Research Article Open Access

Addressing Marketing Issues for Community Supported Agriculture Using Community-Based Social Marketing

Kelsey Hall*

Utah State University, USA

Abstract

More farmers are meeting consumers' demands for locally grown food by selling their agricultural products through community supported agriculture (CSAs). CSAs experience a high annual attrition rate of their shareholders. The researchers administered an online survey to shareholders of three [state] CSAs to identify their motivations, their attitudes and values toward the environment, and their level of community attachment. Shareholders desired fresh food products free of pesticides and desire to support local community members who grow food. For environmental attitudes, shareholders believed humans abuse the environment and the balance of nature is delicate and easily upset. Communicators and farmers could use the information to develop community-based social marketing campaigns that recruit new individuals to join a CSA and retain existing shareholders. Additional research was needed to identify additional factors that influence [state] shareholders, such as eating behaviors, social capital, and demographic characteristics.

Keywords: Community Supported Agriculture; Motivations; Environmental Attitudes; Community Attachment; Community-Based Social Marketing; Survey

Introduction

More farmers are selling agricultural products directly to consumers through farmers' markets, roadside stands, and community supported agriculture (CSAs) [1]. CSAs are a type of direct-to-consumer agricultural enterprise where a farmer makes the management decisions, but shareholders pledge support by purchasing either a full share or half share of a portion of the products harvested on the farm [2]. The share price can cover operating costs, taxes, insurance, housing, or the farmer's labor [2]. In years with disastrous yields or poor weather, shareholders receive limited produce while the farmer still receives a living wage. In years with good yields, shareholders receive more produce, and the farmer receives a better living wage. Shareholders may pick up their share at the farm, while other CSAs deliver shares to a centralized location, a farmers' market, or the home [3]. Most CSAs offer a variety of vegetables, fruits, and herbs; some CSAs also provide shares in eggs, meat, milk, baked goods, fiber, honey, beeswax, and firewood [2].

US consumers have shown their interest in local foods by purchasing produce through a CSA [4-10]. Information on who buys local food and their motivations would help farmers improve their marketing efforts [1]. Many farmers have equated marketing with selling their products rather than having a clear understanding of consumers' wants and needs [11]. Marketing to consumers' wants and needs is considered the most important factor that determines the success of an alternative agriculture enterprise like a CSA. New shareholder recruitment and retention has been a challenge for CSAs [12,13]. In the 2014 season, more CSA operators indicated that new shareholder recruitment was more challenging for CSAs located in the northeast and southeast in the United States. Urban CSAs also indicated more recruitment challenges in comparison to CSAs in rural areas [14]. Little to no research has used consumers' motivations for joining a CSA, level of community attachment, and their use of communication channels to develop a community-based social marketing campaign for recruiting individuals to join a CSA and to retain existing shareholders.

Motivations to Join a CSA

Fishbein has established relationships between an individual's beliefs of attributes of an object and the formation of the individual's overall attitude toward the object [15]. His work has provided evidence that an individual's attitude toward an object is positively associated with the individual's intentions to use the object [16]. Attitudinal characteristics were factors for explaining consumers' motivation to join a CSA in the United States [4,7,9,10]. One of the major motivations related to quality traits in food, such as fresh, organic, and seasonal. Fifteen members of a CSA in the northeast indicated that having organic, fresh, tasty, seasonal produce grown by a local farmer was the most popular reason for joining the CSA [7]. Almost all respondents from the Roxbury Farm CSA reported that receiving fresh vegetables (99%) and eating organic vegetables (93%) were either very important or important in their motivation for joining the CSA [9]. Respondents also indicated they joined the Roxbury Farm CSA because they wanted to consume seasonal vegetables. Similarly, members of eight CSAs in the Twin Cities area of Minnesota indicated availability of organic foods, desire for fresh produce, and desire to eat vegetables in season as motivations [4]. Members of two CSAs, located in Ithaca, New York, ranked freshness as the most important trait considered in their decision to join a CSA, followed by locally grown and organically grown [5]. The two most common motivations for joining the From the Group Up CSA in Maryland were wanting locally grown produce (86%) and organic produce (84%) [8]. Research has indicated that health concerns also motivate consumers to join CSA. When ask about the benefits of

*Corresponding author: Hall K, Assistant Professor, Utah State University, Agricultural Systems, Technology and Education Department, 2300 Old Main Hill, Logan, UT 84322-2300, Tel: (435) 797-3289; Fax: (435) 797-4002; E-mail: kelsey.hall@usu.edu

