

The adaptive consumer: shifting attitudes, behavior change and CSA membership renewal

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Accepted 6 May 2007

Research Paper

Abstract

A qualitative study was conducted with a subset of a Community Supported Agriculture (CSA) membership base in Wisconsin, USA to examine attitude and behavior change associated with membership. Changes that were examined included: modified eating or cooking habits, increased consideration of food seasonality and associated consumer preferences for seasonal products, and an enhanced appreciation for farming. Although this study investigated ‘spillover’ attitude or behavior changes (e.g. reduced driving or increased use of environmentally friendly cleaning products), none were observed. This study indicates that attitude and behavior changes are generated by the structural elements of CSA including exposure to the farm, interactions with the farmer, and the constraints imposed by a pre-selected bundle of vegetables. There was no indication that changes occur due to the development and enforcement of social norms within the CSA membership base. Community, in the context of this CSA, is expressed primarily as a conceptual community of interest. Our results suggest that demonstrated attitude and behavior change increases the likelihood that a consumer will renew their CSA membership.

Key words: CSA, community supported agriculture, behavior change, attitude change, consumer behavior, Troy Community Farm, CSA membership renewal, sustainable agriculture, local foods

Introduction

The Robyn Van En Center’s 2006 database lists approximately 1700 Community Supported Agriculture (CSA) farms in the United States¹. CSA members pay a farmer, or group of farmers, a lump sum of money at the beginning of a season in exchange for bundles of products (e.g. vegetables) at regular intervals. People join CSA for a variety of reasons including concern for the environment and sustainable food systems, desire for fresh and organic foods, and an interest in supporting local farmers^{2–5}.

For CSA farmers, economic viability is dependent, in part, upon their ability to attract and retain members. In the best case scenario, farmers will attract members that will return year after year, thereby reducing the amount of energy they have to invest in recruitment. This issue of retention was of particular concern to the managing farmer of Troy Community Farm, our study site, and our research was designed accordingly. In particular, this study explored the following questions. (1) Does demonstrated attitude and behavior change affect a member’s willingness to renew their membership? (2) What are the ways in which people

change their attitudes and behavior? (3) Are these changes generated by the development and enforcement of social norms within the membership base or are they generated by the structure of CSA (e.g. limited selection of products)?

CSA Membership and Attitude and Behavior Change

Lancaster established that consumers derive utility, not only from goods themselves, but from the ‘intrinsic properties’ of those goods that are often present in a ‘bundle’ of traits⁶. In the case of CSA membership this bundle of traits includes not only the quality (freshness and flavor) of the produce itself, but the interactions consumers have with the farm and CSA community and the sense of well-being or moral satisfaction that comes from supporting a system that consumers believe is good for the environment, their health and the health of their community.

Meeting these preferences alone does not guarantee that a farm will retain its members from season to season, however. Individuals who leave CSA generally attribute

their decision to inconvenience and a lack of choice in the variety and quantity of produce items^{2,4}. This gets to the heart of the issue: 'At a minimum CSA members must change habits of purchasing, processing, and eating to adapt to the production and distribution constraints of CSA farms'². In this study it was therefore hypothesized that consumers who reported attitude and behavior change would be more likely to renew their membership.

Changing personal cooking and eating habits are some of the ways that members modify their behavior after joining CSA. However, O'Hara and Stagl showed that CSA members also adopt other preferences for supporting local farmers, buying organic foods and eating seasonally⁷. Some of these changes could be generated simply by the produce selection restrictions inherent to most CSA memberships, but it is also possible that other changes could occur due to exposure to the farm and interactions with farmers and other CSA members. O'Hara and Stagl stressed the importance of 'learning and institution forming' within CSA. Their research introduced the idea of 'endogenous preferences' or preferences that change over time within an economic institution or system. In the case of CSA, these changes develop during the course of an individual's membership⁸.

The presence of endogenous preferences was explored in this study as opposed to *exogenous* preferences that might also have had an impact on changes in CSA member attitudes and behavior. Exogenous preferences are understood to 'change in response to "non-rational" factors such as advertising or other forms of "propaganda" ... and are assumed to be shaped by social and biological processes and institutional conditions outside the economic system itself'⁸. Hence, this study did not focus on factors such as social marketing aimed at 'greening' consumer behavior and buying local products or peer and family pressure consumers might experience outside the CSA membership to improve their eating habits. Instead this study focused on endogenous preferences that change *within* the CSA system in response to factors such as interactions between members or between members and the farmer and farm.

These concepts of endogenous preferences and institution forming fit well with the idea that human behavior is molded, in part, by social norms that are developed and enforced within communities⁹. Consumption patterns are similarly fashioned, signaling status, style and values within a social context^{10,11}. At the onset of this study it was therefore conjectured that a CSA membership base could act as a behavior-shaping community, leading to greener consumer choices.

CSA, at face value, is a community effort. Members agree to share the risks of agriculture with the farmer. In effect, they sacrifice some control over individual well-being and choose to act within a group, a hallmark of community building¹². DeLind and Ferguson cite this kind of collective activity as a mechanism through which members 'can build interpersonal trust and a sense of

community rooted in place,' leading to enhanced commitment to sustainable choices³.

