to establish social norms and rules for the garden. There is potential for discontent over governance techniques (e.g. if a gardener is perceived to have contributed less labor, have they earned a lesser share of the final harvest?)

(Von Hassell, 2002; Lawson, 2005; Macias, 2008). With a communal garden, there may be more need for an established set of rules and procedures.

Theoretical Frameworks

This section is an extension of the literature review focusing on various theoretical insights that have helped to focus the researcher's notion of the community gardens and social movements as well as other analytical frameworks having to do with the processing of information through both the sociological and ethnographic lenses.

Social Movements and Community Foundations

Within this study, community gardens are recognized in terms of their existence within their respective communities, as well as within the larger community garden "movement". According to Buechler, communities are the sustaining force behind social movements, and it is unrest in the community which perpetuates movements for social change (Buechler, 2011). Specifically this research will discuss the phenomenon of modern community gardening as part of a social movement (the food movement) and as a movement of its own (the community garden movement).

The premise of this research theorizes that social movements, such as the community garden movement, emerge from perceived dysfunctions felt in society, or within a specific community (See Conflict Theory and Structural Functionalism below*).* Therefore the purpose of a community garden is to alleviate perceived problems (such as lack of access to healthy foods, or a belief that the current agricultural system is broken). This is consistent with Lyson and Guptil's analysis of the emergence of civic agriculture, a movement initiated by communities who have lost faith in the industrial agriculture system turning to local systems

(Lyson & Guptil, 2004; Lyson, 2007). Community supported agriculture (CSAs), community gardens, farmers' markets, and locally based farmers' co-ops are all components of this.

The lifespan of a social movement can be monitored in four stages: emergence, coalescence, bureaucratization, and decline (Christiansen, 2009). Emergence is the stage in which there may be widespread discontent among a group (or groups) of people, but without organization (Hopper, 1950; Macionis, 2001); coalescence is the stage in which social unrest becomes more apparent and groups begin to organize (Hopper, 1950); bureaucratization is the stage in which a social movement becomes more concrete and more formalized often employing trained and knowledgeable individuals (Christiansen, 2009); finally, the decline of a social movement occurs when a movement is either successful in its goals, fails to achieve its goals, or is repressed (Christiansen, 2009). One goal of this research is to look at community gardens in North America (specifically in Central Minnesota) and to determine whether or not they should be considered as part of the food movement, and one of its many parts, or as a similar-but-separate movement, standing on their own.

Social Capital

Community empowerment is an important aspect of community gardening. Whether this be through neighborhood revitalization, agriculture education, or promoting healthy eating and food access. A study of social capital theory yields beneficial results to the study of community gardens as social spaces and the creation of networks of civic engagement. Though originally a sociologically constructed theory, the idea of social capital is one that has also been used across a wide variety of social disciplines such as leisure studies, human geography, and economics. Bourdieu provides a generalized description of the concept, defining it as

> the aggregate of actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition – or in other worlds, to membership in a group – which provides each of its members with the backing of collectively-owned capital, a 'credential' which entitles them to credit, in the various senses of the word. (1986, pp. 248-249).

This definition makes important distinctions of what may constitute social capital within a network of individuals, which prove to be significant within the context of community gardens. Notably, Bourdieu's statement that the social network may be comprised of relationships which are "more or less" institutionalized. In other words, the relationships within the network in which social capital is being created may be informal. This can be seen, for example, when members of a community garden informally keep an eye on each other's plots or take turns watering while someone is on vacation.

Additionally, Bourdieu's definition of social capital points out that by virtue of membership into a group in which collective capital exists, individuals are "entitled" to a portion of that credit. Of course credit in social capital is not always a tangible item. Similarly to other forms of capital (financial capital, for example), social capital is grounded in the notions of input and output, investment and return. An individual may participate in social relations within the group, and would presumably expect some form of benefit as a result (Lin, 2001; Glover, 2004). Due to the fact that individuals themselves have limited resources, through membership to social groups they have the ability to gain access to additional resources through interactions and social relationships (Portes, 1998; Lin, 2001; Glover, 2004). Therefore social capital is inherent to social groups wherein individuals have come together and have the ability to access social capital through one another, or through the collective, in order to further group and individual

agendas. Glover does point out, however, that while social capital is embedded in social relations, it is up to the individual to access and utilize it (2004).

Coleman also provides a lengthy discussion of social capital, breaking the concept into six sub-categories ("forms"), which I will briefly review (1990, pp. 310-313). First, "obligations and expectations" (pp. 306-310) draws heavily form the concept of reciprocity. If an individual does a favor for another, there is an expectation that the favor will be returned in one way or another and that the original recipient of the favor has an obligation (even if unspoken) to do so. Second, "information potential" (p. 310) comes into play when members of a group use one another to share information. In the context of community gardening this could be exemplified in the exchange of information on gardening techniques or goings on in the community. Third, "norms and effective sanctions" (pp. 310-311) are characterized by the adherence to existing social norms. An individual is able to gain social capital by following social norms that are already in effect, in turn gaining social approval and status. Fourth, "authority relations" are classified by the transfer of control from one individual in the social network to another – therefore granting power and social capital to the recipient. Fifth, "appropriable social organization" (pp. 311-312) is the idea that an organization (or collective) was created for a specified purpose within a society or social group, but has the ability to serve additional or alternative purposes. Sixth, and lastly, "intentional organization" (pp. 312-313) is the concept that a group will organize for a specific purpose with the intention of providing a direct benefit to said group.

Other researchers have also studied the role of social capital (Glover, 2004; Alaimo, Reischl, Ober Allen, 2010), human capital, and natural capital (Macias, 2008) specifically within the social structure of gardening communities. Macias, for example, offers a

comparison of varying levels of natural human capital between community gardening, community supported agriculture, and organic market farms. His findings suggest that community gardens provide more opportunities for participants to utilize natural human capital (e.g. they learn through experience and from each other how to grow food for themselves) (Macias, 2008). It is important to mark the distinction between human capital and social capital. As previously discussed, social capital is the concept of aggregated prospective resources that lies within a social group or network. Whereas human capital is the concept that an individual can acquire skills that allow them to have more "capital" (Coleman, 1990) – a value-added human if you will.

Approaching Gaps within the Literature

While there is available literature on the subject of community gardens in North America, there is much less to be found in the area of community gardens in Minnesota, or the region of the Midwest specifically. This research aims to fill that gap by providing a comprehensive study of several gardens within Central Minnesota.

This research also aims to fill a methodological gap as well. The vast majority of qualitatively focused literature available on the topic relies on in-depth interviews as a primary data collection. In the world of sociology this is perfectly acceptable and (obviously) very common. However, a literature review on the subject of community gardens, community gardens as social movements, community-based or locally-based agriculture, etc., has revealed very little research making use of ethnographic methodologies[2]. Indeed, one of the only ethnographic accounts of community gardening found was Andrew Flachs' work in Cleveland community gardens wherein volunteer work and snowball sampling was used as a means to open doors for ethnographic fieldwork in order to examine economic and class differences among groups of

gardeners (2013). It is important to study similar topics with various ranges of methodological diversity in order to uphold a holistic and well-rounded approach to social science research.

Chapter II: METHODOLOGY

Research Questions

This research is inductive, and therefore is not based on proving or disproving hypotheses. Rather the research is designed to be exploratory, answering a specific set of research questions designed by the researcher. Below you will find a set of questions as well as a brief explanation of each.

Research questions are as follows:

1) How has the community garden movement manifested itself in the St. Cloud area? I wish to compare and contrast the St. Cloud area community gardens using the framework and historic perspective discussed in the literature review. I would like to know in what ways they are similar, and what areas they are different. This research aims to determine whether or not the community garden network in Central Minnesota is to be considered a social movement of its own, if it is simply an extension of the larger food movement, and in what ways they may intersect with one another.

2) For what reasons have community gardens been created in this area? This question is designed to dig into the motivation behind each community garden. It is likely that individual gardens will have been created for reasons unique to each community, but that also overlap with one another.

3) Have these gardens benefited their respective communities, and in what way(s)? This question is aimed at the positive impact of each garden within its immediate community.

Generally speaking gardens are created to provide something for the community[1]. I will be examining the goals and values of each garden community.

4) Have these gardens benefited the greater St. Cloud area, and in what way(s)? Expanding upon the previous question, this question looks at the impacts of each garden (or the garden network) on the larger St. Cloud community. Again, looking at the positive (or potentially negative) impacts that the garden(s) have had on the larger community.

Chapter III: RESEARCH DESIGN

Methods of Data Collection

The data collection portion of this study took place from June through September of 2015. Data was collected from gardens located within the metropolitan area of St. Cloud, Minnesota – specifically the counties of Benton, Stearns, and Sherburne (locally known as the "tri-county" area). In order to identify community gardens within this predetermined geographic location, I used the *St. Cloud Area Community Garden Directory* (Appendix A) (Stay & Kunkel, 2012) as a starting point. The document lists the locations and contact information for 16 community gardens in the area. It also includes basic information about each garden, such as the structure of the garden, number of plots, year founded, cost, etc.