Received December 12, 2016; Accepted December 14, 2016; Published December 15, 2016

Citation: Hall K (2016) Addressing Marketing Issues for Community Supported Agriculture Using Community-Based Social Marketing. J Mass Communicat Journalism 6: 322. doi: 10.4172/2165-7912.1000322

Copyright: © 2016 Hall K. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

joining, CSA shareholders in Missoula, Montana, said it was important to do something good for their health [6]. Shareholders of the Redwood Roots Farm CSA in Humboldt County were concerned with healthy food for themselves and society at large [17]. Limited research has been conducted to examine the relationship of environmental concern and local food production. Specific environmental issues motivating consumers were soil erosion, fossil fuel dependency, pesticide contamination, and depletion of wetlands, prairies, and wildlife habitat [18]. Hassanein [6] reported that 82% of CSA shareholders in Missoula, Montana, said supporting efforts to protect the environment was a benefit gained from their membership. Environmental concerns for members of eight CSAs in the Twin Cities area of Minnesota included concern for a healthy environment, knowledge of how and where their food was grown, and their desire to reduce packaging [4]. Additionally, researchers have revealed a relationship between motivations to join a CSA and general environmental attitudes, using the revised New Ecological Paradigm (NEP) scale [19]. The revised NEP had statistically significant relationships with respondents' strong desire to reduce packaging of food products, for food free of pesticides, to support sustainable agriculture practices, and for food products that are not genetically engineered.

Community-Based Social Marketing

Community-based social marketing (CBSM) is a strategy for fostering sustainable behavior in agriculture [20]. CBSM is founded on the belief that personal contact at the community level is the most effective approach to change sustainable behaviors, such as eating locally grown food from a CSA [20]. This approach involves (1) selecting a sustainable behavior, (2) identifying barriers and benefits to performing the sustainable behavior, (3) designing strategies that uses behavior change tools that address the barriers and benefits, (4) piloting the strategies with a small segment of a community, and (5) implementing the sustainable behavior on a broader scale and evaluating the behavior change once it has been adopted in the community. Communicators must first recognize the barriers and benefits to performing a sustainable behavior, understand these barriers differ among community residents, and discover what motivates community residents to engage in sustainable behaviors [20]. Communicators use these tools to develop a strategy to remove the barriers and enhance the benefits of performing the sustainable behavior: commitment, social norms, social diffusion, prompts, and communication. Commitment begins by asking for individuals to voluntarily agree to a small request and then following up with the larger request. Commitment for doing a sustainable behavior should be sought by individuals interested in the behavior. When possible communicators should help the individuals to view themselves as environmentally concerned [20].

Social norms can influence an individual's ability to engage in a sustainable behavior [20]. Individuals are more likely to be influenced by the behavior of those who are similar to themselves. Social networks (informal and formal) can increase individuals' cooperation for achieving a mutually beneficial behavior, develop strong norms of acceptable behavior, convey their expectations to one another, establish reputations for keeping promises, build trust, and facilitate communication/flow of information [21]. Informal social networks include family, friends, and neighbors. Formal networks include relationships formed through work, institutions, or associational memberships, such as business groups, financial groups, youth groups, religious groups, cultural associations, parent groups, school committees, sports groups, service group, professional associations, and trade unions [21,22]. Social diffusion, or the diffusion

of innovations, is a process by which conversations with trusted individuals, who are perceived as similar to themselves, influence adoption of sustainable behaviors. Social networks are an important component for determining social diffusion, especially family, friends, and colleagues. Prompts are an effective behavior change tool because they remind individuals to perform the sustainable behavior [20]. Either a visual or auditory prompt serves as a reminder to engage in a sustainable behavior that individuals already perform. These prompts are not meant to increase an individual's knowledge or change his or her behavior. Communicators should combine the use of prompts with commitment strategies and social norms to encourage individuals to act on the prompts. Communication is a tool of CBSM used to capture the attention of the target audience in order to initiate behavior change [20]. Communication efforts include the use of messages, credible sources, personal contact, modeling, and community leaders. Persuasive messages influence individuals' attitudes and behaviors [20,23]. However, communicators need to know the intended audience's attitudes, beliefs, and behaviors before crafting persuasive messages. These messages need to be tailored to the different segments of the community to be effective. Additionally, effective messages need information that is vivid, concrete, and personalized. Vivid information is more likely to be recalled at a later time because the information stands out against other information. How the information is framed is also important. Most sustainable behaviors can be framed positively or negatively. Marketing research indicated that messages emphasizing negative motivations to engage in sustainable behaviors or losses as a result of inaction are more effective than positive messages [20]. Messages delivered through personal contact from credible sources are more influential on forming individuals' attitudes and behaviors than mass media coverage [20].