The existence of community-generated behavior change could vary from farm to farm, however. O'Hara and Stagl stressed that members in a small, interactive CSA group are more likely to develop altruistic behavior (such as making sustainable choices) than those in a large, anonymous membership because the former provides 'moral muscle' that rewards certain behaviors and punishes others⁷. Other researchers have also questioned the definition of community within CSA. Cone and Myhre, for instance, found that the community aspect of CSA membership was ranked as a low priority for most members and that, on the whole, about half of the members they surveyed did not engage with the CSA other than to pick up their share². They concluded that 'in reality "community" for a great many [members] referred more to a community of interest than to community built on mutual relationships of rights and obligations, on reciprocity'². Agrawal and Gibson recognized that the 'concept of community as shared norms and common interests depends strongly upon the perceptions of its members; in this sense all communities are imagined communities'¹².

This study attempted to define the type of community Troy provides and establish whether social norms exist within that framework and whether they could contribute to modified behavior in the membership base.

Study Site: Troy Community Farm

There are approximately 24 CSA farms that serve over 1700 members in the greater Madison area of Wisconsin, USA. These farms vary in size, serving between 10 and 300 households¹³. Troy Community Farm is a medium-sized, organic farm on 2 ha of land that currently (as of 2006) serves 110 CSA members. Within this membership base approximately 10 spaces are available for worker share members that spend a total of 84 h on the farm in exchange for their share and 10 spaces for assisted memberships for low-income individuals and families. At US\$400 a share, CSA provides about 55% of the farm's revenue (based on the 2005 income data) though the managing farmer hopes to increase this contribution over time. The remaining 45% is generated by retail sales at the farm and at two weekly farmers' markets (24%) and from wholesale revenues (21%). Current wholesale items include herbs, sprouts, and tomatoes. The farm employs a farm manager, farm assistant, interns from the University of Wisconsin-Madison, members of a high school farming program, and CSA worker share members.

Members of Troy Community Farm receive shares for 21 weeks from June to October. In addition to their share, members get *Urban Roots* (a weekly newsletter with recipes and farm updates), invitations to farm events, and are free to pick flowers and herbs from the farm at any time during the growing season. Members are involved with the farm at varying levels, starting with simply picking up their shares at the farm and extending to volunteering on the land

and participating in the Core Group. The Core Group works together to recruit new members, diversify the membership base ethnically and economically, locate and apply for grants, and so forth.

Troy Community Farm is unique in a few significant ways. It is one of the few urban CSA farms in the country, making it more accessible to city residents than other farms, but also limiting the amount and types of crops that can be grown in the restricted space. The farm also differs because it is part of a larger non-profit organization called the Friends of Troy Gardens (FTG). FTG currently oversees 10.5 ha of land. In addition to the farm, FTG manages community gardens, a high school student worker program called Farm and Field, adult education classes, a kids' garden, natural areas, a prairie restoration site, University of Wisconsin-Madison research projects, and is affiliated with a co-housing development that broke ground in March of 2006 on an adjacent 2 ha of land that are not managed by FTG (Fig. 1).

Methods and Data Analysis

This study was designed to be participatory in nature and the managing farmer of Troy Community Farm was consulted during research question design and throughout the preparation phase of the study. Her particular interest, as mentioned above, was how to retain members from season to season. Based on 2003–2006 membership data, Troy has a renewal rate of approximately 56% and they would like to bolster that number so that less energy has to be channeled into recruitment efforts each year. Troy is currently moving into its sixth year of operation at which time, according to Docter and Hildebrand¹⁴, it should have a 75–80% renewal rate in order to be deemed 'successful'.

After the data had been gathered, analyzed and synthesized, the managing farmer had an opportunity to review and comment on the results along with a series of recommendations that were generated for the farm. She was not involved with the focus groups, however, so that participants would feel more comfortable expressing their opinions anonymously.

In this study four focus groups were facilitated with a total of 23 participants. Focus groups are semi-structured discussion sessions that engage a group of people on a certain topic or suite of topics. Results from focus groups are not meant to be representative of a given population due to the non-random and small-scale sampling techniques involved. Researchers organize groups according to common characteristics and can thereby compare them for a fuller understanding of the issue in question. These groups, if led well, encourage dialogue between participants that can reveal things that in-depth interviews or surveys would not¹⁵.

Participants for the focus groups in this study were recruited by phone using CSA contact lists from 2003 to 2005 provided by the managing farmer. These lists were divided into four sub-groups according to shared characteristics. Groups 1 and 2 were comprised of current and

returning CSA members. Group 3 included 'engaged members' that were either worker share members, participants in the Core Group, or both. Group 4 was made up of former members. Each person in every group was called at least once. For each group, calls were repeated until a focus group of 9–12 individuals was formed. Focus groups typically range in size from six to 12 individuals and in the recruitment efforts of this study the target was set slightly higher in order to accommodate for attrition¹⁵. Reminder calls and emails were placed and sent out the day before the session to help limit this loss of participants. However, in Groups 1, 2, and 4 there was an average attrition rate of 27%. The final composition of the focus groups was therefore based on successful contact, willingness and availability.

The focus group sessions ran for approximately one and a half to three hours and included time to eat, settle in, and fill out a pre-meeting survey to capture demographic and basic supportive information. (After the first focus group met, some slight changes were made to the pre-survey for clarification. The changes to this survey are noted in Appendix 1.)

Focus group discussions were facilitated in a semi-structured way, instituting a 'round-robin' technique that offered everyone an opportunity to speak, while providing for deviations if a discussion style conversation started or if individuals wanted to add something out of turn. The order and delivery of the questions varied at times to accommodate conversation flow and improve clarity, but did not deviate significantly from the standard list (Appendix 2) with the exception of Group 3's discussion. This group was particularly engaged and talkative and, in the interest of time, questions 1 and 3 of Part II were skipped. These questions were addressed during the rest of the session coincidentally. In Group 3 there were also two group members that had to leave an hour early, so their input was not collected for a portion of the session.

