

# Research Proposal

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## **The impact of community gardening in neighborhoods.**

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L8: Can pose questions and use methods of formal inquiry to answer questions and solve problems

L9: Can examine previous research to analyze factors that impact participation in community gardening and its effect.

## I. THE PROBLEM AND ITS SETTING

### *A: Statement of the Topic to be explored*

Neighborhoods are small cities within a city and there are many variables that determine the make up of residents in those neighborhoods. Some of the most visible attributes of the residents of these neighborhoods are race and income. From there on, other characteristics can be found that contribute to the make-up of a neighborhood such as religion, social values, ethnicity, employment and countless more.

There is an element to these neighborhoods that have been around for over a hundred years in America. The element that I speak of is the community garden. Although gardening has been around for much longer, the idea of community gardens and gardening is relatively recent in nature.

Community gardening has a long history in the U.S., as well as being an activity practiced globally. In her research, Lawson found, “that people have organized to create places for people to garden in American cities since the 1890’s” (1). She says, “The first efforts to programmatically introduce gardening to urban communities began in the 1890’s through school gardens programs” (21). School gardening programs are still being used today to bring community residents together. They are used in various capacities. These gardens provide “an alternative activity to help keep young people in urban areas from roaming the streets” in contributing to their community in a productive manner (Henderson 14).

These community gardens have served multiple purposes since their inception. One purpose was for that of the environment. Broadway notes, “increasing urban agriculture is a way of reducing natural resource imports, pollution, and waste exports, at the same time making better use of existing resources” (23). If the produce that is consumed comes from a

local source then the need for large volume transportation of the produce is limited to that particular area. Trucks wasting gallons of gas and causing pollution due to constantly commuting will be minimized since the need to transport the produce from city to city will decrease. This essentially comes down to the sustainability of communities and its health.

Increased social capital is another goal among certain community gardens and its participants. For example, the gardens are places where community residents can find common grounds that could ultimately unify them more than these without the community gardens. Glover, Parry and Shiness found, through their qualitative research of gardeners, that the environment created by participating in the community garden allowed for opportunities to develop relationships with other like minded individuals that they most likely would have never made without the leisure nature of participating in their community garden (468). The opportunity to have a network of like-minded neighbors in a way creates a support system that is rarely achievable under typical neighborhood situations (Alaimo, Reischl, Allen 503).

A significant purpose identified for community gardens deals with the availability of fresh produce to its community, especially in communities with limited access. Rilveria et al mentions that populations with limited access to fresh produce “can usually access these gardens, since they often are located within neighborhoods and on public property” (1435).

The impact of community gardens and gardening in neighborhoods has been discussed for decades. The interest in this topic has been cyclical over the past century and is currently a trending topic. The purposes of these community gardens are varied from social causes to job training and the benefits of it have been reported through small experiments and research. Unfortunately they have not been thorough enough to see the aggregate effect of community gardening and how it relates to their health.

***B: Statement of the Problem and Sub-problems within the Topic to be addressed***

There has been an increase in community gardens being established and as a result there has been a significant increase in farmers markets that include many of the urban farmers (Cappellano 203). The affects to communities appear to be positive in nature (Broadway 24). Within my neighborhood, there are three community gardens. Two of the three gardens grow and harvest vegetables, with one of them strictly focused on vegetable growing and the other focusing on growing flowers with some vegetables. In the neighborhoods moving eastward you can find another eight community gardens. One of them has not even been established long enough to make it into the community garden maps found on [greennetchicago.org](http://greennetchicago.org) or [neighbor-space.org](http://neighbor-space.org)'s websites.

According to Greenet, there are over 600 community gardens in the Chicago area throughout the 50 wards. There is a certain type of person that it takes to establish a community garden within a large city like Chicago. There are certain circumstances that cause there to be a need for a community garden. There are certain people that are affected by the gardens. These three components surrounding community gardens all come together to produce a result that through secondary research has shone a positive result to all of those involved in the community gardening project. Positive results include increased vegetable and fruit consumption as found in the Marshall study (1468), improved self-image for unemployed workers (Flachs 8), waste reduction (Flachs 4), increased community involvement (Alaimo, Reischl, Allen 499) and many other results. Combined, these positive results can be seen as related to different aspects of health for the residents of the community.