This study fills a gap in the knowledge of the factors influencing [state] consumers to join a CSA, particularly their motivations, their environmental attitudes and values, and their community attachment. The following research questions were used to guide the quantitative data collection:

- 1. What motivates shareholders to join a CSA?
- 2. What are the shareholders' environmental attitudes?
- 3. What is the level of community attachment CSA shareholders have with their communities?
- 4. What is the relationship between shareholders' motivations to join a CSA and their use of communication channels to seek information about food choices?

Materials and Methods

The instrument used for this study was part of a larger descriptive, collective case study used to explore the marketing strategies of three CSA owners and the factors influencing their shareholders to join a CSA in [state]. This collective case study used a mixed methods design to collect and analyze quantitative and qualitative research data concurrently but separately as a way to better understand the research problem [24]. For the quantitative data collection, the researcher contacted identified 120 CSA owners in [state] from the Local Harvest's website. Local Harvest maintains the most comprehensive searchable database of CSAs in the United States [25]. Sixty-four listings did not have active phone numbers or discontinued CSA programs. These CSAs were determined to be an inaccessible group. The remaining 62 [state] CSAs from the database were used as the population for the study. Three out of the 62 CSA owners agreed to participate in the

study. CSA 1, located near [city], has approximately 50 shareholders. CSA 2, located in a rural community in [city], has 83 shareholders. Eighty-two of those shareholders had e-mail addresses; however, only 39 shareholders for CSA 2 had working e-mail addresses. CSA 3 is in a rural community near [city] and has approximately 120 shareholders.

The data collected from three sections of the researcherdeveloped questionnaire was used in preparing this manuscript. One section of the questionnaire used items from previous instruments [4,19,26) to indicate how strongly shareholders agreed or disagreed (1=strongly disagree to 5=strongly agree) with 17 statements about their motivations for joining a CSA. The researcher used the revised New Ecological Paradigm Scale [27] to measure shareholders' level of agreement with seven statements measuring their attitudes and values toward the environment on a 5-point Likert scale (1=strongly disagree to 5=strongly agree). Respondents rated their level of involvement with eight types of local groups by providing the number of such groups they belonged to or volunteered with, ranging from zero to 10. Categories of local groups were formed using questions from previous instruments measuring social capital [28,29]. Religious or spiritual groups included churches, mosques, temples, informal religious groups, and religious study groups. Cultural groups referred to ethnic-based groups, arts, music, theater, festivals, film, and dance. Youth organizations included sports teams, scouts, FFA, 4-H, Boys and Girls Clubs, and school activities/clubs. Parents' associations included PTA, PTO, and other school support or service groups, including home school. Respondents were asked their level of involvement in adult sports teams or clubs. A professional association related to trade, farm, business, doctors, lawyers, teachers, veterans, and labor unions. A service group involved Lions Club, Rotary International, Kiwanis, woman's club, alumni groups, and college fraternity or sorority. Political groups were considered political action groups, political clubs, or party committees.

A panel of experts comprised of faculty and graduate students in agricultural education and communications established face and content validity of the instrument. After using the panel's comments to revise the questionnaire, the instrument was submitted for approval by [the university's] Institutional Review Board. Prior to administering the questionnaire to the study's sample, the researcher conducted a pilot test with shareholders of two CSAs to establish reliability of the researcher-developed questionnaire. The Cronbach's α value from the pilot test was 0.90 for the motivations to join scale. The scale measuring environmental attitudes had a Cronbach's α of 0.81.

The researcher collected data through an online survey to members of three CSAs in [state] using SurveyMonkeyTM. The researcher created the e-mails and online survey that the CSA owners sent to their shareholders. As the first contact, CSA owners sent a pre-notice e-mail to their shareholders requesting assistance with completing the questionnaire. CSA owners sent an e-mail with the link to the online survey as the second contact. CSA owners sent a third e-mail to thank their shareholders for responding to the questionnaire and remind others who had not. A total of 85 online surveys were returned for a response rate of 41%. The researcher imported the data into SPSS® 18.0 for WindowsTM PC. The researcher handled non-response rate to the online survey by using the Fisher's exact test [30]. No significant differences were found between early and late respondents for ethnicity, employment situation, marital status, ownership arrangement, and the number of children under 18 living in their households. Descriptive statistics described shareholders' motivations for joining a CSA and environmental attitudes. Spearman's rho correlation coefficients indicated relationships between specific information channels and the motivations to join a CSA construct. The results presented in this study are cumulative of the three CSAs.