All of the focus group sessions were audio recorded and transcribed. Transcripts were used to identify themes, which were coded for commonalities and collapsed into broader thematic groups. Frequencies with which these broad themes occurred within individual groups, and among all the participants as a whole, were then determined. (Frequencies were defined by how many individuals mentioned the theme, not by how many times it was mentioned by the same individual.) For supplementation, the frequency of topics brought up in the focus groups was compared with quantitative measurements from the 2004 and 2005 end-of-season surveys, which were previously carried out by Marcia Caton Campbell and Troy Community Farm. The response rates for these surveys were 25% (15 out of 60 members) and 44% (35 out of 80 members) respectively.

As with all case studies, generalizability is very limited as these results pertain specifically to Troy Community Farm, which, as mentioned above, is unique in a number of ways that might affect the types of members it attracts. For

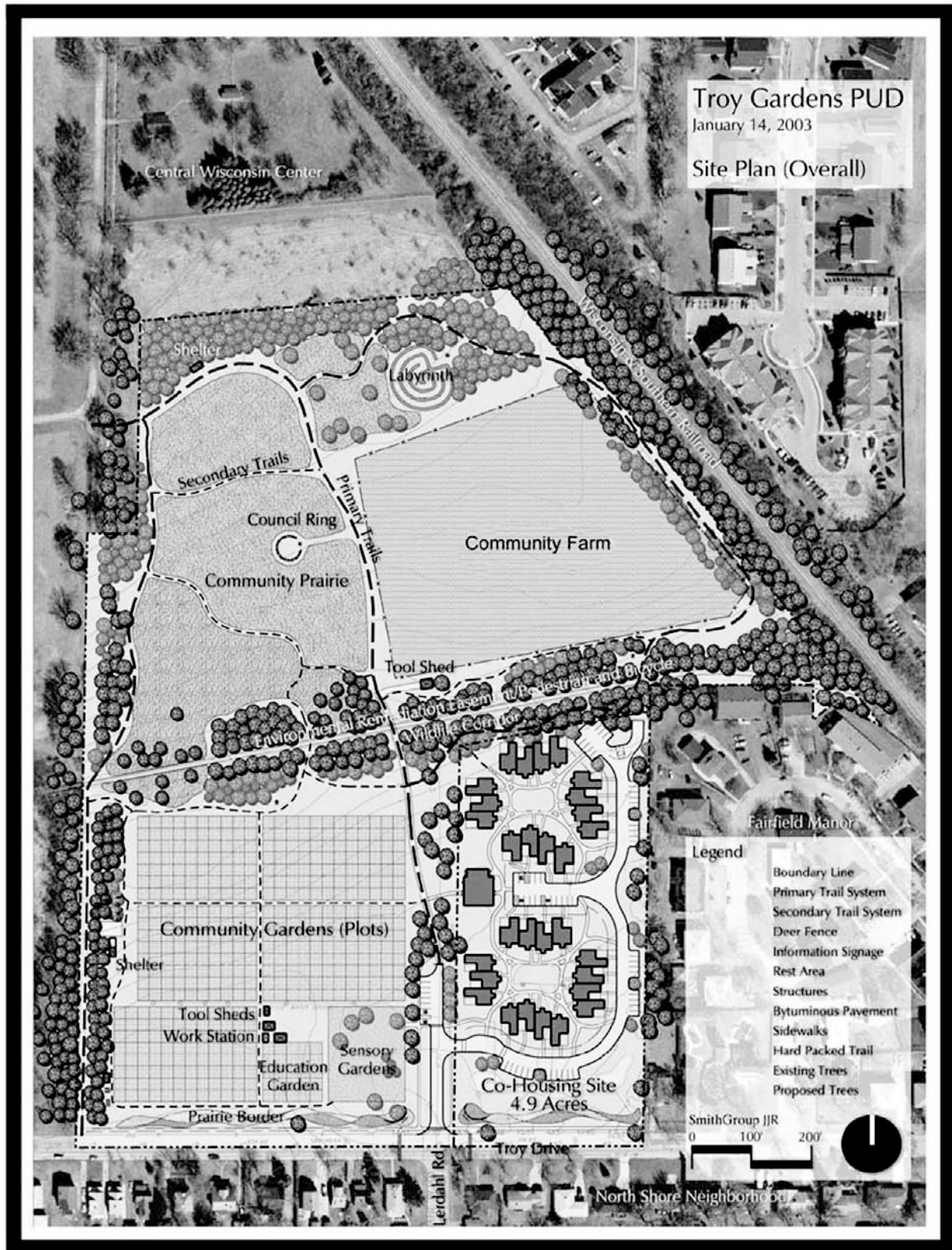


Figure 1. Map of Troy Gardens of which two hectares is dedicated to Troy Community Farm (see online for a colour version of this figure). Source: FTG Web site: <http://www.troygardens.org/pictures/sitemap.jpg>

instance, Troy is an urban farm and thus quite attractive to neighborhood residents. It is also part of a larger non-profit organization that manages community gardens, natural

areas, and educational programs that provide added value for some members. Additionally, results from these focus groups may not be representative of the Troy CSA

population as a whole since only 18 current members (plus five former members) participated in the focus groups, constituting 23% of the 80 consumers that were members in 2005. Results are also subject to sample selection bias as the type of people who participated might have very different views from those who did not.