***C: Statement of the Question about the Problem that Research will answer***

The question I propose examining is: How are community gardens affecting the communities in which they are located?

***D: Statement of the Hypothesis that Research will test***

The hypothesis that I propose testing is: Active participation in community gardening improves health among its participants.

***E: Delimitations***

This research doesn't intend to discover new effects of community gardening, since all major effects have been addressed.

It will not attempt to pinpoint a specific way to run a garden since; most of the time gardens have a particular agenda that they are pursuing.

This will not study the affects from working in a garden whose purpose is to operate as a business set up as a CSA instead of a leisure communal activity.

***F: Definition of Terms***

Active participation in community gardening means that during the appropriate seasons, members attend gardening activities at least twice a month.

When referring to "health", it should be taken as overall health, both mental/psychological and physical. There will be instances where health is used to describe an individual's perception of self-worth. In other cases it will represent the physical changes that may or may not have occurred.

The term “improved” means a positive increase of overall health as defined above.

Community gardening refers to the activity of gardening, specifically for this study, of produce to be used for the consumption of its grower and in some cases the residents.

A CSA is a Community Supported Agriculture where community residents purchase a share of the harvest for a small fee. Many CSA’s harvest fresh, and mostly organic, fruit and vegetables that typically are delivered to a primary delivery location where individuals are responsible for picking up their share of the harvest.

### ***G. Assumptions***

This proposal is based on certain assumptions such as:

- Assuming that access to community gardening activities will continue to exist in large urban settings.
- Assuming that there will continue to be growth in the establishment of gardens.
- Assuming that some communities lack access to fresh produce.
- Assuming that community gardens will continue to be used as a tool for community outreach.
- Assume that the activity of gardening can be a form of physical activity.
- Assume that participants have a desire to be active within their community.

## II. REVIEW OF THE RELATED LITERATURE

### *A: Major Issues Explored by Scholars who have Researched this Topic and Problem*

There are a variety of themes found among the articles that I have searched so far but I will only focus on the most common themes. The themes are about fruit and vegetable consumption, health education, the social aspects of gardening, and community involvement. Of these themes, increased fruit and vegetable consumption, as well as the social aspects, are mostly touched on.

One main topic among the articles relates to the social aspects of community gardening. Flachs found that “by linking organizers with socially conscious people garden initiatives provide a social space that fosters networking and activism” (8). Among the various studies, many found that the societal aspects were more pronounced than others. Holland found that it provided “community support to the unemployed” and helped in “enhancing skills that can then be used in the jobs market” (304).

In a case study performed on particular community gardens, the benefits of social capital were evident. Many joined the group to have the opportunity to socialize since many had retired from the workforce and needed something to do but not be isolated from society. The study found that many members described elements of “social support, connections and networking” as members of the community garden (Kingsley 534). Although these elements were apparent among the participants of the study, Kingsley found that those elements didn’t go beyond the gardening activities they all shared and that it would have to take additional time to develop those elements outside of the gardening environment (Kingsley 535). This example demonstrates what Glover concluded, that leisure activities such as community gardening “should not be confused as a form of social capital, but rather a facilitator for the

development of social ties and networks, which are a primary source of social capital” (470).

A second common theme among the articles is the consumption of fresh produce. In the Marshall et al study, the conclusion is made that the active participation of individuals in community gardening influences and affects their behavior towards fruit and vegetable consumption (1471). In a study of promoting gardening to low income WIC participants, it was found that when the participants were informed of the available gardening programs in the slightest way, that there was a increased likelihood of more fruit and vegetable consumption (Flanigan and Varma 73). Rilveria et al reported the results of the California Healthy Cities and Communities surveys, which showed significant changes to student behavior. There was a 10% increase of fruit and vegetable consumption among the students as well as a 20% increase in them gardening at home as a result of taking part in the after school gardening program (Rilveria et al 1436).

The access to fresh food is very important, especially to those in communities where access to it is limited. In a study conducted to see how interracial relationships formed through community gardening, an interesting result from the respondents, specifically African Americans, was discovered. Many of those who live in low-to-moderate income neighborhoods indicated that one of the main reasons of their involvement was to “provide food for others” (Shinew 351). The lack of accessibility to obtaining fresh produce is something that usually is found in low-income communities. Henderson notes that “produce is one of the most expensive food items to acquire, and one of the most important nutritionally” (14). So the ability to grow fresh produce within a community can potentially decrease the costs of obtaining the food significantly to the underserved. Additionally,



“consumers will not have to worry about what chemicals may have been used on the produce they cultivated the crops themselves” (Henderson 14).

