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MOTIVATIONS FOR PARTICIPATING IN COMMUNITY-SUPPORTED AGRICULTURE AND THEIR RELATIONSHIP WITH COMMUNITY ATTACHMENT AND SOCIAL CAPITAL^{*}

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ABSTRACT

The social fabric of rural communities is continuing to change as we move toward a more globalized society and food economy, and the vitality of rural agricultural communities in particular may be declining (Berry 1999). In response to these changes, efforts are underway in many parts of the United States to counteract this global, industrial food system and by implication, increase the vitality and sustainability of rural communities. One effort that is gaining momentum is the Community Supported Agriculture (CSA) movement, which involves local farmers and community members working together as partners to create a sustainable local food system. It has been argued that one measure of a community's vitality and sustainability is the longterm health of its food system, and CSAs provide a locally-based approach to community revitalization that also incorporates the benefit of such a healthy food system (Feenstra 1997). Using quantitative data from the memberships of CSA operations in both Central Illinois and New Hampshire, this research identifies the perceived benefits of CSA involvement, the motivations CSA members identify as important to their involvement, and the effects of CSA activity on community social capital. Analyses reveal that CSA member motivations are similar to those found in past empirical work, with concerns over quality of food being the strongest motivators. The importance of community building and development of social capital are not considered significant motivators for joining a CSA, nor are they perceived to be particularly important benefits of membership. However, the importance of community attachment in enhancing certain motivating factors like a desire to develop a stronger sense of community and a desire to support local growers is significant.

Introduction

The social fabric of rural communities is continuing to change as a more globalized and homogenized society continues to develop, and as a result the vitality of rural agricultural communities may be declining (Berry 1999). One change that has had profound impacts on communities overall, and rural agricultural communities in particular, is the domination of globalized corporate

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agriculture and the resulting decline of smaller-scale, sustainable farming operations throughout the United States (Hamilton 2000; Sabine and Stagl 2001; Vandana and Gitanjali 2002). In response to these changes and other factors efforts are underway in many parts of the United States to counteract the industrial food system, and by implication, increase the vitality and sustainability of rural communities. One effort that is gaining momentum is the Community Supported Agriculture (CSA) movement, which involves local farmers and community members working together as partners to create a sustainable local food system. As of 1999, there were more than 1,000 CSA operations within the United States, and this number is projected to continue to rise (Lass et al. 2003).

CSAs provide a variety of food products ranging from fruits and vegetables to meats, poultry, and eggs in a system where a farmer or producer partners with community members to create a sustainable and healthy local food system. In the typical CSA community members pay for a "share" in the farm's production in the fall or spring and are given goods throughout the season, thus allowing the farmer to have access to the financial capital necessary to purchase seeds and other inputs for the upcoming season. In addition, both farmer and CSA members have an investment in the operation and share the risks and benefits associated with the uncertainty of farming: some harvests are meager due to growing conditions and other variables, while other bounties exceed expectations. CSAs are argued to have multiple community and ecological benefits, including civic renewal and increased collaboration at the community level, improving access to healthy foods, and preserving farmland through sustainable production practices (Feenstra 1997) An important variable in both the conception and application of CSA is a strong and vigorous community.

In his 1999 Presidential Address, Rural Sociological Society President William B. Lacy noted, "The way we view and structure work, the way we generate and disseminate knowledge, and *the way we produce, distribute, and consume food* are essential factors affecting the viability and empowerment of our communities" (Lacy 2000). Lacy called for continued efforts to strengthen active participation and engagement in food production, distribution, and consumption as a means to enable the creation of sustainable communities and therefore mitigate some negative effects of globalization. CSAs are an example of locally-based efforts that have the potential to meet the challenge for strengthening community engagement and sustainability through an emphasis on local food systems, yet the dynamics of CSA's emergence and impacts on communities have only recently become the subject of sociological examinations.

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In response to Lacy's challenge and to needs identified in previous empirical work about CSAs (Cooley and Lass 1998; Kane and Lohr 1997; Kolodinsky and Pelch 1997; Sabine and Stagl 2001), the objective of this research is to determine what motivates CSA members' participation and to identify how their participation may affect social capital in their communities. In addition, data from current CSA members from CSAs in Central Illinois and New Hampshire will be compared and contrasted to identify important differences between the two regions. The specific questions guiding this project include:

- 1. What are the primary motivations CSA members have for their involvement?
- 2. What are the relationships between motivations for joining CSAs and environmental values?
- 3. What are the relationships between motivations for joining CSAs and community attachment?
- 4. What are the relationships between motivations for joining CSAs and community satisfaction?
- 5. How do members believe their CSA involvement affects social capital in their communities?
- 6. How do Central Illinois and New Hampshire CSA members differ in motivations for joining CSAs, environmental values, and community attachment?
- 7. Are there demographic differences in motivations for joining a CSA?