This study examined behavior change through retrospective reporting, which might not yield results that are as reliable as in an experimental design that tested behavior before and after the participants' exposure to CSA. The data were also dependent upon self-reporting, a particular problem when investigating behavior that relates to values and perceptions of an appropriate code of conduct. Furthermore, it is difficult to identify whether CSA membership is a driver for attitude and behavior modification or if the values that lead to becoming a CSA member also drive the other changes. Despite these limitations, however, this study does provide interesting exploratory results and a foundation for further research.

Demographic Background of Participants

The pre-survey revealed that the CSA members in this study are fairly representative of the age distribution (not including individuals under 20) and marital status (partners are considered single in the US Census) in the US population (Table 1)¹⁶. However, they are a little older and less likely to be single than the average resident of Madison, Wisconsin (which has a large university student population). They are also more educated than the average US citizen and Madison resident and are more likely to be female. The gender bias may be attributed to the fact that, in the average household, women often make the grocery shopping decisions. When surveying household shoppers in the United States, Zepeda and Li discovered that 65% of their respondents were female¹⁷.

Participants in this study tend to be Caucasian (note that African Americans, who make up 12% of the US, and 7% of the Madison, population, are not represented at all), which is not entirely consistent with the US population, but is fairly representative of Madison's ethnic distribution. These CSA members are also less likely to have children living at home and are a little more likely to be employed than the average US or Madison citizen. Their income distribution is fairly similar to that of the US and Madison populations in the upper income brackets (above \$60,000). However, there were proportionately more participants with incomes between \$30,000 and \$60,000 than those with incomes below \$30,000 when compared to the general population. These demographic results are fairly typical of CSA members^{2,3,5}.

Changes in Attitude and Behavior among Renewing CSA Members

Almost all of the renewing CSA members in this study experienced some sort of attitude or behavior change since

they first joined CSA. Such changes were not found among non-renewing members (discussed in detail below). The most common shifts (occurring in all of the current member focus groups) included alterations in food preparation and increased consideration of food seasonality, which sometimes resulted in different consumer choices. Other common trends included changes in diet and increased appreciation for farming. These changes were directly related to food or farming and did not appear to spill over into other areas of consumption such as driving habits or use of biodegradable soaps.

Increased awareness of seasonality and appreciation for farming

Seasonality became an important factor for two-thirds of the current CSA members. For many this has translated into an attitudinal shift: 'I think it's good for everybody. I think, especially in America, you just get used to [expecting that] whatever you want is going to be there. If you've got the money to buy it, you'll get it. I think it's good to remember that there are forces beyond that, and that nature is one of them'. For some participants these changes in attitude were expressed in different purchasing decisions: '... now we're a little more persnickety about [seasonality] and we'll kind of ask ourselves the question, "do we really need the red pepper from Israel right now?" Or, "can we really afford these?"' For some members, CSA prompted or empowered them to act on pre-existing knowledge and values: 'I think part of it is learning to eat what is in season, and the farm share really helps that because you don't want to waste it, so you start looking for recipes that are relative to whatever is in the farm share. Even though ... I thought that was a cool idea before I got the farm share, the farm share sort of pushed me to [act on it]'.

These participants buy seasonally for various reasons such as the social and environmental implications of importing foods from around the globe. They also noted the reduced quality and high price of off-season produce: 'I think that over the winter I became a lot less tolerant of grocery store produce. I would just rather not eat lettuce if it's not going to be good'. However, for a smaller percentage of the participants, their enhanced awareness has not prompted seasonal consumer choices: 'It hasn't really changed my behavior any, but when I do go to the store, sometimes I think about where [the produce] is ... in the cycle and also what types of vegetables grow in this area, as opposed to other areas'.

In addition to increased consideration of seasonality, over half of the renewing members in this study discovered that they had a new level of understanding and appreciation for farming: 'I think I've come to understand a little bit better the difficulties of being a farmer ... And just appreciating ... the hardships that [they] go through'. For some members this has changed their attitude about food availability: 'I remember Claire writing in the newsletter of how she was very disappointed in some of

Table 1. Participants' demographic information as compared to US and Madison, Wisconsin population demographics (n = 23)¹⁶.

Demographic	Raw #	% of participants	% of Madison pop.	% of US pop.
Age¹				
Range	22–85			
Mean	47			
20–29	4	17%	33%	19%
30–39	5	22%	20%	22%
40–49	5	22%	18%	21%
50–59	4	17%	13%	15%
60–69	3	13%	7%	10%
70–79	1	4%	6%	8%
80+	1	4%	3%	5%
Sex				
Female	17	74%	51%	51%
Male	6	26%	49%	49%
Education				
High school	1	4%	18%	29%
Associates	2	9%	8%	6%
Bachelors	12	52%	27%	16%
Masters	4	17%	13%	6%
Professional	1	4%	4%	2%
PhD	3	13%	4%	1%
Ethnicity				
Caucasian	20	87%	86%	77%
Asian American	1	4%	7%	4%
Undisclosed	2	9%	NA	NA
Marital status				
Single	7	30%	57%	46%
Married	12	52%	43%	54%
Partner	3	13%	NA	NA
Undisclosed	1	4%	NA	NA
Dependents in home				
Yes	4	17%	48%	68%
No	17	74%	52%	32%
Undisclosed	2	9%	NA	NA
Employment				
Employed	20	87%	73%	64%
Stay at home parent	1	4%	NA	NA
Retired	2	9%	NA	NA
Annual household income				
Less than \$30,000	3	13%	34%	35%
\$30,000–\$59,999	13	57%	34%	32%
\$60,000–\$89,999	3	13%	21% ²	13% ²
Over \$90,000	3	13%	11% ³	12% ³
Undisclosed	1	4%	NA	NA
Primary food shopper				
Yes	14	61%	NA	NA
No	0	0%	NA	NA
Shared	9	39%	NA	NA