I reached out to each of the gardens included in the directory (most were listed with at least one contact name and a phone/email). Because the information provided in the garden directory is a few years old, I expected at least some of the information to be out of date. Additional gardens were identified through snowball sampling methods and word of mouth recommendations from members of the original 16 gardens that I was able to contact. The original proposal for this project set an estimated goal of contacting 10-20 gardens. By the end of the data collection phase, I had had the privilege to work with 18 community gardens in the area.

Through snowball sampling I did learn about at least two additional community gardens in the area. A couple of the garden leaders I spoke with mentioned other gardens in the area, and I was able to get contact information for two other potential gardens. I was unable to locate the gardens themselves or get in contact with a representative from either referral. It is unclear as to

why they were unresponsive or unavailable to meet. It is possible that they were uninterested in participating in the study, or were perhaps inactive during the time of data collection.

The focus of this study emphasizes an orientation to social contexts and processes, therefore this research employs the use of qualitative methodologies in order to answer the above research questions. Initially my intention for data collection included conducting interviews as the primary method of data collection, complimented by the collection of observational data gathered through participant observation. Unfortunately, I greatly overestimated the amount of opportunity for participant observation[2] and my personal availability. Therefore, in lieu of significant participant observation data, I was able to at least tour all but three of the community gardens involved in this study.

Interviews

The primary method of data collection used in this study was in-depth interviews. Representatives from each garden were contacted using information found within the community garden directory, as well as from contact information found during the snowball sampling (referral) process. Each representative was contacted and asked to participate in the study via phone and/or email. Interviews were conducted with between one and three garden leaders per garden, and each participant was asked to participate in one interview with the option of further interviews in case follow-up was needed. In an attempt to be respectful of each participants' time, the interviews were designed to last no longer than an hour (the shortest was approximately 20 minutes and the longest was around 70 minutes), not including time spent touring each garden.

Throughout this text, I will be using the term "garden leaders" or "leaders" to describe my contacts at each of the gardens. These leaders are identified as members or organizers of the

garden who have a detailed knowledge of garden history, goals, and functions. These individuals may have been appointed by the gardening community, or may have been recommended to me by other gardeners. It is important to note here that, in most cases, the garden leaders I worked with were a mixture of informal and formally appointed leaders. Even in cases where I interviewed multiple participants from a particular garden, it was often apparent that one person was considered to occupy a more ostensible leadership role (particularly in regards to questions surrounding funding or the history of the garden, interviewees would simply refer me back to my original contact).

Interviews for this study used a set of 16 questions (see Appendix B for a full list) designed to cultivate conversations about the history, goals, participation, and place of each garden (whether perceived or not) within the social movement of community gardens. Using in-depth, but loosely structured, interviews allows for conversations to expand upon and explore a general set of questions and ideas without the limitations of surveys (whether using open or close-ended questions). The process of interviewing research participants opens up opportunities to discover personal stories and motivations (Schutt, 2012). Interviews also allow the researcher to delve more deeply into topics or angles that may not have been expected (whereas survey questions are somewhat more absolute).

The majority of interviews conducted lasted fewer than 60 minutes. Of the 18 interviews conducted, 17 were recorded using voice recording and one was recorded through written notes. Interviews took place in a variety of locations including at the garden, at a secondary location with a garden tour included, or at a secondary location with no garden tour. Secondary locations were often coffee shops or participant's offices/break rooms. In the case of the single

participant who did not wish to be recorded, I took detailed notes manually. All digital recordings were transcribed.

Observational Data

Data collected during garden tours was designed to provide a more accurate context and backdrop for interview data. Some interviews took place away from the garden (usually at a coffee shop or office), while others took place next to or within the garden. During the research process, I found that participants provided much more descriptive data when we were in or near the garden – essentially the garden served as a type of visual aid.

As stated above, I was able to tour all but three of the gardens. Four of these were self-guided tours, and the remainder were visits led by my contacts who were there to show me around. Data from each garden visit was manually recorded in field notes and photos. Visiting each garden gave me an idea of how the garden was laid out (plot spaces versus communal spaces), whether or not the area was fenced, how large or small the gardens and/or plots were, etc. I was also able to view methods and techniques utilized by the garden community.

Though this research is designed to look at social processes (not best practices for growing crops), the methods used in each garden often speak to the beliefs and values held by the community. For example, if the garden community is overtly dedicated to the use of organic-only methods, versus more conventional methods, it is possible (if not probable) that that particular community may have a greater focus on issues such as sustainability, environmentalism, and local foods.

The observational data I collected was intended to be a form of informal ethnographic data. Ethnographic researchers seek varying levels of immersion[3] within the groups they are studying. By working with, building relationships, and participating in community garden

events, the researcher hopes to gain a better understanding of social processes in order to answer the proposed research questions. While I did participate in work sessions at two of the gardens (direct participation), the majority of my observational data is just that, observational.

Ethnographic research tends to be much less structured than other qualitative data collection methods (such as structured interviews). Generally, ethnographers record and process data using a grounded approach (See Grounded Theory below). Essentially, this means that the researcher remains mindful and self-reflective throughout the data collection process, minimizing commitments to any preconceived notions or theories (Charmaz, 2001; Emerson, Fretz, and Shaw, 2011). This also means that, while being conscientious of the research questions, the researcher remains open to developing new thoughts and conclusions throughout the research process.

Participant Confidentiality

All names of both individuals and organizations (gardens and community partners) will be kept confidential. Only myself and my thesis advisor will have access to this information. Real names have been replaced with pseudonyms which will be used throughout this report and in any subsequent publications or presentations related to this research. It is important that participants and participating organizations be treated with respect and are protected by means outlined by St. Cloud State University's Institutional Review Board (IRB).

Relevance of this Research

The food movement within the United States and around the globe has grown immensely over the past decade. Discontent and perceptions of serious issues within local, national, and, ultimately, global food systems have resulted in the emergence of various types of programs designed to combat injustices within the existing system. This research aims to look at

community gardens in Central Minnesota as part of the larger North American food movement and potentially as their own social movement. This research employs the use of social movement theories as well as other conceptualizations of food-based social movements in order to construct a framework that is applicable to garden networks. It is the goal of this research to analyze community gardening through a sociological lens in hopes that this will shed some light on the human motivation to engage in community garden practices. Food has always been a medium through which people have been both drawn together and pulled apart. For this reason, it is important to study the human connection to food and its origins.

In addition to scientific curiosity, this research is also designed to be applied. This means that the completed work will be shared with each of the garden communities worked with throughout the data collection process. The purpose of this is to make research available to at least a small (and relevant) portion of the public that may not have been accessible otherwise. Due to the nature of St. Cloud State University's graduate culminating project requirements, this paper will be available in The Repository (http://repository.stcloudstate.edu/grad_etds/). This follows the belief of public sociologists who are pushing for a more widely accessible source of knowledge for the everyday person. For example, public sociologist Michael Burawoy suggests that scientists have spent over a century developing the sociology as a discipline and creating and collecting a pool of knowledge – accessible to other scientists, but not necessarily to the people (2005). It is time now to bring sociology into the public sector and to use our knowledge, scientific method, and subsequent research to make sociology available to everyone.

Chapter IV: DATA ANALYSIS

An Introduction to the Data

The content of the following section aims to provide (1) a brief introduction to the coding process and the identification of themes within the data; (2) a summary of each of the gardens represented in the study; and (3) a discussion of the ways in which the themes selected approach the research questions and any other additional patterns discovered that are pertinent. Though each research question is discussed in its own section, please note that there are most certainly overlapping themes between each question. They each intersect one another while also providing a focus on one particular area.

This research is based on qualitative data, with an emphasis on both interviews (digitally recorded and transcribed) and observational data (written and transcribed). Based on some previous experience working with gardening communities, I had anticipated a high level of community activity and social involvement within each garden (which was to feed the participant observation stage of my research). As I learned through the process of introducing myself to garden leaders and gaining more knowledge about how each garden operated, only about five of the gardens had consistently scheduled work nights or community events and only a portion of those were relatively active.

The vast majority (72%) of gardens did not have officially planned communal work times. These are defined as consistent, pre-planned, scheduled times where all gardeners are invited to work together. Even the 28% of gardens that did offer communal work times often had

a sort of "open door" policy. In other words, gardeners were able to come and go in the garden as they needed – there was no requirement to attend community work times.

The Plaza Community Garden (a communal garden), for example, was the most active in terms of scheduled communal work times. They often had 1-2 days per week set aside to work together, and social events on some weekends. Of course, if gardeners could not, or did not want to attend work times or social events, the unfenced garden was always open for gardeners to come in and weed, water, plant, or harvest as desired.