Results

Question 1: What motivates shareholders to join a CSA in [state]?

As seen in Table 1, the highest rated motivation was the desire for fresh food products (M=4.78, SD=0.64). The second highest rated motivation was tied between the desire to support local community members who grow food (M=4.73, SD=0.92) and the desire for food free of pesticides (M=4.73, SD=0.72).

Question 2: What are the shareholders' environmental attitudes?

Respondents had the highest level of agreement (M=4.64, SD=0.53) with the statement that "despite our special abilities humans are still subjects to the laws of nature" (Table 2). Respondents agreed that "humans are severely abusing the environment" (M=4.27, SD=0.89). The third highest environmental attitude was that "the balance of nature is very delicate and easily upset" (M=4.23, SD=0.76).

Question 3: What is the level of community attachment CSA shareholders have with their communities?

The highest ranked statement was "I feel 'at home' in my community" (M=3.76, SD=0.93). Respondents reported a mean of

Statement	М	SD
Fresh food products.	4.78	0.64
Local community members who grow food.	4.73	0.92
Food that is free of pesticides.	4.73	0.72
Support sustainable agricultural practices.	4.69	0.76
Locally grown food products.	4.69	0.71
Support my community's local economy.	4.61	0.72
Know where and how my food is grown.	4.58	0.79
Organic food products.	4.53	0.79
Eat food products that are in season.	4.47	0.81
Food that tastes better than what I can find in a local grocery store.	4.45	0.92
Food products that are not genetically engineered.	4.33	1.03
Reduce packaging on my food products.	4.33	0.89
Affordable food.	4.27	0.96
Develop a stronger sense of community.	4.24	0.89
Food that is easily accessible.	4.16	0.90
Meet new people who care about where their food comes from.	3.49	0.93
Health reasons/conditions that require this kind of food products.	2.41	1.28

Note. The scale was 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly Agree.

Table 1: Motivations for Joining a CSA (n=51).

Statement	n	М	SD
Despite our special abilities, humans are still subject to the laws of nature.	47	4.64	0.53
Humans are severely abusing the environment.	48	4.27	0.89
The balance of nature is very delicate and easily upset.	47	4.23	0.76
Plants and animals have as much right as humans to exist.	49	4.20	0.94
If things continue on their present course, we will soon experience a major ecological catastrophe.	50	3.98	1.02
When humans interfere with nature it often produces disastrous consequences.	47	3.98	0.99
We are approaching the limit of the number of people the Earth can support.	48	3.67	1.31

Note. The scale was 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly Agree

Table 2: Respondents' Environmental Attitudes.

3.68 (SD=1.05) for their level of agreement with the statement "My neighbors would be very helpful if I had a personal emergency or crisis." The lowest-ranking statement was that respondents did not think the connections made with other CSA members would be useful if there was an important issue facing their community (M=2.66, SD=1.20).

Respondents indicated their involvement in eight different types of local groups. As seen in Table 3, many respondents (n=25, 51.0%) were involved in professional associations or cultural groups (n=23, 46.0%).

Question 4: What is the relationship between shareholders' motivations to join a CSA and their use of communication channels to seek information about food choices?

Table 4 showed the relationships between the shareholders' use of 11 information channels and the summated average of the motivations to join construct. The motivations to join a CSA construct had a significant relationship with print publications (r_s =0.49, p<0.01) and e-mail (r_s =0.43, p<0.01).

Discussion

Findings from this study have potential implications for developing marketing practices for CSAs located in [state] communities. The information was organized by the components McKenzie-Mohr [20] included in a community-based social marketing (CBSM) campaign, specifically using the identified benefits in their messages, identifying social norms, seeking commitment, and writing effective messages.