¹ Census age percentages exclude individuals under 20 (29% of total population) as they are unlikely to be paying CSA members.² Approximate comparison: Census income brackets did not match brackets used in this study: \$60,000–99,999.³ Approximate comparison: Census income brackets did not match brackets used in this study: \$100,000+.

the earlier stages when things were really hot, and dry, and the CSA shares weren't as big as they hoped they would be. We just kind of empathized with that ... If I go to the

grocery store, and there's no red peppers there, I say, "damn it, where are my red peppers?!" ... The weather is important to me now. It's not like I just want it to be

Table 2. Frequencies of topics mentioned pertaining to attitude and behavior change among CSA members (expressed as a percentage of possible occurrences).

Types of behavior change	Total focus group (n = 23)	G1: current members (n = 5)	G2: current members (n = 5)	G3: engaged members (n = 8)	G4: former members (n = 5)
Changes in food preparation	61%	100%	80%	63%	0%
Consider food seasonality when making purchasing decisions	52%	60%	100%	50%	0%
Eat healthier/Eat more fresh vegetables	43%	80%	80%	25%	0%
Gained appreciation for farming	43%	20%	100%	50%	0%
Store more vegetables	26%	40%	40%	25%	0%
Waste less food	22%	60%	40%	0%	0%
Buy more organic foods and products	22%	40%	60%	0%	0%

Notable differences are indicated in the shaded box.

75 degrees and sunny. I want there to be rain so that Claire has a good season’.

Altered food preparation and shifting diets

Renewing members’ food preparation habits changed in various ways. Some began to plan their meals more carefully and around the produce that was available in their share, adapting and, in most cases, enjoying the challenge that a limited selection of produce posed for them: ‘I feel way better, knowing what I’m going to eat ... I love to cook. I just feel like it’s so much better now ...’. Many changed how and what they cooked, trying new techniques and becoming more involved with their food preparation: ‘I think it causes me to cook from scratch a lot more’. Some participants tried new foods: ‘I find because of the recipes [in the newsletter], I have some ingredients in my cupboard that I never had before. Balsamic vinegar and tamari, some of those things. So the vegetables I make tend to be a little more interesting ...’. Another participant learned that ‘[t]here’s so much out there besides what Copps’ produce section had. I had no idea. It really opened my eyes to the world of vegetables’.

Other participants found that they are encouraged to eat out less and at least one member thinks more about where he dines out: ‘I think: “do they buy food from our farmers or from another farmer around here?”. So that sort of becomes like another decision-making factor when we go out to eat’. About one-fourth of the current members find that they freeze or store more vegetables and produce less waste. These data are complemented by the 2004 and 2005 member survey results in which an average of 84% of the respondents indicated that their cooking knowledge has increased since joining CSA.

These surveys also show that 86% of the respondents are eating more vegetables and 89% are improving their nutritional health since they joined Troy CSA. Members in the focus groups found that they now eat more fresh vegetables and often associated that with the development of healthier eating habits: ‘I think every year we get a little bit healthier ... We try new things, and we’re more

creative, and we’re more adventuresome. I think that carries through. [CSA] does feed your habits, for our family, even after the crops’. Another member found that ‘[d]uring the year I was definitely eating more vegetables, and vegetables I’ve never eaten before. That is what is kind of cool about ... getting one of these [pre-selected shares]. If I was at the farmer’s market, I wouldn’t have purchased it for myself’. Those members raising families feel that CSA has benefited their children as well: ‘... my kids are so aware of vegetables, and being organic, and things ... When they have a choice of different foods, they’ll pick healthier foods. I think that [CSA] was a really good education’.

For a few members focusing on fresh vegetables has moved them away from eating meat: ‘... especially since joining the CSA, I’ve been trying to base a lot more of my meals around vegetables, and try to put some type of vegetables in my meals. Growing up, my mom was very meat, potato, vegetable type of meals. This is a radical shift for me, and it’s very welcome’. One member revealed that ‘[w]e eat a lot healthier since we joined CSA. We are edging further and further towards becoming total vegetarians’. In some cases these changes also influence other family members.

A small but adamant percentage of the participants also indicated that they buy more organic foods and products now that they are a part of CSA: ‘... we’ve just totally kind of gone organic—milk and everything ... It was a gradual change with being involved with the CSA’.

Notable differences between groups

The most notable difference between the four focus groups (Table 2) was demonstrated by the absence of attitude and behavior change in Group 4 (former members). This phenomenon is discussed in the context of willingness to renew later in this paper. In addition to this, changes in Group 3’s eating habits (i.e. adopting a healthier diet, eating more fresh, organic vegetables) were less pronounced than in Groups 1 and 2, with the exception of trying new foods.

Instead this group emphasized changes in their appreciation for farming and consideration of seasonal produce.

There are a few possible explanations for this: (1) this group has a greater interest in the broad social and community benefits of CSA, which is likely as this group has committed more time and energy to the cause, (2) the members in this group have already made the dietary shifts mentioned by the other two groups, and specifically sought out CSA as a way to satisfy those preferences, which was specifically indicated by a few of these members, and/or (3) they have a greater interest in farming as an activity than the produce they acquire as a result of their labor.