Another common topic is in regards to education, which can be seen as an extension of the importance of fresh produce consumption mentioned previously since it tends to lead to increased fresh produce consumption. Educating people on the importance of gardening and how it relates to consumption was found to be critical in the Flanigan and Varma study. Flachs also found that at one particular farm he volunteered at focused on providing education on sustainable farming (6). By taking this approach, the workers at the farm recognized how to “reject large-scale commercial food operations and encourage others to do so” in order to create an atmosphere where “food is both environmentally sustainable and readily available to those who will work for it” (Flachs 6).

In Massachusetts, programs have entered into classrooms to help teachers and other educators implement agricultural education in their schools. From the classroom lessons, the students are able to go out into a community garden program to practice what they have learned (Cappellano 205). There are also efforts to “connect schools from kindergarten to grade 12 with local farms” to help bring healthy and nutritional food to them and at the same time learn about having a healthy lifestyle (Cappellano 206).

Education not only useful for improved health reasons but also for environmental reasons. Lawson says “urban gardening has served educational agendas throughout its history” (295). Lawson discusses that some of the educational points are things such as “gardening, recycling, composting, and nutrition” (295).

The idea of sustainability arises due to the lands and environment in which people live having been negatively affected by air pollution, dumping waste, and even toxic waste

dumping. Community gardens can play an important role and have assisted in the “struggle to restore these damaged neighborhoods to ecological and social health” (Ferris 567). What these authors miss is how the educational aspects have improved the health of its participants.

Lastly, community involvement is also a commonly discussed topic throughout the articles. Lawson also talks about community gardening as an inspiration to get involved in community activism (296). In the Michigan State University study, the authors found that involvement in community activities such as gardening improved perceptions of the community from outsiders, as well as from community members, thereby increasing the social capital of the community (Alaimo, Reischl, Allen 510). The involvement in community gardening creates an opportunity for neighbors to meet each other and bond with each other due to their similar interests. It also allows them to make those connections with their area police, community organizations, and other members of the community that wouldn't have happened had they not participate in community gardening activities. These are especially important factors that would strongly impact neighborhoods that are economically at a disadvantage (Broadway 24).

An example of the impact of community gardening is found in a study that found that interracial friendships occur in low-to-moderate income communities in which various races interact with each other. These participants agreed that gardening has brought them together because otherwise they would most likely not have normally socialized with them (Shinew 350). Another example of these connections are found in Brazil where community gardens are looked at as “sustainability centres” and where participants come together to work the gardens where the activity is “enjoyed by people with no previous social connection” (Rival 45).

Although the examples of community involvement abound, a study reviewed showed a different story. Glover studied the concept of political citizenship and the results of it were not strong enough in revealing whether or not participation in a community garden lends itself to political citizenship (Glover 85). The statistical analysis didn't show a strong enough correlation between the gardening and political citizenship, meaning democratic values.

What these examples of common themes in previous research lack is the effects of living a lifestyle in which participation in community gardens yields. I propose to study the perception of the participants' health and its relation to their active participation in gardening activities. Of all the previous studies, only a few actually mention physical and/or mental benefits. When they do, the mention of it is brief because it is not the focus of the research being conducted. Various authors have performed positivist and exploratory research on community gardening and its effects to its participants. They have acknowledged the need to further study the effects of gardening to participants' health as well as the health of the community in which they are situated.

### ***B. Methodologies Utilized by Scholars to Research this Topic and Problem***

There are two methods that dominate the way in which information was gathered among the researchers that were reviewed. Those two dominant methods consist of cross-sectional interviews and surveys. It can be said that they are essentially the same but what truly makes them different is that interviews are typically done in person.

Although that might be the norm, there were occasions that an interview was done by phone. The phone interviews used questions that can be easily converted into survey questions, which appears to make the two methods very similar to each other. Some phone

interviews used methods such as the Likert method while others simply had open-ended questions and allowed for the respondent to take any direction they chose to follow preceding the question. The Likert scale can prove to be effective in the study I propose since it allows for a graduated grading on the participants perception of their health. There were also two instances in which field observations were made. Those observations served as a secondary and/or follow up method to further expand on the information previously collected from interviews and surveys.