One criticism of CSAs is that the benefits of CSAs are not always universally or widely accessible, and they often serve the "advantaged" populations while neglecting inclusion of the more socially disadvantaged (Hinirchs and Kremer 2002; Kneen 1993). A better understanding of not only the composition of members but also their motivations for participation can be applied to increase participation in CSAs, and better understand how CSAs might affect social capital in the community. Such analyses can also inform the development of approaches that work to enhance a broader and more inclusive membership in CSA activities, thus working to enhance the viability of the associated communities further.

CSAs have the potential to enhance economically-viable alternatives for local farmers in rural areas, while simultaneously improving local access to healthy foods and fostering social equity and perceptions of democracy for members of the community. However, to realize these potential benefits, it is crucial to first understand the complexities of how community culture itself may factor into

motivations to participate in CSA systems, and how these motivations relate to social capital and overall perceptions of the community. It has been argued that one measure of a community's vitality and sustainability is the long-term health of its food system, and CSAs provide a locally-based approach to community revitalization that also incorporates the benefit of such a healthy food system (Feenstra 1997). This project examines CSAs and their impact on community by focusing on current CSA members, what factors have influenced their engagement in this local food system, and how these motivations are related to values and the formation of social capital.

Community Supported Agriculture (CSA)

Alternative approaches to large-scale global food markets have been emerging around the globe, and particularly within the United States, for quite some time. One of the more common and rapidly-growing alternative approaches is the local farmer's market, which allows local producers to sell directly to consumers weekly during the growing season. The United States Department of Agriculture reported that between 1994 and 1996 the number of farmers' markets in the U.S. increased by 20 percent, to a total of 2,410. Although farmers' markets will likely continue to grow and develop as an alternative to the global food markets, they are not the only approach that is gaining in popularity.

Community supported agriculture (CSA) groups are a second addition to the increasing list of alternative food market models in the United States, and one that may be developing at a rapid pace. The CSA concept originated in Japan in the 1960s, when Japanese women became concerned about the loss of farmland and the rising levels of imported foods. In response, the women asked local farmers to grown fruits and vegetables for them and the farmers agreed with the caveat that families had to commit themselves to supporting the farmers to make it economically viable (Van En 1995). The CSA movement began in the United States in 1986 on two East Coast farms and has since grown to include more than 1,000 farms that provide alternative options for linking growers and consumers in a variety of ways (Lass et al. 2003).

Research focused specifically on CSAs is growing in magnitude, but the findings indicate that there is still much to be learned regarding making this alternative approach both economically and socially sustainable for rural communities. Past work on CSA members has found that membership in CSAs has increased not only consumer awareness about food quality, health, and associated community sustainability but more important, it has altered their behavior in relation to 98

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consumption habits overall (Ostrom 1997). In much of the research focused on motivational factors for supporting local food market alternatives such as CSAs, environmental concerns and interest in respondents' local communities were repeatedly the most compelling motivating factors (Cooley and Lass 1998; Kane and Lohr 1997; Ostrom 1997). However, examinations of more recent research reveal some conflicting findings about motivations for joining a CSA, specifically in interest in local community. Cone and Myhre (2000) found that concern for the environment, desire for fresh and organic food, and support for local food sources were extremely or very important among 90 percent of their respondents, a sense of doing something for the community was selected by only 35 percent (Cone and Myhre 2000). In contrast, informal social networks and word of mouth are the most effective means of sharing information about CSAs and the most influential in motivating people to join (Kolodinsky and Pelch 1997). This finding seems to emphasize the significance of community connections within the decision process, which raises questions about why community is not always a strong motivation for joining a CSA.

In a more recent examination of CSA member households in upstate New York, Sabine and Stagl (2001) found that CSA members were very motivated by a search for "re-embedded" markets, allowing for more direct and personal interaction between themselves and the producers of their food products and thus increasing their sense of community and their connection to their community. CSA members in upstate New York were better educated than the average New York household, had a median income of 30.7 percent higher than the New York State average, and had higher levels of both political and social involvement outside the CSA membership (Sabine and Stagl 2001). Although past research provides a foundation for further inquiry, it is clear from the diversity of results that there is still much to learn about how CSAs recruit and retain members, and how their operation affects broader community vitality.