The Louise Avenue Community Garden (a plot garden), on the other hand, was much the opposite. There were no communal work times and gardeners worked on a largely independent basis. As Louise Avenue Community Garden manager, Daniella, put it, "We are really more of a community of gardeners than a community garden."

This appears to be indicative of a lower levels of cohesion among gardeners and/or the garden community. However, this is also not to say that none of the gardeners worked or collaborated with one another. Of several of the gardens that did not employ the use of communal work times, there was still evidence of community building, just in a different, perhaps less-structured, manner.

For example, when I spoke with both Alice (manager) and Sienna (long-time gardener) from the Arboretum Community Garden, and Oliver, manager of the Pecan Park, Monroe Park, Independence Park, and South Park Community Gardens, each mentioned that gardeners would sometimes share plots (leasing them together and sharing the physical space as well as gardening responsibilities). In other instances, gardeners would also assist one another during vacation, or if a fellow gardener was unable to tend to their garden for a few days or more.

I was able to make it to group work sessions at two of the gardens and tour all of the gardens but three (one of which is currently inactive). That said, the observational data I obtained came mostly from visiting the gardens and walking around on my own (with permission, of course) or getting a tour from one of my contacts. Through the various methods discussed previously, I was able to collect my interview data, some field notes, photos, and access to secondary data sources (i.e. lease agreements, garden websites or social media pages, mission statements, etc.) – all of which contributed to my analysis. Over the course of my data collection, I conducted 18 interviews with leaders of 18 gardens[1].

Themes

The analysis process for both interview recordings and field notes began with transcribing each into Word documents. This ensured that all data was accessible for coding and analysis in a consistent and standard format. During several interviews I was also given access to secondary documents such as plot lease agreements or garden rules which have also been used in the analysis.

From a coding and analysis perspective, the field notes and interview transcriptions collected for this research differ from one another. Where the interviews are designed to be semi-structured, using a set of pre-designated questions, data collection through the observation process and field notes use a less-structured, more grounded approach. Emerson, Fretz, and Shaw refer to this as grounded theory, a methodological approach to data analysis (2011). Whereas interview questions are designed, shaped by, and based on preconceived notions and knowledge of existing theoretical concepts (social movement theories, conflict theory, structural functionalism, civic agriculture, etc.), the grounded approach focuses on being mindful and self-

reflective while in the field, not ignoring already developed theories, but conscientiously limiting the amount by which they influence the perceptions of the researcher (Charmaz, 2001; Emerson, Fretz, and Shaw, 2011).

This approach maintains “that if the researcher minimizes commitment to received and preconceived theory, he [sic] is more likely to develop new analytic categories and original theories from his [sic] data. By making frequent comparisons across the data, the researcher can formulate, modify, and extend theoretical propositions so that they fit the data” (Emerson, Fretz, and Shaw, 2011, p. 172). In short, coding themes have been developed during the analysis – drawing both from themes already distinctly represented within the research questions and subsequently designed interview questions, as well as from patterns identified throughout the analysis. Of course, the research questions are the cornerstones of the coding and analysis process. Therefore the codes, or themes, identified in this study were designed to both answer the predesignated research questions, as well as to identify additional patterns or commonalities which may appear throughout the data.

The section "Addressing the Research Questions" (on page 35) will do just that – provide a detailed discussion of evidence found within the data that helps to answer each of the questions which originally prompted this study. Additionally, I have provided a detailed discussion of those themes that were identified throughout the data collection, but may be indirectly related to the research questions. Of course, some overlap between themes is present, and is to be expected.

Table 3.1: Research Questions and Themes

Research Question	Theme
How has the community garden movement manifested itself in Central Minnesota?	• History • Community Partnership
For what reasons have community gardens been created in this area?	• History • Values • Education
Have these gardens benefitted their communities, and in what way(s)?	• Donations to the garden • Donations from the garden • Community partnership • Conflict (between the community and garden) • Conflict (between gardeners) • Challenges (general internal/external challenges to the garden) • General internal challenges • General external challenges • Education
Have these gardens benefitted the greater St. Cloud area, and in what way(s)?	
	Additional Themes
	• Other community gardens • Gardeners having home gardens • Governance • Demographic information

Garden Profiles

In addition to the 16 original gardens I reached out to using the information from the Community Garden Directory (Stay & Kunkel, 2012), I was also able to contact five additional gardens. This put my total attempted sample at 21 gardens across the tri-county region. Of those 21, five were either unresponsive or (in the case of one) I was unable to arrange an actual interview. My total acquired sample was 18 gardens and 18 interviews.

Each interview does not necessarily correspond with a singular garden. For example, in some instances, I interviewed only one participant for multiple gardens, and in others I was able to interview multiple participants for one garden. In cases where I was interviewing one garden leader as a representative for two or more gardens, each garden was part of the same organization or group. For example, when interviewing Oliver, I learned that he was the appointed manager for not one but four gardens run by the city of St. Cloud (South Park, Centennial Park, Riley Park, and Pecan Park Community Gardens) – only three of which were listed on the original garden directory, and one being in its first season during the data collection period. Additionally, in the cases of the Plaza Community Garden and the Arboretum Community Garden, I was able to interview three and two people from each, respectively.

Before delving too deeply into my findings and analysis, I will provide a brief introduction to each of the gardens. The table below (Table 3.2) sorts each garden by name (in alphabetical order), year began, whether the garden is communal or divided into plots, whether or not there is a cost associated with the garden, and the garden affiliation. I have also included a table with additional categories in Appendix B.

Table 3.2: Community Garden Profiles

Name	Year Started	Fenced	Plot/Communal/Mixed	Free (Y/N)
Arboretum Community Garden	2010	yes	plot, with communal perennials	no
Asheville Community Garden	2014	no	plot	yes
Belmont Community Garden	2004	no	communal	yes
Central Community Garden	2011	no	plot	no
Elizabeth Community Garden	1993	no	CSA, plots	no
Hawthorne Community Garden	2009	no	plot, with communal perennials	no
Independence Park Community Garden	2011	yes	plot	no
Louise Avenue Community Garden	1980	yes	plot, with communal perennials	no
Monroe Park Community Garden	2008	yes	plot	no
Oakhurst Community Garden (currently inactive)	2004	no	communal	yes
Pecan Park Community Garden	2015	yes	plot	no
Piedmont Community Garden	2011	yes	plot, with communal perennials	no
Plaza Community Garden	2005	no	communal	yes
Providence Community Garden	2014	no	communal	yes
Queens Community Garden	circa 2010	yes	Plot	no
Randolph Community Garden	2004	no	communal	yes
South Park Community Garden	2011	yes	Plot	no
Sunnyside Community Garden	2008	no	communal	yes

The information presented in Table 3.2 shows a comparison of the some of the basic layout of each garden. For example, looking at whether or not a garden is divided into plots versus a communal system tells us something about the community.

Remember that plot-based (or "plot-allotment") gardens are those that allow each gardener (or in some cases small groups of gardeners) to garden a pre-designated plot (Von

Hassell, 2002; Lawson, 2005; Macias 2008). In some cases the gardeners were required to pay a fee, and in others the gardeners were allowed to use the plot free of charge.

Communal gardening is the second model of community gardens. In these cases gardeners typically share a common area where everyone shares responsibility (though not always formally or equally) for the well-being of the garden. The communal garden model revolves around the notion of the community as a gorup that must work collaboratively in order to create one garden from which everyone benefits (Von Hassell, 2002; Lawson, 2005; Macias, 2008). While the prosperity of a plot garden falls on the shoulders of the individuals maintaining each singular plot, in a communal garden all of the gardeners are responsibly. Communal gardens also tend to have a greater potential for disagreements or other conflicts among gardeners.

The community gardens found in this study are no exception. Each of the gardens follows suit – either using a plot or communal system. Of course there are some variations to the rule. For example, most of the plot gardens will allow the plots to be shared by two or more people. Yet, in all of these instances, the gardeners knew one another and decided to split the cost, labor, and harvest together (making their plot a small, structured, communal space). I did not find any instances where gardeners shared a space and had never met each other before.

Some plot gardens also had communal areas where perennial plants (herbs, raspberries, strawberries, rhubarb, grapes, flowers, etc.) were grown – though, interestingly enough these areas were usually tended by only one or two people within the group of gardeners. Staci, for example, one of the gardeners at the Hawthorne Community Garden, tends her own plot (in addition to a garden she keeps at her home) as well as a small separate section of the garden dedicated to communal perennials and some annual vegetables which are donated to a local food

bank. Similarly, the Arboretum Community Garden has a large section of perennial herbs, flowers, and fruits around its perimeter that was created for both decorative purposes as well as to provide extra produce for gardeners. According to Alice, one of the founders and participants of the garden, she will sometimes ask for help with larger projects – but primarily it is she that takes care of the perimeter garden.