These surveys and interviews varied in how they were performed. Some were done over the phone, some in-person and others through mail. Observations were always done on site: meaning at the community garden's location.

The sample size also varied from researcher to researcher. Some had as low as six respondents (Kingsley 529) and others had as much as 1,916 respondents (Alaimo, Reischl, Allen 497). In some of these cases there were also follow-up surveys and interviews performed to get more in depth answers from respondents who were eager to further discuss the various subjects related to the community gardening project that they are involved in.

The surveys done had varied methods in administering them and were all cross-sectional. Two of the surveys were done over the phone and one of them had over 1,900 respondents. One was done through the mail where 255 surveys were mailed out to selected participants but only 96 returned the survey (Holland 294). One survey was administered at a clinic where a total of 257 surveys were completed (Flanigan 69).

The phone surveys had a specific structure in which the interviewer was able to lead the respondent in a prescribed direction with the aid of specific questions to be asked and leaving little room for elaboration from the respondent (Alaimo, Reischl, Allen 501). The

mail-in survey (Holland 293) and clinic survey (Flanigan 69) were similarly structured to the phone survey.

The in-person interviews were all semi-structured to allow for respondent to elaborate on questions asked. It allowed for an organic interaction between the respondent and the interviewer. In the Holland study, the in-person interview was actually a follow-up to a telephone survey. There also were telephone interviews, which differed from the telephone surveys since the interviews allowed for more elaboration on responses made. It also followed a less structured style compared to the telephone surveys and allowed for qualitative data to be collected.

The field observations were conducted loosely and with an ethnographic structure as a guide for what to look for (Flachs 5). In one case, the field observation came about all of a sudden due to the researchers visiting with leaders of the organization, which maintains the networks of community gardeners.

The strengths and weaknesses of these methods vary according to the method and execution of the research performed. An example of a well thought out execution of a survey would be that of the one administered at a clinic (Flanigan 70). The researchers provided a survey to the specific people they wanted to learn about and most importantly, made the survey in both English and Spanish. This shows that they are well aware of the challenges that could have occurred if the survey was in only English. Lower response to the survey would have been a consequence of not having the survey in both languages.

In contrast to the strong survey execution above, there was one case where only Black and White Americans were surveyed. Although the population of this particular case is predominantly Black and White, dismissing other populations could possibly be leaving out

important information to the researchers.

One case did the opposite and took into account all races and ethnic backgrounds into their ethnographic research thereby allowing for a non-positivist approach to their study. What they did differently was randomly pick participants within certain zip codes and divide them within the type of garden categories they were looking at. They were able to get a broad sample of the population and not leave any particular group out based on race, ethnicity, income, education and other factors found in respondents.

Most of the phone interviews are effective in the sense of making it easier for potential respondents to participate. Having a discussion on the phone allowed researchers to ask the questions versus having individuals actually read the questions themselves. This helps avoid hurdles such as literacy issues that might be found in low-income communities as well as comprehension issues that are part of literacy.

Most of the in-person interviews consisted of less than 13 participants. This strategy of only speaking to a handful of participants is suitable for initial inquiry but not for in-depth review of the topics being sought by the researchers. It will be difficult to argue that the limited amount of participants is adequate to represent the population.

The research previously performed by others has mostly been surveys and interviews as described above. The results of those methods have been relatively consistent among all cases. They demonstrate that the research method utilized is effective in producing strong and easily reportable results and can be applicable to the study I propose with changes that will allow for data to be collected about participants' perception of their health.

### **III. PROPOSED RESEARCH METHODOLOGY**

#### ***A. Data or Evidence to be collected***

Both surveys and interviews will inquire about how the health of the participants has or has not improved since participating in the community gardens and if they believe that is a result of their participation. Survey questions will ask about how they became interested in gardening and what ultimately drove them to participate in them. It will ask about the potential benefits to their health, both physical and mental, that they believe may or may not have occurred. It will ask about the relationships developed with fellow gardeners and if those relationships in some way contributed to their social health. The questions will essentially ask the respondents about their perception of their health and its relation to gardening. To develop a clear understanding as to the impact of active participation, the survey will ask about the amount of time spent working in a community garden.