Identifying barriers and benefits of joining a csa

FoodRoutes Network, a national non-profit organization supporting local, community-based food systems in the United States, suggested marketing campaign ideas derive from consumers' attitudes and behavior toward consuming locally grown food [31]. Communicators should refer to shareholders' motivations for joining to more effectively target the type of consumer who would be likely to join

a CSA. Many of the motivations for joining a CSA in [state] related to food quality traits and environmental concerns, particularly the desire to reduce packaging on food products, to use sustainable agricultural practices, to consume non-genetically engineered food products, and to consume food products free of pesticides. Shareholders in this study desired locally grown, fresh food, supported local community members who grew food, and supported their community's local economy.

CSA shareholders from three CSAs in Illinois and three CSAs in New Hampshire indicated their motivations for joining using the same 17-item construct from this study [19]. Respondents from those CSAs in Illinois and New Hampshire also had a strong desire for fresh food, for food free of pesticides, for locally grown food products, to support local community members who grow food, and to support their community's local economy [19]. Survey responses from shareholders of two CSAs in Ithaca, New York, ranked freshness as the most important motivation and locally grown as the second most important motivation for joining a CSA [5]. The motivations concerning food quality traits—fresh, organically grown produce—were also important to CSA shareholders in the Northeast [7]. Similarly, 99% of the respondents from the Roxbury Farm CSA indicated that receiving fresh vegetables was either very important or important [9]. In contrast to the food quality traits, concerns related to building social networks via the CSA and motivations based on specific health conditions were less important motivations for joining the CSAs in [state], Illinois, and New Hampshire [19]. Respondents from the three [state] CSAs expressed neutral agreement with the desire to meet new people who care about where their food comes from. [State] CSA shareholders disagreed that specific health reasons/conditions required this kind of food products. Similarly, CSA shareholders in Illinois and New Hampshire agreed they desired to meet new people who care about where their food comes from and held a neutral opinion that specific health reasons/ conditions required this kind of food [19].

Local Group	N	Yes		No			
		F	%	f	%	Range	
Religious or spiritual group	50	20	40.0	30	60.0	0-10	
Cultural group	50	23	46.0	27	54.0	0-9	
Youth organization	49	16	32.7	33	67.3	0-9	
Parents' association	50	11	22.0	39	78.0	0-9	
Adult sports team or club	48	11	22.9	37	77.1	0-8	
Professional association	49	25	51.0	24	49.0	0-7	
Service club	50	11	22.0	39	78.0	0-8	
Political group	49	16	32.7	33	67.3	0-8	

Table 3: Respondents' Involvement in Local Groups.

Information Channel	Motivations for Joining Construct (r _s)
Print publications (fliers, newsletters, brochures)	0.49**
E-mail	0.43**
Presentations at local organizations	0.40**
Direct mail	0.40**
Cooperative extension (agent, website, materials, events)	0.33*
Events (on-farm, farmers' markets)	0.29
Websites	0.26
Local newspaper	0.24
Local broadcast (television, radio)	0.23
Interpersonal (fellow CSA members, friends, family, neighbors)	0.15
Social media (Facebook, MySpace, Twitter)	0.01
cial media (Facebook, MySpace, Twitter)	0.01

^{*}p<0.05 **p<0.01

 Table 4: Relationships between Motivations for Joining CSA Construct and Information Channels.

Social norms

One way to measure social norms is to ask individuals about their values held because the responses provide a sense of norms held by a community or a group [32]. The motivations individuals have for joining a CSA can represent their social norms. CSA owners could administer an online survey to shareholders to determine their shareholders' motivations for joining then share that information through the preferred information channels to help shareholders realize their norms.

Respondents' agreement with the seven statements from the New Ecological Paradigm Scale construct could explain that these individuals were gaining awareness of the material effects an industrialized country has on the environment [33]. These [state] CSA shareholders shared a similar environmental concern as the consumers in rural and urban areas of England when making food choice decisions [34]. Weatherell et al. [34] explained that consumers with an increased awareness of and concern for conventional industrialized systems and their impact on the environment were interested in buying local foods or engaging in sustainable food systems. Environmental concern might be related to consumers buying organic food and locally grown food [35]. These consumers might have notions that local food systems are environmentally sustainable [36,37]. It was recommended to create marketing strategies for local foods based on environmental awareness.

Commitment

Trust was an important characteristic that could impact commitment to adopting sustainable behavior, such as joining a CSA [20]. McKenzie-Mohr [20] explained that shared environmental attitudes and concern promoted commitment to a sustainable behavior because the shareholders had common values and norms. A way for potential shareholders to build trust and commitment to a CSA was by having the CSA owner help potential shareholders view themselves as environmentally concerned [20]. A CSA owner could use the environmental attitude statements to build trust. This trust could help potential shareholders trust each other and the CSA owner, allowing them to work together and support a local food movement in their community.