I also included a category in Table 3.2 denoting whether or not there was a cost associated with each garden. While all of the communal gardens are free to participants, only one plot garden (the Asheville Community Garden) was free for participants. The Central Community Garden, while technically not free, only requires that participants pay if they are able to. The purpose of this is to help ensure that cost is not a barrier to gardeners or potential gardeners. The Central Community Garden places high value on neighborhood cohesion. As Max put it, the garden is:

> …open to anybody to come in and use it. It was envisioned as being kind of a neighborhood garden over there. There are a lot of apartment buildings around there, and the idea was to be able to provide places for those folks to grow food. And the majority of the people who garden there do live in the surrounding neighborhood…This one is really special because the vision for this was to, not only facilitate people in growing their own food, but also to build community…it's particularly important in the Central Garden with so many people coming from all over the world who, you know, whatever their experience has been in the past, to get out in the garden and everybody is just a gardener. It kind of puts everyone on equal footing. It's a way not only for the people from different countries to work and associate with people from other countries, but also with the majority white population.

The Community Garden Network

This research differs from traditional participant observation approaches because it does not look at or work with a specific individual community. As I mentioned when introducing this concept earlier, traditional (anthropological) participant observation approaches often focus on a specific group over a long period of time. This research focused on multiple subgroups (the individual gardens) within a larger category, and over a shorter period of time.

Again, the use of the term "community" has been explained in some detail previously in this paper (please revisit the Defining Community section on page 4 for further explanation). However, here I would like to differentiate between community and network. As mentioned previously, this research has an underlying component of ethnographic research – specifically utilizing an informal, and non-traditional form of observation. This element is secondary to the collection of qualitative data through interviews, but also plays an important role in providing the research with contextual evidence to support the interview data.

As it is used in this study, the term "community" follows Flora and Flora's (2004) example of community identity and physical space as well as Oldenburg's (1989) concept of "third spaces" – which, again, are physical spaces with significance to a particular social group in which social interaction is fostered and supported. An emphasis is placed on the idea of community groups sharing a sense of place within a physical or geographic area (Flora & Flora, 2004). These spaces are places where individuals can enjoy social interactions in an informal gathering places (Oldenburg, 1989). The pattern that emerged throughout the research was that theses spaces and communities were not isolated from one another.

Throughout the course of the data collection process as well as into the coding and analysis process, it became apparent that (the majority of) the gardens were not isolated entities unto themselves but that many of them communicated and even worked directly with one another – these occurrences are what I have identified as the network. The degree of collaboration or involvement varied from garden to garden, but there were very few that were completely isolated from other gardens.

Not surprisingly, geographic proximity also appears to be a factor contributing to gardens' knowledge of or involvement with one another. For example, during my interview with Gary from the Asheville Community Garden, there was no mention of collaboration with other gardens. This could be, at least in part, due to the fact that this garden is located in a small rural town about fifteen miles outside of the city limits of St. Cloud (though still within the borders of Benton County). The Asheville Garden is also one of the newest gardens of the sample population group, only in its second season at the time of my interview with Gary. It is also important to point out here, that even though the Asheville Community Garden (through Gary), does not necessarily have ties to other community gardens in the network, there is still involvement with other external organizations. This is a pattern that appeared consistently throughout the research.

During my interview with Gary, he explained that the land for the garden was owned by a local nonprofit organization who let him develop garden plots in the space that are used by him and others in the neighborhood. He also donates much of the food he grows in his own plots (over 750 pounds last year) to various local charities:

> Gary: Well, hauling 750 pounds of food in to people who would not otherwise get the food, it's pretty cool.

> Kay: And who do you donate the…you said 750 pounds of food.
>
> Gary: Pretty much, you know I try to keep it in Foley, but a lot of times they have…their hours are real short…it's the Cross Center. It is a food shelf though. So, that…or I go to the Salvation Army. Or there's sometimes the Serving Life Ministry at church will give out baskets of food. I really don't care where the food goes as long as it's going to a good cause.

Through Gary, the garden is connected to his neighbors who use the garden plots, the community organizations and members who receive donations of fresh produce from his garden plots, and the nonprofit organization who has let him cultivate the property. The Asheville Community Garden is the furthest away from any other garden I worked with during the data collection – they were also the least involved with other gardens in the sample population. However, the connections and partnerships with other organizations was still existent and Gary expressed that he was very interested in learning more about other gardens in the area (of which he was previously unaware) – particularly for the exchange of information.

The pattern of network connections (usually casual and informal) also proved to be an essential part of the success and effectiveness of the snowball sampling method used. Of course, snowball sampling is dependent on participants possessing some knowledge of others within the sample population – though these relationships are not always guaranteed.

I had to make the assumption that there would be some previously existing relationships between members of each garden (or at least that they were aware of one another). Not only were many of the garden leaders aware of (if not involved with) other gardens in the area, in many cases they were willing to provide me with contact information of other leaders from their

garden community or leaders from other gardens within the network. This made it possible for me to expand my sample size.

Addressing the Research Questions

How has the community garden movement manifested itself in the St. Cloud area?

The statement and phrasing of this question was developed with the assumption that the community gardens within the area are indeed part of the community garden movement – particularly within the United States. This does not mean, however, that participation in the movement is transparent or conscious. As stated previously, this research question also aims to explore the historical contexts of each garden and in what ways these gardens intersect with the food and community garden movements that are occurring on the national and global levels.

During the interview process, I asked a specific question in regards to perceived involvement in social movements: "Do you see this garden (or 'these gardens' in some cases in which two or more gardens were being discussed) as being part of a social movement?"

Some interviewees answered this question with a resounding and straightforward "yes" and/or included various perceptions of how they related their garden experience to social movements. During my conversation with Max, he stated, "I think it's part of the movement toward locally grown food, and more healthy lifestyles, yeah, I think it is a movement."

Miriam echoed this and elaborated on her perception of how the Plaza Community Garden fit into a social movement:

> …I think it's part of the food security movement in the area, and I know that the county is having a food security plan, St. Cloud is interested in doing that. There are a lot of people that are food insecure, and I think it helps with that. Even though the rules are

> very few, one of them is you work and you get to harvest, but I have never ever witnessed anything but gardeners helping is someone that walks by that is homeless or hungry or needy not gathering as much food as a person can carry or wont' spoil and gathering it and giving it away. So that's helping and not that that is a hundred percent helping with their food security, it's helping with their food security at that moment. But that people are concerned about that can get involved in other ways. For example, Lacey, at the garden, works with the Central Minnesota Sustainability Project and so then invites all the gardeners to the Harvest Festival, and what is that about, so we get involved with that. Or United Way meetings or items like that.

Brianna, from the Providence Community Garden mentioned that the number of community gardens in the area shows evidence of a social movement:

> Well, like you said, there are a lot more community gardens in the area than you knew about. So yeah I think it could be part of a social movement. A lot of people are doing the community garden thing. I know we have a couple guys here that are doing the community garden thing as well as their own gardens. And you've got to assume that they are not the only ones doing it to. And they're popping up more and more. Community gardens are popping up more and more all over the area and people are getting more into it.

Others were unsure of how to answer this question explicitly but may have mentioned similar themes at other points during our conversation. In Rose's interview, she specifically stated that she does not personally view the garden as a social movement but that some gardeners may.

> I think it could be viewed that way. Personally, I don't see it that way. I mean, I think we're inclusive, I think that we want to give the extra food to…I mean anyone who wants food can have it. So I think that Leah has made a point of being very welcoming to everyone, beyond that personally I would not say I'm involved in the social movement. I'm a gardener.

While the community garden is presented and identified as being part of a social movement (actions such as inclusivity and donations from the garden community are indicated), Rose, as an individual, explicitly states that she does not identify herself as being part of the movement – "I'm a gardener," she says.

Interestingly enough, both Miriam and Rose are seasoned gardeners in the same garden. Both have been active members of the Plaza Community Garden since its first couple of seasons, yet they have different personal perceptions of whether or not the garden or they themselves fit into a social movement.

In their current form, community gardens have been present in the Central Minnesotan landscape since at least the early 1980s. Of course, while this research includes individual garden histories, an in-depth exploration of gardens that may have existed previously was not included. Essentially, this research gives a snapshot of gardens that existed during the research period and the history attached to them. It should be noted that the gardens, as community entities, ebb and flow within parameters such as participation, funding, land availability, or other circumstances.

Of the gardens I was able to work with during this study, the oldest was founded in 1980, the second oldest in 1993, and the remaining gardens were founded in or after 2004 with the most recent in its first season during the data collection period. To put this in statistical perspective, of the 18 gardens participating in this research during the 2015 growing

season, 87.5% of them were begun within the past twenty years – and over 50% were begun in the past 15 years.

This means that all but one of the gardens represented are part of fourth wave community gardens (Walter, 2013), or those often viewed as part of a social movement towards a healthier and more sustainable food movement (Levkoe, 2006; Flammang, 2009; Pollan, 2010).

For what reasons have community gardens been created in this area?