Factors Contributing to Attitude and Behavior Change

Limited social interaction

This study indicates that the renewing members have a strong commitment to, and affinity for, the managing farmer. However, there is very little actualized interaction among CSA members. It is therefore unlikely that any of these shifts in attitude and behavior are influenced by community-driven social norms within CSA.

When this study was conducted almost all the members retrieved their shares from a stand set up at the farm itself on Thursdays between four and six-thirty in the afternoon. The exception to this would only occur if a member was not able to pick-up their share in the assigned time period. In these instances members would retrieve the share from the managing farmer's front porch later that night, but the norm was to visit the farm itself.

During CSA share retrieval, members had the opportunity to interact with the farmer, assistant farmer, volunteers, high school students working at the farm, and other CSA members. They also had the option of taking a three-minute walk from the farm stand to the farm itself and pick herbs and flowers. In such a scenario, one would expect there to be some interaction between the members, particularly in comparison to CSAs that deliver shares to individual homes or to another off-site location. However, when prompted to share a social experience they had with another CSA member the majority of participants in all the focus groups (except the engaged member group) had no stories to tell. The managing farmer said that she has observed the members talking to each other at the stand when they pick up their share, but only six participants mentioned this themselves and the focus group discussions indicated that social interactions rarely extended beyond this polite chitchat. Non-CSA-related interactions were almost never mentioned in all the groups except Group 3 (engaged members) and even in that group these instances were limited to the occasional informal conversation when members would bump into each other at the local cooperative grocery store or farmers' market.

Among working share members there was a little more interaction. However, one member expressed that these

conversations are 'not very serious' and another mentioned that the socializing while working varies tremendously from week to week, and 'there are weeks where there's just something really fun that happens, just the type of conversation bantering back and forth, and then there's these kind of surly weeks when everyone is doing their thing.' There was also one participant that said there was never any time to talk while working.

The low occurrence of social interaction among CSA members could be explained in a few different ways. It could be attributed to the fact that members already have their own established communities and are not interested in building new relationships or getting involved with additional projects. They may have limited time and therefore do not engage in civic or broad social activities and perhaps CSA provides a convenient and simple way to connect to the land and community. It is also possible that members are more interested in developing a relationship with the farmer than other members. The data in this study certainly suggest that the members value their interactions with the managing farmer, which is consistent with the work of Bregendahl and Flora⁷. In their study they discovered 'that CSA members may value their relationship with producers more than they value their relationship with other members'⁷. In the year following this study Troy Community Farm started using one off-site location for CSA delivery at a local cooperative grocery store. It would be interesting to compare the retention rate of these members, who do not have weekly interactions with the farm and farmer, with those that do.

A conceptual community of interests

Despite the low level of interaction among members, a common trend in Groups 1, 2, and 3 was an affinity for the sense of community that CSA provides. It seems that Troy CSA members glean utility from a conceptual community of interests, rather than a community based on an actualized network of relationships, social norms and reciprocity, which is consistent with Cone and Myhre's work².

The majority of the participants in this study believed that they shared common interests and values with the other CSA members. They recognized that this was primarily an assumption, since they had such limited interaction with other members, but they still sensed that this was a group of like-minded individuals: '... if I were to talk to some CSA member out of the blue, I'm pretty sure I'd find plenty in common with them'. In Group 1 this inquiry about common interests led to a participant initiated discussion about how many CSA members would shop at Wal-Mart. A quick poll around the table indicated that a defining quality of CSA members in this group was the conceptual, and in most cases, actualized, rejection of this establishment.

A number of members spoke of this community of interest as a favorable aspect of their membership: 'It is also a little bit of sense of community, just belonging to the group, seeing the same people each week, picking up your

vegetables, and realizing that in some way we share the same values, I think, is real nice’.

The former members were less comfortable claiming common interest with the other CSA members: ‘I don’t really know ... We all paid to get a box. We all have the same principles. We believe in the CSA. We believe in fresh and organic, but without actually knowing anybody ...’.

Structure of CSA

In the absence of an actualized community it appears that attitude and behavior change are linked to the structure of CSA rather than social interactions. This structure (1) forces members to make dietary and related behavior changes by restricting their choice, (2) educates and exposes them to different foods and preparation techniques through pre-selected produce and recipes provided in the weekly newsletter, and (3) introduces them to the seasonality of foods and the benefits of eating accordingly. These adaptations might be amplified by members’ predisposition, or even desire, to change their behavior, which might have brought them to CSA in the first place.

This complements O’Hara and Stagl’s endogenous preference argument and their results, which show that member preferences for organic produce, supporting a local farmer, seasonal food consumption and knowledge of food origin were enhanced over time. It is possible that social norms could develop in smaller, active sub-groups within Troy CSA (like the Core Group) if facilitation and organization was increased within the membership base and the farm, providing the forum to cultivate relationships and ‘moral muscle’ that shape and enforce social norms⁷.

How Attitude and Behavior Change Relate to Willingness to Renew

Limited choice, attitude and behavior change, and renewing members

Generally, this study indicates that members stay with Troy because they want to (1) access high-quality (and, to a lesser extent, organic) produce, (2) support local farmers, (3) get exposed to new foods by receiving a pre-selected bundle of vegetables, and/or (4) be a part of community. Troy Community Farm in particular attracts and retains members because it is (1) an urban farm in close proximity to its members, (2) a part of a larger organization (FTG), and/or (3) because there is sense of loyalty to the managing farmer.