The initial survey questions will have a mixture of close and open-ended questions. The follow-up one-on-one interview questions will be open-ended to allow for further explanation of the individuals perception of their overall health and whether or not they believe that community gardening has affected their health. The interview will allow the respondents to further discuss items of the telephone survey that they wanted to speak more about but couldn't because of the time limitations of a telephone survey. This form of research is descriptive in nature and will seek to understand how community gardening is affecting the participants.

The data collected from the surveys will mostly be quantitative in nature but will also have qualitative aspects stemming from the responses of the open-ended questions. Methods such as Likert scale will be employed for the collection of the quantitative data. The results

from the surveys will help provide further direction in refining the qualitative-based questions that will be asked during the one-on-one interviews.

### ***B. Techniques for Collection of Data***

The data collected in the study I am proposing will come from the same methods as previous researchers: surveys via telephone, and one-on-one interviews. The survey will be used to collect a large and significant amount of data from participants of community gardens. Following collection and compiling of the surveys, the data will be reviewed to select a sample of the respondents for further qualitative one-on-one interviews.

The list of potential respondents will be derived from member lists from community gardening networks found throughout the U.S. and efforts will be made to have a comprehensive list of members who actively participate in the community gardening activities. The focus will be on members of community gardens located in large urban settings. The reasoning for targeting those members is due to the dense population in urban cities and the possible environmental issues that are typically found in urban settings compared to suburban and rural areas. Those environmental issues such as air pollution, access to fresh produce, high unemployment rates, and numerous other factors can affect people's health. Logically, having respondents from areas having those types of issues will yield results that can be seen as more representative of the health effects of community gardening compared to participants in suburban communities where factors such as these are not as likely found.

The members on the list obtained from the community garden networks will be contacted by the team of interviewers. These members will be given prior notice from



organizers at their particular community garden that our team of researchers will be looking to do a telephone interview with them for 20-30 minutes. This will allow for a streamlined process of the collection of data to be reported and compiled quickly in comparison to using mailed surveys. By doing telephone surveys, we will avoid difficulties among participants with literacy and interpretation issues. This will allow the respondents to ask for clarification when a question is understood very well. It will also allow the interviewer to provide examples of what the question might be referring to.

The initial part of the study will provide a study in a cross-sectional manner to understand the majority of community gardening participants. The results of the telephone interviews will then provide information for the research team to select specific individuals for the follow-up one-on-one interviews and perform a case-study type approach. The individuals chosen will be able to provide insight into their feelings and perceptions of community gardening.

### ***C. Methods of Analysis***

Although the researchers leaned more towards the qualitative methods, many used statistical analysis to help draw meaning from the data that was collected yet managed not to turn their studies into a positivist study. I expect to do the same.

The initial telephone surveys will be compiled and will be looked at statistically. A statistical analysis will be performed to look for variables that may correlate to each other. A graph with the variables will be used to visually represent the correlation, if any, between the variables. There will also be a table that breaks down certain themes discovered such as common health benefits and time spent gardening. To finalize the analysis, a comprehensive

written analysis will be done to explain the findings and attempt to connect the relationships of the independent and dependent variables.

A sample of the telephone survey respondents will be randomly selected to participate in an in-person interview. The in-person interviews will be recorded and transcribed and will touch on some of the questions from the telephone surveys. Doing so will allow for a more thoughtful discussion of those questions by the interviewee. The recording and transcription will also allow for a review of common answers given by the interviewee. This data will once again be analyzed statistically to not only better understand the results from the interview but also from the telephone surveys.

#### IV. OUTLINE OF THE FINAL REPORT

The structure for the final report will be as follows:

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## **V. EXPECTED OUTCOMES**

Community organizations and local governments will be able to utilize the research to develop public health policies, assuming positive correlations are made between community gardens and participants health.

Community organizations and their local leaders would be able to develop specialized health outreach programs for the residents in their community.

The physical nature of gardening and the potential health benefits could attract residents to participate in community activities.

This study has the potential to link the effects of community gardening to the perception of the participants' own health. If participants believe that their involvement has positively improved some aspect of their health, then more community residents can follow.

The medical field can further research the effects of community gardening by conducting a longitudinal study on a group of community gardeners. They would be able to tangibly measure the occurring changes in the participants' physical and mental health.