The gardens in the sample were created for various reasons and through an array of organizations. Six gardens were built and managed by local government, seven by non-profit organizations, three by churches, one by a local university, and one independently. Of course, even the Asheville Community Garden, which was the only garden really managed independently (they had no parent organization, but are located in a subdivision) is located on land owned by a local non-profit organization. The organization gave them permission to utilize the space (an empty lot in a subdivision), but remains largely uninvolved.

Have these gardens benefitted their communities, and in what way(s)?

Have these gardens benefitted the greater St. Cloud area, and in what way(s)?

For the purpose of this analysis, I will be discussing research questions three and four together. When I designed these questions, the intention was to examine the benefits to the garden community and immediate physical community (neighborhood) as well as the larger St. Cloud region and the network from which my sample was collected.

Throughout the data collection process, I found not only examples of gardens working with one another, but also with individuals and organizations in the greater community. For this reason, it is pertinent to address these questions not as one per se, but together. It is important

to maintain a distinction between the types of reciprocity and giving that are happening among gardens and with outside community members as well as community organizations.

Not a single one of the gardens functioned in a completely individualistic manner. Every one mentioned collaboration with either other gardens within the network, organizations in the community, or individuals in the community. Even the Asheville Community Garden, which I mentioned earlier is relatively isolated from the other gardens, sits on land owned by the local affiliate of Habitat for Humanity and donates large amounts of produce to a local food bank.

Many of the gardens also work with one another. The Hawthorne Community Garden and Central Community Garden, for example, interact with one another on a frequent basis. This is largely because they are located on adjacent lots. One is affiliated with a local sustainability-focused non-profit organization, while the other is a church garden. In speaking with leaders from both gardens, collaboration and sharing were mentioned on multiple occasions. Though the gardens operate separately, they share some resources and even gardeners at times. I learned that during the season I was doing data collection, the Central Community Garden had run out of spaces, and the Hawthorne Community Garden had just expanded by a couple of plot spaces. In this case, the Central Community Garden began sending referrals to the Hawthorne Community garden in effort to find a space for everyone.

Finding a space for everyone in gardens using the plot gardening method is not always a feasible option. Again, with the exception of the Asheville Community Garden, every one of the plot-based gardens I worked with were full every year, and many of them had waitlists. Perhaps this is a reflection of Macias' (2008) work, which indicates that community gardens tend to be the most accessible option in terms of affordability when compared to other ways of participating in local agriculture (such as a CSAs). Comparatively, community gardens tend to be inclusive to

a more diverse population (as a whole, though not always within individual gardens) (Macias, 2008).

Returning to my previous point, however, it was not uncommon to see gardens working with one another. Some gardeners would even be involved in more than one community garden – though not always as a gardener. For example, Max, who is an organizer for the Queens Community Garden and the Central Community Garden, also donates leftover plants from his work with the Central Community Garden to the Providence Community Garden. Additionally, he has his own plot in the Monroe Park community garden, as well as his own garden at home. While gardeners having involvement in other community gardens throughout the network was reasonably common, I also found that gardeners having gardens at home was even more of a commonality.

Staci, from the Hawthorne Community Garden (part of a local church) invited me to work with her for an evening in the communal portion of the garden she manages along with her own plot. As we weeded between young raspberries that had been planted earlier in the season, she told me about the garden she and her husband kept at their home. She said she likes to participate in the Hawthorne Community Garden as a way to stay involved with her church, and because the space she has for her garden at home does not get enough sunlight in some areas. So she plants her tomatoes, peppers, and herbs in her plot at the Hawthorne Community Garden. The communal portion she manages is for church and community members, but also has a portion dedicated to food shelf donations, which Staci also mentioned she enjoys helping with.

Additionally, examples of gardeners participating in community gardens as well as having their own gardens at home was not uncommon:

A lot of people are doing the community garden thing. I know we have a couple of guys here that are doing the community garden thing as well as their own gardens. And you've got to assume that they are not the only ones doing it too.

Brianna, Providence Community Garden

Kay: So you have your own garden here [at home]? Do you know if any of the other gardeners have gardens at home?

Gary: Yeah, James across the road here does, and Allen does.

Kay: Why do you think they garden in both places?

Gary: I would say the space. They don't want to give up any more of their yard. And that's part of the reason why I garden to some extent over there too [in the community garden], is because Wendy said I couldn't take up any more lawn. I was expanding it by about a food or two every year and she caught on to that.

Gary, Asheville Community Garden

The Central Community Garden is an interesting example, however, and points to a juxtaposition occurring within the larger St. Cloud community. The Central Community Garden differs from other community gardens in several ways, but the most notable is that it is the only community garden I worked with that is not predominantly white. In fact, when I interviewed Cora and Max, two garden organizers for the Central Community garden, Max noted that the majority of gardeners were not native Minnesotans.

> So we have about 75 plots in that garden, um, I haven't counted since I stuck a few more on the edge, but it's about 75 plots. And all but two of those plots are occupied by new American families, immigrant families.

Later on during our interview, Max and Cora were kind enough to give me a tour of the Central Community Garden where I was able to learn more about the garden landscape and functionality. I discovered that the "new American families" Max had been referring to were from a variety of different backgrounds. While predominantly Somali, the garden was cultivated by gardeners from over fifteen African countries, China, Korea, Ukraine, and Russia.

While some of the gardens I visited were fenced, this one was not, and in the mid-July heat it was a wild green maze of plants and plots growing into one another. But if you looked closely you could see paths weaving in between small sections of carefully tended greenery. Some of the plots had their own makeshift fences pieced together with small sections of lumber, sticks, and twine.

Max explained to me that most of the plots in the garden were leased by individuals and families, but that they also set aside a few larger sections each year for community organizations such as Hands Across the World and the African Women's Alliance. They were also able to collaborate with a local farmer who would come and till for them in the spring in exchange for the harvest from a section of squash planted specially for him. These in addition to the partnership between Central Community Garden and neighboring Hawthorne Community Garden, are just a few examples of how gardens work with other organizations.

Revisiting the last two research questions (Have these gardens benefitted their communities, and in what way(s)? Have these gardens benefitted the greater St. Cloud area, and

in what ways?), the data shows that the community gardens do provide benefits to their respective communities as well as the greater St. Cloud area.

Though the term "benefit" is subjective, I would argue that evidence of benefit can be seen in the presence of the community garden network (as discussed above), and in the gardens' willingness to give back to the community. 55% of the gardens studied donated food back to the greater community (outside of the garden community). This was either in the form of giving to families nearby or to local food shelves. The community gardens have most certainly been integrated into the community. And though the benefits may not always be overt, their influence and impact reaches beyond the gardens themselves.

An additional benefit is expressed through educational programming. A perfect example of this is displayed by both the Belmont and Shamrock gardens. Both are run by a local non-profit organization whose focus is on providing educational programs to children. The purpose of their garden is not production, but rather to education the children involved with their organization on the importance of fresh foods and how to grow them.

> ...and basically what we would do with the produce is just send it home with families so that they would have access to fresh and healthy vegetables, so it's connecting the kids and helping them learn where their food comes from. I mean that's really what it…what's behind the entire idea or intention is to connect them back to nature and then there's also a lot of educational components you can also do with planning and learning. You know, the science aspects, measuring, the seed germination, learning about types of plants, what do plants need to grow, you know and different things like that...
>
> Elizabeth, Belmont & Shamrock Community Gardens

This exemplifies the notion of using agriculture and gardening as an educational tool and as one of the community benefits of maintaining a garden (Lawson, 2005; Scanlan, 2009).

Discussion

While portions of the literature (Lawson, 2005; Macias, 2008; Scanlan, 2009) indicated that gardens are inclusive spaces – I would argue that this may be somewhat limited to intra-garden inclusion. That is, I saw the evidence of inclusivity among those who were already involved members of the gardens, but the garden communities themselves had a tendency to exclude others.

In some cases this was deliberate. For example, both the Arboretum Community Garden and the Piedmont Community Garden are funded and managed by the city of Sartell, Minnesota. Because of this, they only allow Sartell residents to participate, according to Alice:

> City of Sartell residents, and once you have a garden, you keep the garden. It's not a lottery every year. If you have a garden, you'll stay out there. Until you tell us not to. This is our sixth year, and we still have some of the original gardeners out there. But a lot, there's lots that keep it one year, there are some that keep it two or three years…
>
> Alice, Arboretum Community Garden and Piedmont Community Garden

Similarly, the Louise Avenue Community Garden is managed by a local senior center and only allows members of the senior center to become members of the garden. According to their plot lease agreement, gardeners must be 55 or older, and there are different rates for gardeners based on their residence. St. Cloud residents are charged $20.00 per season, and non-St. Cloud residents are charged $23.00 per season (presumably based on address).

Overall eight (44%) of the gardens have explicitly exclusive membership, and three (17%) are exclusive based on location (the Asheville, Providence, and Queens community gardens). The remaining seven (39%) are completely open to anyone who would like to garden.