Methods

This research is based on survey data collected during the summer of 2006 from three CSAs in Central Illinois and four CSAs in New Hampshire. The three CSAs in Central Illinois are diverse in their offerings, with one providing produce, a second providing only meat products, and a third providing only fruit and flowers. The membership in these three CSAs has considerable overlap, with most of the meat and fruit CSA members also belonging to the larger produce CSA. All three CSAs share the same delivery/pick-up location. In contrast, the four CSAs in New

Hampshire all provide produce, have very little overlap in membership, and all have different delivery/pick-up locations.

The locations of New Hampshire and Central Illinois were purposively selected as the comparative study sites for several reasons. First, both states have about the same number of CSA operations, with USDA reporting that Illinois had 20 and New Hampshire had 21 CSA operations in 2005 (Adam 2006). Second, Illinois and New Hampshire also have some critical differences in terms of sociocultural context and their dependence on agriculture. Illinois is a leading producer of corn, soybeans, and swine and the second leading exporter of soybeans and feed grains (Illinois Department of Agriculture 2007). The geography and soil lend themselves well to large-scale production of commercial commodities. In 2002, Illinois had a total of 73,027 farms working 27,310,833 acres, almost 80% of the state's total land area (U.S. Department of Agriculture 2002).

In comparison, New Hampshire has a very diverse agricultural industry, encompassing many crops, livestock, and specialty products. Production of milk and apples are the largest commercially produced commodities, but ornamental horticulture, Christmas trees, and vegetable production are also significant components of the agricultural economy of the state (New Hampshire Department of Agriculture 2007). However, both the number of farms and the acreage in production is significantly less than Illinois, with a total of 3,363 farms working a total of 444,879 acres in production in 2002 (U.S. Department of Agriculture 2002). This variation between the two locations in both type and scale of agricultural production has implications for cultural identity and associated values, beliefs, and behaviors of local residents. It is expected that the variations in the sociocultural context of agricultural production will lead to variations in both motivations for joining a CSA and the broader environmental values of CSA members.

Questionnaires were delivered to CSA members at CSA pick-up/delivery locations weekly for 3-4 weeks in June and July to ensure that all CSA members were given an opportunity to participate in the study. This method of delivery allowed for personal contact to be made with each CSA member, and increased the likelihood that respondents would agree to participate and return the completed questionnaire. CSA members were approached at the pick-up location and asked to participate in the study. If they agreed, they were given a cover letter explaining the study in detail, the questionnaire, and a self-addressed, prepaid envelope to mail the completed survey back. CSA members were also given the opportunity to return the completed survey to the CSA pick-up/delivery location the following week, thus

helping to increase the final response rate. The response rate was 61% in Central Illinois and 72% in New Hampshire.

Measurement Procedures

Measures of motivations for joining the CSA were structured on a five-point Likert-type scale, asking respondents to rate their level of agreement with each motivation statement from strongly agree (1) to strongly disagree (5). Measures included replication of several indicators previously used in empirical research (Cone and Myhre 2000, Sabine and Stagle 2001), as well as the development of several new indicators based on the specific interest in community and social capital within this study. For example, motivations such as "a strong desire to meet new people who care about where their food comes from" and "a strong desire to develop a stronger sense of community" reflect this specific interest in community and associated social capital.

Measures of community attachment and social capital were adapted and created for the specific topic of CSA using previously validated measures (Brehm, Eisenhauer, and Krannich 2004). These included questions about how "at home" they feel in their community and how pleased they would be if they had to move away. In addition, several new indicators were developed specifically to address perceptions and measures of social capital as they directly relate to membership in the CSA. For example, respondents were asked to rate their level of agreement (strongly agree = 1 to strongly disagree = 5) to statements such as "If there was an important issue facing the community the connections I made with other CSA members would be useful," "I look forward to socializing and interacting with other CSA members at the weekly distribution locations" and "Since joining this CSA I have volunteered at an organization I was not previously involved with."

General environmental attitudes/values were measured using the revised New Ecological Paradigm scale that improved on the original scale developed by Catton and Dunlap (1978, 1980). These measures have been widely adapted and used in a variety of empirical works over time. The revised scale (in 2000) has slightly more internal consistency than the original version and has a more comprehensive coverage of key facets of an ecological worldview (Dunlap et al. 2000). In addition, basic demographic data was collected from each respondent, including length of residence, marital status, number of children, education level, annual income, and age. Respondents were also asked to indicate how long they have been a member of the CSA and how they learned of the CSA.