## VI

## Works Cited

- Alaimo, Katherine, Thomas M. Reischl, and Julie Ober Allen. "Community Gardening, Neighborhood Meetings, And Social Capital." *Journal Of Community Psychology* 38.4 (2010): 497-514. Academic Search Complete. Database. 28 Jan. 2012.
- Broadway, Michael. "Growing Urban Agriculture In North American Cities: The Example Of Milwaukee." *American Geographical Society's Focus On Geography* 52.3/4 (2009): 23-30. Academic Search Complete. Web. 2 Feb. 2012.
- Cappellano, Kathleen L. "Supporting Local Agriculture: Farmers Markets And Community-Supported Agriculture And Gardens." *Nutrition Today* 46.4 (2011): 203-207. Academic Search Complete. Web. 2 Feb. 2012.
- Flachs, Andrew. "Food For Thought: The Social Impact Of Community Gardens In The Greater Cleveland Area." *Electronic Green Journal* 1.30 (2010): 1-9. Academic Search Complete. Web. 22 Jan. 2012.
- Flanigan, Shawn, and Roli Varma. "Promoting Community Gardening To Low-Income Urban Participants In The Women, Infants And Children Programme (Wic) In New Mexico." *Community, Work & Family* 9.1 (2006): 69-74. Academic Search Complete. Web. 23 Jan. 2012.
- Ferris, John, Carol Norman, and Joe Sempik. "People, Land And Sustainability: Community Gardens And The Social Dimension Of Sustainable Development." *Social Policy & Administration* 35.5 (2001): 559. Academic Search Complete. Web. 2 Feb. 2012.
- Glover, Troy, Kimberly Shinew, and Diana Parry. "Association, Sociability, And Civic

Culture: The Democratic Effect Of Community Gardening." *Leisure Sciences* 27.1 (2005): 75-92. Academic Search Complete. Web. 2 Feb. 2012.

Glover, Troy D., Diana C. Parry, and Kimberly J. Shinew. "Building Relationships, Accessing Resources: Mobilizing Social Capital In Community Garden Contexts." *Journal Of Leisure Research* 37.4 (2005): 450-474. Academic Search Complete. Web. 2 Feb. 2012.

Henderson, Bethany Rubin, and Kimberly Hartsfield. "Is Getting Into The Community Garden Business A Good Way To Engage Citizens In Local Government?." *National Civic Review* 98.4 (2009): 12-17. Academic Search Complete. Web. 2 Feb. 2012.

Holland, Leigh. "Diversity And Connections In Community Gardens: A Contribution To Local Sustainability." *Local Environment* 9.3 (2004): 285-305. Academic Search Complete. Database. 28 Jan. 2012.

Kingsley, Jonathan 'Yotti', and Mardie Townsend. "'Dig In' To Social Capital: Community Gardens As Mechanisms For Growing Urban Social Connectedness." *Urban Policy & Research* 24.4 (2006): 525-537. Academic Search Complete. Web. 2 Feb. 2012.

Lawson, Laura J. "City Bountiful: A Century of Community Gardening in America." Berkeley: University of California Press, 2005. Print.

Marshall, Julie A., Michael Buchenau, James W. Hale, Mark S. Turbin, Mah-J. Soobader, and Jill S. Litt. "The Influence Of Social Involvement, Neighborhood Aesthetics, And Community Garden Participation On Fruit And Vegetable Consumption." *American Journal Of Public Health* 101.8 (2011): 1466-1473. Academic Search

Complete. Web. 22 Jan. 2012.

Rilveria, Liz, Joan Twiss, Joy Dickinson, Shirley Duma, Tanya Kleinman, and Heather Paulsen. "Community Gardens: Lessons Learned From California Healthy Cities And Communities." *American Journal Of Public Health* 93.9 (2003): 1435-1438.

Academic Search Complete. Web. 2 Feb. 2012.

Rival, Laura. "Ecological Threats And New Promises Of Sustainability For The 21<sup>st</sup> Century." *Suomen Antropologi: Journal Of The Finnish Anthropological Society* 36.2 (2011): 43-46. Academic Search Complete. Web. 2 Feb. 2012.

Shinew, Kimberly J., Troy D. Glover, and Diana C. Parry. "Leisure Spaces As Potential Sites For Interracial Interaction: Community Gardens In Urban Areas." *Journal Of Leisure Research* 36.3 (2004): 336-355. Academic Search Complete. Web. 2

Feb. 2012.