Those that are exclusive based on location are those that are on private property and are utilized by patrons affiliated with that property (though exclusive membership is not necessarily enforced through formal rules). For example, the Asheville Community Garden is located in a subdivision and is located on private property (though the community is given permission to use it). Because of this, and perhaps the lack of other gardens nearby, all of the gardeners are also residents of the subdivision in which it is located. Similarly, the Providence Community Garden is located on privately owned property within a neighborhood. The property is managed by the organization which sponsors the garden and community activities. And lastly, the Queens Community Garden is also situated on private property (owned by a local organization). And though it is open to anyone, the gardeners there were all affiliated with that organization.

So, instead of inclusivity being the norm within the community garden network gardens seem to have a mixture of formalized exclusion (or inclusion of community members only), non-formalized exclusion (or inclusion of community members only), and inclusion.

Limitations of this Study

A few things I would like to see if I were able to continue this research would be 1) a more diversified interview sample; 2) a larger sample of both interviewees and gardens; and 3) more historic context given to the garden network.

Firstly, a more diversified interview sample would add more rich data to the research and data analysis process. Of the garden leaders I was able to talk with all were white, 11 were

women, and seven were men, 11 were working (8 female, 3 male) and seven were retired (4 male, 3 female). Of those working six had jobs related to the garden and the remaining five contributed to the garden as an additional activity outside of their regular work.

It is probable that the use of snowball sampling contributed to the lack of diversity. Snowball sampling, by nature, is not a representative sampling method. The population of the St. Cloud area is also predominantly white – 84.6% in 2015 (United States Census, 2015). Interestingly enough, however, though the garden leaders I interviewed did not themselves make up a diverse population – on some level the gardeners did. The Central Community Garden was by far the one with the most diversity on a scale of racial identity and nationality, however both leaders I interviewed, Max and Cora, are white.

Secondly, a larger sample size would have revealed more about the ways in which gardens in the St. Cloud area operated. For the sake of time and working with a larger number of gardens, I limited the actual number of interviews conducted. It may be possible, for future research to focus more on sampling individual gardeners from each garden, or to spend more time working on collecting ethnographic data from one or more gardens.

The bulk of my time during the data collection process for this study was spent trying to expand the garden sample size through referrals gained through the snowball sampling method. If I were to continue the research from this point on – with relationships and contacts already established with garden leaders – I would work on trying to procure a larger sample size of individual gardeners and their experiences within their respective garden(s).

Lastly, I would have liked to be able to have more background research done on the historic context of community gardens in the area. I had mentioned previously that this research reflects only a snapshot of the garden network as it was at the time that the research was

conducted. I would be interested in looking both into the past and at how the garden movement was developed over time. For example, there may have been gardens that no longer exist that may give important insight into a more holistic picture of gardens in the area. It would also be interesting to do follow up with gardens each year and to keep track of any new gardens that may be built in the future.

Future Research Questions

Additional research questions I have formulated throughout the course of this process include:

- How has the garden landscape in the sample area changed since the data collection period, and how will it change subsequently in the future? Due to the timeline of research, my data was collected during one growing season. I would like to know what the garden structures and network would look like over time.
- What portion of gardeners have gardens at home? This seemed to be a recurring pattern throughout the interview process. I would be interested to know the exact number of individual gardeners throughout the garden sample who garden in multiple locations.
- How does the community garden network studied within this research compare to (either in variations or similarities) other garden networks in the region, nationally, globally, etc.?

These are the three most prominent research questions I would post if this research were to be continued.

More indirectly, I would also be interested in results if various different methods of data collection were used. For example, I chose to study a larger amount of gardens, but in turn was only able to interview a few leaders from each garden. I would be curious to see what was found

if a researcher were able to focus more on interviewing individual gardeners in perhaps fewer gardens.

Conclusion

The data within this research has shown that there is a wide level of involvement in community gardening within the sample area. An involvement that is only growing. It also shows that though there is a diversity among the gardens as entities (their functions and purposes) that diversity does not extend to the gardeners themselves. In other words there are a variety of types of gardens (communal, plot, or a mixture of the two) and their purposes (CSA, neighborhood, educational, etc.) however the gardener populations tend to be very homogenous.

The food movement within the United States and around the globe has grown immensely over the past decade. Discontent and perceptions of serious issues within local, national, and ultimately, global food systems have resulted in the emergence of various types of programs designed to combat injustices within the existing system. This research, in particular, has aimed to look at community gardens in Central Minnesota as part of the larger North American food movement.

This research employs the use of social movement theories as well as other conceptualizations of food-based social movements in order to construct a framework that is applicable to garden networks. It has been the goal of this research to analyze community gardening (as a social activity) through a sociological lens in hopes that some light will be shed on the human motivation to engage in contemporary community garden practices. Food has always been a medium through which people have been both drawn together and pulled apart. For this reason, it is important to study the human connection to food and its origins.

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Appendix A

Informed Consent Form

You are invited to participate in a research study of community gardens in the Central Minnesota/St. Cloud area. You were selected as a possible participant because of your affiliation with a community garden in the St. Cloud, Minnesota area.
This research is being conducted by Kaitlyn Printy to satisfy the requirements of a Master's Degree in Social Responsibility at St. Cloud State University.
Background Information and Purpose
The purpose of this study is to look at the community garden movement in St. Cloud, Minnesota through a comparative analysis of various gardens in the area. The project will look at a number of community gardens located in Central Minnesota (specifically within the St. Cloud tri-county area of Stearns, Sherburne, and Benton counties). The aim of this research is to compare and contrast garden and community structures as they exist locally and among gardens across the United States.
Procedures
If you decide to participate in this study, you will be asked to participate in 1 to 3 interviews. These interviews are expected to take between 30 and 90 minutes, and will take place during the research period of April to December, 2015.
Risks
The risks associated with this research are minimal. If at any time you do not wish to answer a particular question, or no longer wish to participate in this research, you are free to express this at any time.
Confidentiality
Information obtained in connection with this study is confidential. To prevent identification of research subjects, data will be presented with no more than 1-2 descriptors presented together. Although the names of individual subject will be kept confidential, there is a possibility that you may be identifiable by your comments in the published research. Please feel free to ask the researcher if you wish to review the text and/or withdraw comments prior to publication.
Research Results
Upon request, a summary of the research results will be provided when the study is complete. A copy of this thesis will also be available at St. Cloud State University's Learning Resources Center (Library) upon completion of the study.
Contact Information
If you have questions right now, please ask! If you have additional questions later, you may contact me at (320)828-1136, or prka0701@stcloudstate.edu, or my thesis advisor at asfinan@stcloudstate.edu. You will be given a copy of this form for your records.
Voluntary Participation/Withdrawal

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with St. Cloud State University or the researcher. If you decide to participate, you are free to withdraw at any time without penalty.

Acceptance to Participate

Your signature indicates that you are at least 18 years ofage, you have read the information provided above, and you have consent to participate. You may withdraw from this study at any time without penalty after signing this form.

Name (Printed) _____ Date _____

Signature _____

Interview Questions

1. What is your name?
2. What is the history of the community garden?
    3. How long has the garden been in existence?
    4. What spurred the creation of the garden?
5. Who is the garden open to?
6. What does the population of gardeners look like (demographically)?
    7. Approximately how many gardeners participate in the garden each year?
    8. Do gardeners usually tend to return from year to year?
    9. Are there specific populations within the community which the garden serves?
    10. What age groups would you say are present in the garden?
    11. Would you say that the majority of gardeners tend to be men or women?
12. Why is this community garden important?
13. Do you see this garden as being part of a social movement?
14. Do you see this garden changing the community? In what ways?
15. What is the mission of the garden?
16. What are the goals of the garden?
    17. Short-term goals
    18. Long-term goals
19. What are some of the largest challenges your garden has faced?
    20. Has the garden community had any challenges or disputes among gardeners, the surrounding community/neighborhood, the city or county?
    21. Other challenges?
22. If you could learn one thing from other community garden organizations, what would it be?
23. What are some things you think make this garden unique?
24. Have you ever worked in collaboration with
    25. Other gardens?
    26. Other organizations?
27. Has the garden adopted any organic or sustainable agricultural practices?
    28. If yes, what are they?
    29. Why are these practices important to the garden community?

30. If no, why not?
31. Where does funding for the garden come from (participant driven, grants, fundraising, etc.)
32. Are there any other questions you have for me?