Results

Table 1 presents descriptive statistics on select sociodemographic variables of survey respondents. Sociodemographic data for CSA members was also compared with available census data for state-level averages. Although direct categorical comparisons were not always possible, it was noted that CSA members were considerably above the state average for both education and income. These findings are consistent with those of CSA members in upstate New York (Sabine and Stagl 2001).

		Central Illinois CSA Members		New Hampshire CSA Members	
		N	Total	Ν	T OTAL
NUMBER OF	None	20	24.7%	32	22.7%
CHILDREN	1-2	46	56.8%	80	56.7%
	2-4	11	13.6%	28	19.9%
	More than 4	4	4.9%	1	.7%
Gender	Male	18	23.1%	24	16.7%
	Female	60	76.9%	116	80.6%
Education	High school or less	2	2.5%	5	3.5%
	Post-high school / No bachelors	8	10.1%	12	8.5%
	Bachelors degree or higher.	69	87.4%	124	88.0%
Length of	Up to 2 years	3	3.7%	18	12.7%
RESIDENCE	2-9 years	28	34.6%	61	43.3%
	More than 10 years	50	61.7%	62	44.0%

TABLE 1. RESPONSE DISTRIBUTIONS FOR SELECTED VARIABLES BY STUDY SITES

		Central Illinois CSA Members		New Hampshir CSA Members	
		Ν	Total	Ν	Total
Age	18-29 years	7	9.2%	7	5.1%
	30-44 years	25	32.9%	52	37.7%
	45-59 years	36	47.4%	62	44.9%
	60-70 years	6	7.9%	15	10.9%
	More than 70 years	2	2.6%	2	1.4%
Income	20,000 or less	8	10.8%	14	10.7%
	20,001-39,999	10	13.5%	19	14.5%
	40,000-59,999	15	20.3%	33	25.2%
	60,000-79,999	15	20.3%	16	12.2%
	80,000-99,999	15	20.3%	18	13.7%
	100,000 or higher	11	14.9%	31	23.7%

TABLE 1.CONTINUED

A basic analysis of distribution of responses as to motivations for joining the CSA is the first important step in the analyses. Table 2 presents the mean scores in rank order from highest agreement to lowest agreement for the fifteen motivations for joining the CSA. Concerns over the quality of the food and how the food is grown and produced are the most commonly agreed upon motivating factors for CSA membership. In contrast, concerns that relate to improving respondents' community, building social networks via the CSA, and motivations based on specific health conditions are much less important motivating factors for joining CSAs. These findings are largely consistent with previous work examining motivations for joining CSAs (Cone and Myhre 2000; Hinirchs and Kremer 2002; Kolodinsky and Pelch 1997). The low levels of motivation ascribed to a desire to develop a stronger sense of community and a desire to meet new people who care about where their food comes from are also noteworthy. Initially, they seem to indicate that concern for the community and the related development of social connections (social capital) through CSA activities are not a significant motivating factor for joining a CSA. However, these findings do support the work of Cone and Myhre (2000)

who found a sense of doing something with the community to also be ranked very low as a motivating factor.

	Ν	Mean
Strong desire for fresh food.	224	1.2
Strong desire for food free of pesticides	225	1.2
Strong desire for locally-grown food products.	225	1.3
Strong desire to support local community members who		
grow food	225	1.3
Strong desire to support my community's local economy	224	1.4
Strong desire for organic food products.	224	1.5
Strong desire to reduce packaging on my food products	225	1.7
Strong desire to support sustainable agriculture	225	1.7
Strong desire for food that tastes better than what I can find		
in a local grocery store	225	1.7
Strong desire to know where and how my food is grown	223	1.7
Strong desire to eat food products that are in season	225	1.7
Strong desire for food that is not genetically engineered	224	1.7
Strong desire for food that is easily accessible	222	1.8
Strong desire to develop a stronger sense of community	225	1.9
Strong desire for affordable food.	225	2.0
Strong desire to meet new people who care about where		
their food comes from	221	2.9
Specific health reasons/conditions that require this kind of		
food	221	3.9

TABLE 2. FREQUENCY DISTRIBUTION FOR MOTIVATIONS FOR JOINING CSA.