Overall, these results are fairly consistent with the current literature, except for the emphasis on exposure to new foods, the added value of pre-selected produce, and the positive attitude and behavior changes associated with those elements. Most of the CSA literature attributes attrition to consumers wanting more convenience and choice, but many of the participants (Groups 1–3) in this

study indicated that they preferred the *lack* of choice that CSA provides. For instance one CSA member said: ‘I like having to work within certain parameters of choices because it makes me try things that I might not try otherwise ... It’s sort of a hoot to see what I can do with it’.

Members not only enjoyed the challenge and introduction of new vegetables, they also relished the surprise and inspiration generated by their weekly bundle: ‘One of the things I liked best about it is the surprise. What are you going to get next week? Saying, okay, I can try some new recipes’. Another member relayed that when you pick your share ‘[i]t inspires you. You don’t get that from the grocery stores’. A few of the members adapted to the CSA lifestyle by planning menus around their weekly produce and found the additional structure to be beneficial. They wasted less food, adopted a healthier diet, and in a couple of cases, saved money.

Limited choice, attitude and behavior change, and non-renewing members

Non-renewing members in this study tended to (1) have a strong preference for self-selected vegetables, (2) not feel like they were a part of the community, (3) perceive that they are not being treated fairly, and/or (4) leave for personal reasons.

Among these reasons the most common element was a preference for self-selected produce. Four out of five of the former members indicated that they preferred their current situation of self-selecting their produce by shopping or growing their own, to the restricted selection of CSA. This strong preference could explain the lack of behavior change experienced by this group. Perhaps, willingness, or even desire, to change is part of what defines a returning CSA member. Additionally, the lack of attitudinal change with regard to the hardships of farming probably caused these members to be less forgiving when the produce did not meet their expectations. In turn, the absence of attitudinal change is probably related to this group’s general disappointment with the community aspect of Troy CSA.

As a result of these findings the managing farmer has made a commitment to resolve some of the information and community building issues that disappointed these former members. However, it is possible that with their primary preference for self-selection, these individuals would still not maintain their membership. In fact, some of these former members still buy produce from Troy Community Farm; they simply do it at the farmers’ market where they can purchase what they like and leave the rest.

These results prompt practical questions within CSA. Should CSA farms restructure their services to provide more selection for their members? Or, conversely, should they invest in educating their members on the benefits of various foods, the merits of menu planning around

a pre-selected bundle of produce, and the ways in which they can use unfamiliar items?

This study does not provide a definitive answer to these questions and, even with further research, it may be difficult to determine a 'one size fits all' solution as CSA farms vary significantly in size, location, philosophy and so forth. However, this study implies that a combined revenue stream that includes CSA memberships and retail sales, such as at a farmers' market or at the CSA farm stand, might provide a way to attract different kinds of consumers. It also implies that making small investments in broadening selection opportunities and education could be beneficial. For instance, Troy provides recipes in the CSA newsletter and allows members to pack their own shares and leave items that they dislike.

While this study does not point to a single optimal structure, it does have implications regarding whom to target when looking for CSA members that will renew. Strategically recruiting consumers who are desirous of positive changes in their diet and cooking habits could reduce the need to restructure CSA or invest a great deal in educating members. As this study illustrates, some members find utility in the current structure of CSA, making pre-selected produce a marketable feature. Conversely, members who have a strong preference for self-selected produce are unlikely to change, particularly if they have access to a farmers' market or the opportunity and ability to grow their own produce. Therefore, utilizing the CSA structure to inform recruitment strategies and to identify successful members might prove more beneficial than restructuring CSA or educating members.

Concluding Thoughts

This study indicates that members who are willing (or even seeking) to change their behavior, and in fact gain utility from the altered lifestyle, are more likely to renew their CSA membership. It also suggests that behavior change in members extends beyond simply modifying eating and cooking habits and includes altered consumption patterns with regard to produce seasonality and attitudinal shifts that demonstrate an increased appreciation for farming, which could also contribute to membership renewal. Changes were limited, however, to food- or farm-related attitudes and behaviors and did not spill over into non-food consumption categories.

Demonstrated changes are most clearly associated with the structural elements of CSA (i.e. exposure to the farm, interaction with the farmer, pre-selected produce, etc.). They do not seem to be connected to the establishment and enforcement of social norms by the members themselves. Though members clearly indicate that they value their relationship with the farmer, the CSA member community is conceptual and is not a system where relationships and reciprocity could govern behavior.

For CSA farmers these results imply that marketing to a population poised for behavior change could be beneficial

(e.g. people who want to improve their diet, incorporate more whole foods into their cooking, etc.). This market could be reached through human health outreach centers, weight loss support groups, and associated publications. Insurance companies also offer another potential pathway, particularly if CSA farms can depend on financial support and advertising from these companies. For instance, Physicians Plus, a Madison-based HMO, now offers a US\$100 rebate for individuals and a US\$200 rebate for families who join a CSA and has produced a marketing campaign to promote this program. The decision on the part of Physicians Plus seems justified as our research shows that many Troy members have improved their nutritional health since joining CSA, making this a win-win situation.