Appendix B

Community Garden Profiles

Garden	Year Started	Fenced	Plot/ Communal/ Mixed	Free	Approx. # of Plots	Land Ownership	Membership	Common Work Time
Elizabeth	1993	No	CSA, Plots	No	2, +CSA	Private	Closed	Yes
Belmont	2004	No	Communal	Yes	n/a	Private	Closed	No
Asheville	2014	No	Plot	Yes	15	Private	Open	No
Queens	2010	Yes	Plot	No	20	Private	Open	Yes
Central	2011	No	Plot	No	60	Public (City Owned)	Open	Yes
South Park	2011	Yes	Plot	No	18	Public (City Owned)	Open	No
Providence	2014	No	Communal	Yes	n/a	Private	Open	No
Independence Park	2011	Yes	Plot	No	18	Public (City Owned)	Open	No
Sunnyside	2008	No	Communal	Yes	n/a	Private	Open	Yes
Piedmont	2011	Yes	Plot*	No	10	Public (City Owned)	Closed	No
Arboretum	2010	Yes	Plot*	No	96	Public (City Owned)	Closed	No
Monroe Park	2008	Yes	Plot	No	18	Public (City Owned)	Open	No
Plaza	2005	No	Communal	Yes	n/a	Private	Open	Yes
Randolph		No	Communal	Yes	n/a	Private	Closed	No
Pecan Park	2015	Yes	Plot	No	18	Public (City Owned)	Open	No
Hawthorne	2009	No	Plot*	No	18	Private	Closed	Yes
Louise Avenue	1980	Yes	Plot*	No	40	Private	Closed	No
Oakhurst **	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

* This garden is formatted as a plot garden, but also has an area for communal perennial plants.
** Oakhurst Community Garden was being relocated at the time of data collection, and is an affiliate to the Belmont and Randolph Community Gardens.

Appendix C

OFFICE OF RESEARCH AND SPONSORED PROGRAMS
ST. CLOUD STATE UNIVERSITY

Institutional Review Board Application

For

Conduct of Research Involving Human Subjects

PROJECT MANAGEMENT

Project Title: **Community Gardens in Central Minnesota**
Project Summary (3-5 sentences, include method of data gathering): **This project will look a number of community gardens located in Central Minnesota (specifically within the St. Cloud tri-county area of Stearns, Sherburne, and Benton counties). The aim of this research is to compare and contrast garden and community structures as they exist locally and among gardens across the United States. Both participant observation (experiential research) and interviews with garden leaders will be used to gather data.**
Data Collection (note: must be a future date and allows sufficient time for IRB review)
Start Date: : **April 16, 2015** Ending Date: **December 18, 2015**
Location of the Research: **Research will take place in St. Cloud, Minnesota, including but not limited to Stearns, Sherburne, and Benton Counties.**

RESEARCHERS

Principal Investigator (PI): **Kaitlyn Printy**
Type of Research: ☐ faculty/staff ☐ undergraduate ☒ graduate masters ☐ graduate doctoral
Mailing Address: **5413 13th Street NE, Sauk Rapids, MN 56379**
Telephone: **(320) 828-1136** Email: **prka0701@stcloudstate.edu**
Advisor or Course Instructor (if PI is a student): **Dr. Ann Finan (Sociology)**
Other Investigators: **N/A**
If you collaborate with an individual from another institution, the research must be submitted to that institution's IRB as well, and a copy of the approval letter must be filed with SCSU's IRB.

SPONSORS

Is there potential or confirmed external funding sources for this research project? ☒No
☐Yes Funding Agency Account #

CERTIFICATION STATEMENT

The undersigned acknowledge: 1) application represents a complete and accurate description of the proposed research, 2) research will be conducted in compliance with IRB recommendations and requirements, 3) research will not begin until IRB approval received, 4) modifications will not be made prior to obtaining IRB approval, 5) PI responsible for reporting to the IRB any adverse or unexpected events, 6) PI to report to IRB any significant new findings which develop during the course of the study and increase the risk to participants and 7) expedited or full IRB approval in effect for up to one year and PI is responsible to request continuing review or file final report (exempt research is exempt from continuing review process).

TYPE OF REVIEW

REVIEW WORKSHEET

Check **ALL** categories—if any—that apply to your research.

Common Categories of Exempt Review

☐ i. **Research conducted in an educational setting involving normal education practices**, such as research that examines or compares regular and special education:
- instructional strategies/techniques, curricula, **or** classroom management methods

☒ ii. Research involving the use of **educational tests (cognitive, diagnostic, aptitude, achievement) , survey procedures, interview procedures, or observation** of public behavior **if confidentiality or anonymity is maintained**.

☐ iii. Research involving activities in category 2 with subjects who are **elected or appointed public officials or candidates for public office**—regardless of whether the subjects may be identified or the information is sensitive.

☒ iv. Research involving the collection or study of **existing data**, **documents**, **records**, **pathological specimens**, or **diagnostic specimens**, if one of the following is true:
- the sources are publicly available **or** information is recorded by the investigator in a way that subjects **cannot** be directly or indirectly identified.

☐ v. Research **subject to the approval of Federal Department or Agency heads** and designed to study or evaluate public benefit or service programs.

☐ vi. **Taste and food quality** evaluation and consumer acceptance studies, if one of the following is consumed:
- wholesome foods without additives, **or** a food that contains a food ingredient, agricultural chemical, or environmental contaminant at or below the level found to be safe by the Food and Drug Administration, Environmental Protection Agency, or U.S. Department of Agriculture Food Safety and Inspection Service

Common Categories of Expedited Review

☐ i. **Clinical studies of drugs or medical devices** only when research on drugs for which an investigational new drug application is not required. (Note: Research on marketed drugs that significantly increases the risks or decreases the acceptability of the risks associated with the use of the product is not eligible for expedited review.) **or** research on medical devices for which (i) an investigational device exemption application is not required; or (ii) the medical device is cleared/approved for marketing and the medical device is being used in accordance with its cleared/approved labeling.

☐ ii. **Collection of blood samples** by finger stick, heel stick, ear stick, or venipuncture as follows:
- from healthy, nonpregnant adults who weigh at least 110 pounds (collection may not occur more than 2 times per week and exceed 550 ml in an 8 week period), **or** from other adults and children, considering the age, weight, and health of the subjects and the collection amount, frequency, and procedure (collection may not occur more than 2 times per week and exceed the lesser of 50 ml or 3 ml per kg in an 8 week period)

☐ iii. **Collection of biological specimens** by noninvasive means for research purposes.
Examples include:

- hair and nail clippings in a nondisfiguring manner;
- teeth at time of exfoliation or if routine patient care indicates a need for extraction;
- excreta and external secretions (including sweat);
- uncannulated saliva;
- placenta removed at delivery;
- amniotic fluid obtained at the time of rupture of the membrane prior to or during labor;
- supra- and subgingival dental plaque and calculus, provided the collection procedure is not more invasive than routine prophylactic scaling of the teeth and the process is accomplished in accordance with accepted prophylactic techniques;
- mucosal and skin cells collected by buccal scraping or swab, skin swab, or mouth washings;
- sputum collected after saline mist nebulization.

☐ iv. **Collection of data through noninvasive procedures** routinely employed in clinical practice, excluding procedures involving general anesthesia, sedation, x-rays, or microwaves. Any medical devices used must be approved for marketing.
Examples include:

- physical sensors that do not involve input of significant amounts of energy into the subject;
- weighing or testing of sensory acuity;
- magnetic resonance imaging;
- electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, electroretinography, ultrasound, diagnostic infrared imaging, doppler blood flow, and echocardiography;
- moderate exercise, muscular strength testing, body composition assessment, and flexibility testing where appropriate given the age, weight, and health of the individual.

☐ v. **Collection of data from voice, video, digital, or image recordings** made for research purposes.

☐ vi. **Research on individual/group characteristics** or behavior or research employing oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies on areas such as perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, social behavior, etc. **if confidentiality or anonymity is maintained.**

Other

☐ **Other,** please explain

PROJECT DESCRIPTION

Briefly summarize the proposed research and its significance. Include explanations of the following; 1) research question/hypothesis, 2) research design, including independent/dependent variables, if appropriate, and 3) relevant theory

The purpose of this research is to anlyze existing community gardens in the St. Cloud, Minnesta area. Research questions include 1) How has the community garden movement manifested itself in Central Minnesota?, 2) For what reasons have community gardens been created in this area?, 3) What similarities/differences are there among gardens in the St. Cloud area? How are these gardens similar/different to other gardens in the United States?, 4) Have these gardens benefited their respective communities, and in what way(s)? Have they benefited the greater St. Cloud area, and in what way(s)?

In order to answer these questions, participant observation will be used to get a firsthand glimpse into the innerworkings of gardens in the area. This method will also be supplemented by conducting interviews with garden leaders.

SUBJECT POPULATION

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1. How many subjects will participate in the research? Who will the subjects be?
   Approximately 10-20 gardens will be asked to participate in this research, including

interviewing approximately 1-2 leaders (20-40) from each garden organization.