Once the primary motivations respondents' have for joining CSAs are identified, the next step in developing an understanding of CSA membership dynamics is examining correlations between motivations for joining CSAs and other variables of theoretical importance identified in previous research. Based on past empirical works an index of environmental values was created to represent the New Environmental Paradigm (NEP), per the revised NEP Index developed by Dunlap et al. (2000) to analyze the relationships between environmental values and motivations for joining CSAs. The results are presented in Table 3 and indicate the expected results: statistically significant correlations between motivations for joining CSAs and environmental values where motivations are logically related to environmental concerns. For example, motivations such as a desire for food free of pesticides, organic food products, reduced packaging, and food not genetically engineered have statistical relationships with respondents' endorsement of the New Environmental Paradigm (NEP), which emphasizes the view that humans are an

intrinsic part of the biological community and are governed by the same ecological laws that govern other species (Dunlap et al. 2000). The concept of ecological scarcity is central to this paradigm, and the strong correlations represent the recognition of that scarcity and the related need to be proactive in actions to reduce impacts on ecological systems. The NEP implies membership in, not dominion over, the natural world and it underscores a need to limit growth and questions the "rights" of human beings to modify the environment (Catton and Dunlap 1978; Catton and Dunlap 1980; Dunlap et al. 2000).

	Pearson
	CORRELATION
	WITH NEP
Motivation	Index
Strong desire for fresh food	01
Strong desire for food free of pesticides	$.31^{***}$
Strong desire for organic food products	$.25^{***}$
Strong desire for locally-grown food products	$.20^{**}$
Strong desire to reduce packaging of food products	$.36^{***}$
Strong desire to support sustainable agriculture practices	$.29^{***}$
Strong desire for food that is easily accessible	.03
Strong desire for food products that are not genetically	
engineered	$.28^{***}$
Strong desire for affordable food	.12
Strong desire to support local community members who	
grow food	$.15^{*}$
Strong desire to eat food products that are in season	02
Strong desire to support community's local economy	.08
Strong desire to develop stronger sense of community	.04
Strong desire to know where/how my food is grown	$.23^{***}$
Specific health reasons/conditions that require this kind of	
food product	02
Strong desire for food that tastes better	01
Strong desire to meet new people who care about where their	
food comes from.	.14*

TABLE 3.	CorrelationsBetweenMotivations forJoiningCSA andIndex
	OF NEW ENVIRONMENTAL PARADIGM (NEP) VALUES.

*p≤0.05 ***p≤.01 ****p≤.001

Past research has also indicated that concerns about local economies and historical patterns of land use may be related to membership in CSAs, and constitute a different set of relationships and CSA clients. A correlation analysis was conducted to examine the relationship between motivations for joining a CSA and an overall measure of community attachment, asking respondents to rank their level of agreement to the following statement, "If for some reason I had to move away from my community, I would be pleased to leave." The findings from this analysis show a strong connection between motivations grounded in a concern for the broader community and a sense of community attachment (see Table 4). For example, there is a statistically significant correlation between a desire for locally

TABLE 4: CORRELATIONS BETWEEN MOTIVATIONS FOR JOINING CSA AND COMMUNITY ATTACHMENT

	Pearson
	CORRELATION
	WITH
	Community
MOTIVATION	Attachment
Strong desire for fresh food.	06
Strong desire for food free of pesticides	.03
Strong desire for organic food products.	02
Strong desire for locally-grown food products.	- .21 ^{***}
Strong desire to reduce packaging of food products	04
Strong desire to support sustainable agriculture practices	06
Strong desire for food that is easily accessible	07
Strong desire for food products that are not genetically	.04
engineered	
Strong desire for affordable food.	$.14^{*}$
Strong desire to support local community members who	03
grow food	
Strong desire to eat food products that are in season	06
Strong desire to support community's local economy	13
Strong desire to develop stronger sense of community	- .14 [*]
Strong desire to know where/how my food is grown	.01
Specific health reasons/conditions that require this kind of	.12
food product	
Strong desire for food that tastes better	.04
Strong desire to meet new people who care about where their	01
food comes from	
$n < 0.05^{**} n < 0.1^{***} n < 0.01$	

*p≤ 0.05 ***p≤.01 ****p≤.001

grown food products and community attachment, as measured by strong disagreement to the statement "If for some reason I had to move away from my community, I would be pleased to leave." The negative correlation indicates that as motivation for locally grown food increases, being pleased to leave the community decreases. The same relationship holds for the desire to develop a stronger sense of community, which also is logical and makes theoretical sense. In contrast, the desire for affordable food is also statistically significant, but has a positive correlation, indicating that as the motivation for affordable food decreases, being pleased to leave the community also decreases. This may indicate a belief or perception that as an individual's attachment to their community increases, they place less importance on the affordability of food via a CSA. In essence, their attachment to the community facilitates a willingness to pay higher food prices to support it.