Although the behavior change illustrated in this study does not seem to be spilling over into non-food-related consumer decisions, it still implies that there are indirect social and environmental benefits associated with CSA membership that extend beyond the direct effects of buying local, organic produce. Healthier eating habits, increased vegetable consumption, and decreased meat consumption produce healthier citizens and reduce the medical costs affiliated with obesity and other diet-related diseases¹⁸⁻²¹. Decreased meat consumption is also better for the environment, as a vegetarian diet has a much lighter ecological footprint than its omnivorous counterpart²². Additionally, increased consideration of produce seasonality can affect other food purchases beyond the CSA bundle. These increasingly local and seasonal diets reduce the environmental impact of transporting food across the country (and the globe) and support a diversity in agriculture that is more resistant to disease and catastrophe²³.

It should be noted again that this case study is limited in its generalizability due to the small sample size and the uniqueness of Troy Community Farm. The use of retrospective self-reporting on behalf of the participants is also a limiting factor when investigating behavior change. However, as an exploratory study it provides fertile grounds for further research. In the future it would be interesting to compare a selection of CSA memberships in a longitudinal study (including before and after investigations) to see how behavior change is expressed under varied circumstances over time. Within that research it would also be advantageous to rigorously examine non-food-related behavior change and explore the ways in which these separate CSA memberships define community in order to further flesh out how social contexts affect behavior.

Acknowledgements. We thank the focus group participants in this study and all the other individuals that provided assistance throughout the process. We also extend our gratitude to Claire Strader, the managing farmer at Troy, who helped shape this study and offered tremendous support and assistance, to Marcia Caton Campbell who provided supplementary data, valuable leads, and insightful feedback and guidance, and to the anonymous reviewers who read through this paper and provided thoughtful and helpful comments. Finally, we would like to acknowledge that this project was funded by a grant entitled 'UW-Troy Gardens Sustainable Urban Agriculture Learning

Community Project'. This grant was generously provided by W.K. Kellogg Foundation's Food and Society Initiative to the University of Wisconsin-Madison (Lydia Zepeda, Project Director and Principal Investigator).

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Appendix 1

*Troy Community Farm CSA Focus Group: Pre-Survey (Version 2) [Questions that were changed or added are noted with an *]*

Thank you for volunteering to participate in this CSA focus group. Please take a few minutes to fill out the following information. This pre-survey will help inform the results of our study. Although we ask for your name, it will only be used for our own tracking purposes. Your name will not be associated with any of the results included in the final study.

General Information:

1. Name: _____
2. Age: _____
3. Marital Status (please select one):
 Single Married Partner (living together, but not married)
4. *Do you have dependent children living with you in your home?
 Yes No
 If yes, what is/are their age(s): _____
5. Education: Highest degree obtained (please select one):
 High School Bachelor Masters PhD Other:
6. *Occupation and Employer: _____
7. Approximate annual income (please select one):
 Less than \$30,000 \$30,000-\$59,999 \$60,000-\$89,999 More than \$90,000
8. Ethnic Background: _____
9. Are you the primary food shopper in your household (please select one)?
 Yes No Food shopping is shared

Troy Related Information:

10. Did you know that Troy Community Farm is part of a non-profit organization called the Friends of Troy Gardens?
 Yes No
11. Did you know that the Friends of Troy Gardens:
 - a. Has a prairie restoration area?
 Yes No
 - b. Runs a kids' garden?
 Yes No
 - c. Runs a youth program called Farm and Field with high school students?
 Yes No
 - d. Provides space for community gardens?
 Yes No
 - e. Is part of a larger project to build affordable co-housing in the land adjacent to the gardens?
 Yes No

12. During the most recent year that you were a Troy CSA member how often did you read Urban Roots (the CSA newsletter)?

Every time Once in a while Never – I don't have time Never – not interested

13. Reasons you first joined Troy Community Farm (please rank your top 5 reasons on a scale of 1-5):

I like getting farm fresh vegetables

*I like getting organic vegetables

For health reasons

For my children

*For the quality of the produce

*I believe that buying locally reduces the energy costs of importing vegetables

*I believe that organic growing practices are better for the environment

I feel good about sharing in the benefits and risks with those who grow the food

I like being able to choose my own specific vegetables from the pick-up table

*I like getting a pre-selected bunch of produce

I like that the farm is right in the city

I like that the farm is in my neighborhood

I like supporting local businesses

I like picking my own flowers and herbs from the CSA garden

I like seeing and talking with the farmer and the folks who grow my food at the pick up site

*I like seeing and talking with other CSA members

Other(s): _____

Appendix 2

Focus Group Questions

Each group was presented with the following questions (there was some variation in order and structure to facilitate individual discussion flow):

Part I

1. Initially, why did you join CSA in general?
2. Initially, why did you join Troy specifically? What was different or unique about Troy?
3. Why did you decide to renew/give up/change your membership? Did your perception of Troy change after you decided to join?
4. What could be done to improve Troy Community Farm?
5. In what ways did you engage with the farm and gardens (e.g. did you pick up your produce at the farm, attend an event, work on the farm)?
6. How far do you travel to pick up your share? By what means? Are you happy with this situation?
7. How much additional shopping do/did you need to do? Where (else) do you buy vegetables?

Part II

1. Can you describe a positive and/or negative experience you have had with the farm?
2. Do you know or socialize with any of the other CSA members? If so, in what ways? What do you talk about? Did you know them before joining Troy?
3. Can you describe a positive and/or negative experience you have had with other CSA members?
4. What do you have in common with the other CSA members besides Troy?
5. What have you learned since joining Troy CSA? From who? How has this affected your behavior?
6. Has your lifestyle or have your habits changed since you joined Troy CSA?