2. What are the ages of potential subjects? *(Check all that apply.)*
   ☐ 0-7 ☐ 8-17 ☒ 18-64 ☒ 65+
3. Some populations are considered "vulnerable" to coercion or undue influence. Will any of these populations be invited to participate in the research? *(Check all that apply.)*
   ☐ children (under age 18)
   ☐ prisoners
   ☐ pregnant women
   ☐ economically/educationally disadvantaged individuals
   ☐ elderly individuals (over age 65)
   ☐ non-English speakers
   ☐ mentally disabled individuals

   If any of the above vulnerable categories have been checked, provide rationale for using these vulnerable populations and detail the safeguards that will be included in the research to protect their rights and welfare.

   ☒ no vulnerable populations

SUBJECT IDENTIFICATION AND RECRUITMENT

4. How will potential subjects be identified and recruited? *(e.g. college classes, phone books, membership directories, etc.)*
   Community gardens will be identified using a directory of community gardens in the St. Cloud area compiled by the Benton County Human Services Department. Snowball sampling and word of mouth references will also be used as the directory is not currently up to date.
5. Copies of advertisements, bulletin board notices, telephone scripts, letters, and other recruitment materials are attached. ☐Yes ☒N/A
6. Written documentation of cooperation/permission is REQUIRED from any individual or organization that assists you in identifying and recruiting subject:

The following are attached and **MUST** be submitted simultaneously with this application:

Yes	N/A	
☐	☒	Letter/email from professor(s) allowing you to distribute materials in their classes.
☐	☒	Letter/email from independent school(s) that will provide access to students.
☐	☒	Letter/email from medical organization(s) that will provide access to clients/patients.
☐	☒	Other, please explain

7. Will subjects be compensated for participating in the research? ☐Yes ☒No

   If so, what kind of reward will be given (monetary, extra credit, or other) and when will subjects receive it *(e.g. the beginning of the study, the end of the study, or at each visit)*?

METHODS AND PROCEDURES

8. Describe the research procedures and list tasks/activities that subjects will be asked to complete.
   Those interviewed (community leaders) will be asked to participate in 1-3 interviews.

The following are attached and **MUST** be submitted simultaneously with this application:

Yes	N/A	
☐	☒	Attached is a copy of surveys or data collection instrument.
☒	☐	Attached is a copy of interview questions.
☐	☒	Attached is a copy of handouts.
☐	☒	Other materials attached, please explain

9. How will data be collected, recorded, and stored?
   Data will be collected through field notes (jottings and in-depth notes), and will be recorded and saved on the reasearcher's password protected laptop. I will meet with interviewees in a

comfortable location ..coffee…office.

10. Will the data include names or other identifiers? ☒Yes ☐No
    If yes, will the data be coded and identifiable information removed? ☒Yes ☐No
    If yes, explain the coding process, what additional measures will be taken to keep your data secure and who will have access to it?
    I will either remove names or use pseudonyms to ensure confidentiality for individuals. Data will be stored under password protection. Only the researcher, thesis advisor, and other thesis committee members will have access to this data. Research participants will have access to the final write up (which will have identifiers removed) upon completion of the project if requested.
11. The raw data and/or coding key from this research will be destroyed *(Check ONLY one)*:
    ☐ when the study is complete ☒ within three years
    ☐ when my degree is awarded ☐ other:

RISKS AND BENEFITS

---

12. Will the research present more than minimal risk* to subjects? ☐Yes ☒No
    **Minimal risk means that the harm or discomfort anticipated in the research is no greater than that encountered in daily life or during routine physical/psychological examinations or tests.*
13. Does the research involve:

Yes	No	
☐	☒	Physical pain, discomfort, or injury from procedures or drugs
☐	☒	Undesired and/or unexpected psychological changes *(e.g. depression, anxiety, emotional discomfort, confusion, hallucination, stress, guilt, embarrassment, loss of self-esteem, etc.)*
☐	☒	Invasion of privacy/absence of informed consent *(e.g. covert observation, review of private medical or educational records, etc.)*
☐	☒	Sensitive information *(e.g. alcohol/drug use, sexual orientation, illegal activities, suicidal thoughts, physical/mental illness, violence, depression, psychological/physical abuse, gang related activities, pro-life/pro-choice, relationship issues, etc.)* that could result in social and economic harm *(e.g. civil/criminal liability or damage to financial standing, employability, insurability, reputation, etc.)* if a breach in confidentiality occurred.
☐	☒	Deceptive techniques *(e.g. giving false feedback about performance, staging an event or situation, concealing the purpose of the research, etc.)* <u>*A debriefing statement is required.*</u>

    If yes, how will subjects be misled *(i.e. what information will be withheld or what false information will be provided)*? Describe when and how this deception will be revealed to subjects and provide a copy of the oral or written debriefing statement. **See the IRB's handout on deception and the debriefing process** for information, examples, and a template.

14. What precautions will be taken to minimize or prevent potential risks, inconveniences, and discomforts *(e.g. anonymous data collection, presence of trained personnel who can respond to emergencies, etc.)*?
    Individuals may choose not to participate in this research. Participants may choose not to answer any questions which they may feel uncomfortable answering, and may choose to

withdraw from the study at any point (as stated in the informed consent form).

INFORMED CONSENT PROCESS

The informed consent process begins when you first approach potential subjects and continues throughout your research. Typically, it involves:

- presenting information that enables an individual to knowledgeably and voluntarily decide whether or not to participate as a research subject.
- documenting consent with a written form signed by the subject or an implied consent form for surveys
- responding to the subject's questions/concerns during the research and communicating any new findings that may affect the subject's willingness to continue participating.

When your research involves individuals under the age of 18, you must obtain and document the consent of parents or guardians. If your research involves subjects who are between the ages of 8 and 18, child/minor assent must be documented as well. A single project could require an adult consent form, a parental consent form and a child/minor assent form.

15. Minimally consent forms **MUST** include the following information, please verify that your consent process addresses the following:

Yes

☒ Provides a clear understanding of the project to potential participants.

☒ Explain the voluntary nature of the research and give the option to withdraw at any time.

☒ Include researcher and advisor contact information for questions.

☒ Explain to participants how to request study results.

☒ Adult consent states the individual is "at least 18 years of age" to consent.

☒ Confidentiality states data will be presented in aggregate form or with no more than 1-2 descriptors presented together.

16. All projects require consent forms for potential participants: The following are attached and **MUST** be submitted simultaneously with this application:

Yes	N/A	
☐	☒	A cover letter/page accompanying a confidential anonymous survey
☒	☐	Adult consent form
☐	☒	A parental/guardian consent form
☐	☒	A child assent form

17. If applicable, explain the procedures that will be used to obtain child/minor assent and attach a copy of each assent form. ☒ not applicable/no minors participating

IRB APPLICATION CHECKLIST

(Submission of a complete IRB application results in a quicker response from the IRB)

☒ IRB training completed
☒ All questions answered on IRB application
☒ Application fully signed
☒ Question #6 written support attached
☒ Question #8 data collection instrument(s) attached
☒ Questions 15 & 16 consent form(s) attached
☒ Submit completed IRB application to Sponsored Programs in AS 210

OFFICE OF RESEARCH AND SPONSORED PROGRAMS
ST. CLOUD STATE UNIVERSITY.

Administrative Services 210
Website: stcloudstate.edu/osp *Email: osp@stcloudstate.edu*
Phone: 320-308-4932

Institutional Review Board (IRB)

Name: Kaitlyn Printy
Address: 5413 13th St NE
Sauk Rapids, MN 56379
Email prka0701@stcloudstate.edu

Co-Investigator:

IRB APPLICATION DETERMINATION: EXEMPT

Project Title: Commnity Gardenas in Central Minnesota
Advisor: Ann Finan

The Institutional Review Board has reviewed your application to conduct research involving human subjects. Your project has been: **EXEMPT**

We are pleased to advise you that your project has been deemed as exempt in accordance with federal regulations. The IRB has found that your research project meets the criteria for exempt status and the criteria for protection of human subjects in exempt research. Please note the following items concerning our exempt policy:

--Principal Investigator assumes the responsibilities for the protection of human subjects in this project

--Project is approved through the end date stated in your application or per the stamped consent form, whichever is later. To continue the research beyond this timeframe, either submit a continuing review form or a new IRB application.

--Any proposed revisions are to be submitted to the IRB for review and approval.

--Adverse events (research related injuries, harmful outcomes, significant participant withdrawal, etc.) must be reported to the IRB as soon as possible.

--The IRB reserves the right to review the research while it is in progress or when it is completed.

Good luck on your research. If we can be of further assistance, please contact the Office of Research and Sponsored Programs at 320-308-4932 or email lidonnay@stcloudstate.edu. Use the SCSU IRB number listed on any forms submitted which relate to this project, or on any correspondence with the IRB.

For the Institutional Review Board:

Linda Donnay
IRB Administrator
Office of Research and Sponsored Programs

For St. Cloud State University:

Patrica Hughes
Interim Associate Provost for Research
Dean of Graduate Studies

OFFICE USE ONLY

SCSUIRB# 1453 - 1788
Type of Review:

Today's Date: 8/5/2015
EXEMPT: 8/4/2015
Expiration Date: 8/3/2016