To address the potential relationship between community satisfaction and motivations for joining a CSA, correlations were run between motivations and a general measure of community satisfaction which asked respondents to rate their level of agreement with the statement "I am very satisfied with my community as a place to live." Although motivations related to community building were not among the top five reasons for joining a CSA, it is not clear what role community satisfaction may play in this motivation. Table 5 presents only the statistically significant findings for the correlations between motivations and community satisfaction. There is a strong correlation between those who are highly satisfied with their community as a place to live and CSA motivations to support the local economy and to develop a stronger sense of community. So although community building motivations were not among the most important drivers for joining a CSA, the overall quality and satisfaction with a respondent's community has an influence on the desire to join a CSA.

	Pearson
	CORRELATION
	WITH
	Community
Motivation	SATISFACTION
Strong desire to support community's local economy	$.19^{**}$
Strong desire to develop stronger sense of community	$.21^{**}$

TABLE 5. CORRELATIONS BETWEEN MOTIVATIONS FOR JOINING CSA AND
COMMUNITY SATISFACTION.

*p≤.05 ***p≤.01 ****p≤.001

Descriptive statistics were used to explore the degree to which members of CSAs believe their involvement in community supported agriculture impacts social capital. The findings show that most of the respondents do not agree that their involvement affects social capital or enhances social capital for themselves (Table 6), which is consistent with previous measures of motivations.

VARIABLE		Ν	Total
If there was an important issue facing	Stongly agree	12	5.5%
the community, the connections I	Agree	43	19.5%
made with other CSA members would be useful	Neutral	61	27.7%
	Disagree	52	23.6%
	Strongly disagree	52	23.6%
I look forward to socializing and	Strongly agree	20	9.8%
interacting with other CSA members at the weekly distribution location	Agree	47	22.9%
	Neutral	60	29.3%
	Disagree	37	18.0%
	Strongly disagree	41	20.0%

 TABLE 6.
 FREQUENCY DISTRIBUTIONS ON MEMBERS' PERCEPTIONS OF CSA AS

 SOCIAL CAPITAL.

T-test comparisons of means were used to assess how CSA member motivation, community attachment and environmental values differ between Central Illinois and New Hampshire. Table 7 presents the findings (only those statistically significant results were reported in the interest of space), which reveal that in terms of motivations, CSA members in New Hampshire were more motivated by a desire for locally-grown food and a desire to support the local economy than CSA members in Central Illinois. As for community satisfaction, CSA members in New Hampshire were more satisfied with their community as a place to live, felt more 'at home' in their community, would be less pleased to leave if they had to move, and more strongly felt that their community had a friendly atmosphere compared with CSA members in Central Illinois. For environmental values, there were no statistically significant differences between CSA members in Illinois and New Hampshire.

Central NEW **ILLINOIS** HAMPSHIRE MEAN Mean MOTIVATION Desire for locally grown food..... 1.4^{**} 1.2^{*} 1.6^{**} 1.4^{**} Desire to support local economy. Community I feel "at home" in my ATTACHMENT community..... 2.2^{*} 1.9^{*} If for some reason I had to move away from my community I would be pleased to leave..... 3.7^{*} 4.2^{*} I trust other residents in my community .. 2.5 2.2^{1}

TABLE 7. STATISTICALLY SIGNIFICANT T-TEST COMPARISON OF MEANS FOR MOTIVATIONS AND COMMUNITY ATTACHMENT.

*p≤0.05 ***p≤.01 ****p≤.001

As for demographic differences in motivations for joining the CSA, home ownership status, marital status, number of children, length of residence, age, income and highest level of education were examined. Only education, income and age showed any statistically significant results. For age, the only motivation that was statistically significant was a desire for organic products, demonstrating that a desire for organic products was more important to the younger CSA members (Pearson's = -.16, p< .05, N=213). Table 8 presents the means scores for the eight motivations that were statistically significant in terms of education level. As level of education increases, respondents were less likely to strongly agree with these factors as motivations for joining the CSA. Ease of access became less important as education rose, as did having food that was not genetically engineered. The importance of affordable food, food that was in season, a desire to support the local economy, and knowledge about where and how the food is grown also fell considerably as education levels rose. Although statistically significant, the importance of food that tastes better did not change between the two extreme levels of education. Instead, it was most important for those with some college or an associate's degree.

Table 9 presents the findings for those statistically significant motivations by level of income. Food free of pesticides was most important for those at the lowest levels of income, as was food that was not genetically engineered, food with reduced packaging, and knowledge about where/how the food is grown. Overall, it appears that as income rises, these motivating factors become less important for

	HIGHEST LEVEL OF EDUCATION ATTAINED					
	HS	Some College/	4 yr. College	Some College/	MASTER'S	Doctorate
	DIPLOMA/GED	AA	Grad.	GRAD SCHOOL	Degree	
Easily accessible food ^{**}	1.14	1.10	1.15	1.14	1.30	1.33
Food not genetically	1.43	1.35	1.58	1.73	1.79	2.05
engineered ^{**}						
Affordable food***	1.43	1.70	1.85	1.50	2.15	2.30
Food in season [*]	1.71	1.40	1.58	1.59	1.72	1.93
Support local economy [*]	1.29	1.20	1.34	1.45	1.44	1.62
Know where/how food is	1.71	1.40	1.55	1.36	1.80	1.88
grown**						
Health reasons [*]	3.14	3.26	3.83	3.82	4.01	4.17
Food that tastes better**	1.86	1.20	1.51	1.64	1.83	1.86

TABLE 8. MEAN SCORES FOR SIGNIFICANT MOTIVATIONS BY HIGHEST LEVEL OF EDUCATION

*p≤0.05 **p≤.01 ***p≤.001

membership in a CSA. As one would expect, as income increases the motivation for affordable food also drops considerably.

Discussion

The motivations for joining CSAs are diverse, and the analyses here largely support findings in past research about the importance of environmental values and concerns about supporting local communities as factors related to the reasons why people join CSAs. More detailed examinations of the relationship between motivations for joining CSAs and environmental values also support previous profiles of CSA members that identified them as environmentally oriented and having an ecological world view that is consistent with the New Ecological Paradigm (Cone and Myhre 2000; Hinrichs and Kremer 2002; Kolodinsky and Pelch 1997). It is clear from this research that motivations grounded in environmental concerns are the most common factors CSA members identify as important for stimulating their involvement.

When examining the relationships between motivations for joining CSAs and community attachment, strong community attachment clearly has a positive influence on motivations for joining a CSA. This relationship between community attachment and motivations may also be grounded within a concern for the overall well-being of that community and a desire to be supportive of local community members who grow food. In addition, a strong attachment to community seems to reduce the potential negative perception that individuals find CSA food products to be too expensive. The findings reveal that as community attachment increases, the motivation for joining a CSA for affordable food decreases.

The examination of the relationship between motivations for joining CSAs and a broad measure of community satisfaction reveals that respondents that have higher levels of community satisfaction are more motivated to join a CSA based on a desire to support the local economy and a desire to develop a stronger sense of community. This implies that community satisfaction appears to work to create a motivation to continue to improve their community as a place to live through their actions. Respondents may view support of a CSA as one means to continue to improve their community and retain their high levels of satisfaction with their community as a place to live. Satisfaction appears to compel a personal stake or investment in additional activities like joining a CSA, which may be an element in maintaining such satisfaction.

When examining CSA involvement as it relates to the building of social capital, there is very little evidence to support that CSA members perceive their actions as

	Level of Income						
	20,000 OR LESS	20,001-39,999	40,000-59,999	60,000-79,999	80,000–99,999	100,000 OR MORE	
Food free of							
pesticides ^{**} Food with	1.00	1.14	1.31	1.23	1.33	1.43	
reduced							
packaging [*] Food not	1.41	1.34	1.67	1.77	1.70	1.79	
genetically							
engineered ^{**} . Affordable	1.41	1.45	1.67	1.97	1.72	2.07	
Food ^{***} Know where/	1.59	1.83	1.94	2.03	2.12	2.38	
how food is							
grown ^{**}	1.32	1.55	1.74	1.74	1.61	1.95	
Health reasons [*] .	3.41	3.62	4.08	3.55	4.09	4.24	

TABLE 9. MEAN SCORES FOR SIGNIFICANT MOTIVATIONS BY LEVEL OF INCOME

 $p \le 0.05 p \le .01 p \le .001$

enhancing social capital. Our findings show that CSA members do not view their connections with other CSA members as particularly significant in terms of vital or beneficial social networks. Given the prevalence of word of mouth as the primary means of learning about CSAs (53% of respondents said they learned of their CSA from a friend, the modal response category), it is also possible that these connections are not perceived as vital because they duplicate existing ones. The results indicate that members do not view the primary function of CSAs as a social incubator or a place to socialize and build important connections. This is consistent with the findings from motivations for joining a CSA, which emphasize the quality of food and the manner in which it was produced. The importance of community connections and associated social capital was not a strong motivating factor for joining a CSA, which is consistent with the importance of the more directed measures of building social capital within the CSA network.

In a comparison of Central Illinois and New Hampshire CSA members on motivations for joining CSAs, environmental values, and community attachment, the findings reveal only minimal statistically significant differences. Our expectation that the sociocultural and agricultural context of the two regions may have an influence on differences in motivations and environmental values had very little support from the data. The only statistically significant differences in motivations were that CSA members in New Hampshire were more likely to be motivated by a desire to support the local economy and a desire for locally-grown food. This may be because New Hampshire's agricultural industry is largely at a 'community scale' compared with Central Illinois, where most of the agricultural industry remains at a corporate scale. The ability of the consumer to connect their actions to the local economy and local producers may be increased within the context of New Hampshire. However, despite this difference, overall CSA motivations for joining may be much more universal that we think and far less reflective of any regional context.

CSA members in New Hampshire also report higher degrees of community attachment compared with those in Central Illinois. They feel much more "at home" in their community and would be much less pleased to leave if they had to move. This may reflect the generally more rural character and larger degree of smaller communities within New Hampshire as compared with Central Illinois. Although the three CSAs in Central Illinois are in a very rural county, most of the members reside in a more urbanized region with a combined population of about 120,000.

Analyses of demographic data reveal that only income, education, and age were statistically significant in relation to motivations for joining a CSA, and even then

the significance was limited to a few motivations. As for education, the data showed that those with lower levels of education placed more importance on accessibility and affordability of food, as well as a desire to support the local economy. There was almost a linear relationship in the decrease of importance of these motivations as education levels rose. CSA members with lower incomes were more motivated by the overall quality of the food and how it was produced (in terms of organic, no genetic engineering, less packaging). Nevertheless, those motivations again dropped almost linearly as income rose.

These findings have potential implications for the marketing of CSAs and the continued development of this alternative food/economic system. The minor differences in community attachment between CSA members in New Hampshire and Central Illinois, combined with almost no differences in motivations and environmental values and the similarity between these results and those in prior studies indicates that there is the potential for considerable commonalities in CSA member profiles and their motivations for involvement across geographic regions. In contrast there is marked diversity in why CSA members join CSAs within communities, and CSA operators and researchers can apply this information in several ways. First, this information may be valuable to producers and those who market CSAs by giving them common themes that can be emphasized concerning benefits of CSAs. For example, given the strong support for motivations that seem to cluster around concern for healthy, organic food, CSA producers may emphasize the quality of their food products and how they are produced to entice new members to join. An ability to convey how their production processes work in concert with the ecological systems rather than trying to dominate them may also help to draw in additional members who share that same belief and value. However, CSA marketing efforts must also be sensitive to the fact that while these factors are common, they do not account for all CSA participants. The additional findings on motivations can be used to more effectively communicate to audiences with whom different, specific messages may be more effective.

As for community building and social capital, the findings are far less consistent or significant. The importance of community building and development of social capital are not widely considered significant motivators for joining a CSA, nor are they perceived to be particularly important benefits of membership. However, the importance of community attachment in relation to specific motivating factors, such as a desire to develop a stronger sense of community and a desire to support local growers, is significant. This may imply that broader community development efforts aimed at increasing the quality of life in the community and building a

stronger sense of community attachment may have positive benefits for the further expansion and development of local CSA efforts by motivating individuals to participate as another way to enhance their overall community experience and wellbeing. In addition, it is possible that this could be a very important motivation, but one that is simply not commonly recognized today, which can be addressed by educational and marketing outreach.

This research clearly supports many findings of previous works identifying important motivations for joining a CSA, and also reveals that motivations for joining CSAs are related to sentiments about respondents' broader community and community attachment. This work also supports the arguments made by Feenstra (1997) which emphasized the interconnectedness of a healthy food system and a vital and sustainable community, but clarifies that CSA members do not believe their involvement produces social capital directly through their interactions with other members. A useful next step in this examination would be to conduct a broader comparative study utilizing data from the general population to understand better how these results may or may not be generalized beyond those that already belong to a CSA to identify further how CSAs affect their communities.

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