Respondents disagreed that connections made with other CSA shareholders would be useful if an important issue faces their communities. Two of the [state] CSAs offer a limited number of events at the CSA farm, while one CSA does not provide any social opportunities for its shareholders. Since shareholders can pick up their share at the CSA farm or a drop-off location, they have less interaction with each other and less opportunity to build trust and a social network. The limited contact and lack of trust among shareholders could prevent owners from retaining shareholders in their CSAs. The results of this study indicate that many respondents belonged to professional associations, cultural groups, or religious or spiritual groups. CSA owners might find new shareholders from these local organizations, use involvement in these local organizations to identify social norms and behaviors of shareholders.

The fourth research question determined the relationships between the use of 11 information sources and the summated average of the motivations to join a CSA construct. Significant relationships existed for motivations to join a CSA and print publications, e-mail, presentations at local organizations, direct mail, and cooperative extension. Through the use of brochures, CSAs educate consumers at farmers' markets about CSA membership and recruit new

shareholders. A brochure, along with other print publications, is an information source that can contain messages that emphasize the most important motivations for joining a CSA. All three CSAs used e-mail to communicate with current shareholders about weekly pick-up of the share, items in the weekly produce share, recipes, and updates about the farm. In the current study, CSA owners primarily used e-mail and their websites to communicate with their current shareholders. While e-mail was an effective information channel for existing shareholders, respondents to the shareholder survey rarely used e-mail to search for food choice information. It seems that CSA owners might need to use other information channels to CSA owners could deliver presentations to local organizations about the reasons for joining a CSA, and in return, expand and create new social networks for recruiting potential shareholders. Extension was an information source with a significant relationship with the motivations to join a CSA construct. An Extension agent might promote the local food movement and membership in a CSA to residents in the county if CSA owners introduced themselves and invited the agent to the CSA farm. Extension agents could conduct programs or workshops at the CSA farms or share information with residents.

Information sources provide social networking opportunities with the CSA owner and among shareholders. According to Hinrichs [38], the creation of social relationships is important to the formation and maintenance of local food systems. Information sources can help residents discover CSAs in their area, recruit potential shareholders, and enhance relationships among current shareholders. If these information channels communicate about the specific motivations for joining a CSA, they can help grow and strengthen CSAs.

Communication

Persuasively written messages have the intent of influencing an individual's attitudes and/or behaviors [20]. When recruiting potential shareholders, a community-based social marketing campaign might need to persuade potential shareholders to adopt a different lifestyle. A good way to capture potential shareholders' attention was through recruitment messages that focused on shareholders' motivations for joining, knowing that potential shareholders may share these same motivations. CSA shareholders desired fresh food products, to support local community members who grow food, food free of pesticides, to support sustainable agricultural practices, and for locally grown food products. CSA owners should continue to emphasize the attributes of the farm, such as locally grown, organic, and fresh since those were motivations for joining a CSA. These motivations have already encouraged membership from their shareholders, so messages about the motivations for joining a CSA could entice similar individuals to join. Food Routes Network recommended increasing consumption of locally grown products by increasing awareness of where to find locally grown food, delivering messages about why purchasing locally grown products is important, and removing barriers toward buying locally grown products [31]. Shoppers were more supportive of buying local products after learning the benefits of sustaining their communities and local economy, and supporting local farmers [34]. Furthermore, messages need to relate back to shoppers' values and attitudes toward locally grown products. Weatherell et al. [34] recommended creating marketing strategies for local foods based on the environmental benefits.

Recommendations for Future Research

Results from this study provided opportunities for future research. This study used the motivations to join CSA construct previously used in a study of CSA shareholders in Illinois and New Hampshire. The 17 items had a Cronbach's α of .90 on the pilot test, which is considered an acceptable value. However, further research should explore if shareholders have additional motivations for joining. Furthermore, more research is needed to test and refine the motivations to join construct. Factor analysis with a larger sample size would indicate if the motivations to join construct has subscales. An exploratory factor analysis would determine which of the 17 items form a construct for further use in questionnaires. Exploratory factor analysis would also reduce the number of items in the construct to a more manageable size. Much of the previous research has surveyed or interviewed current shareholders to discover their motivations and environmental attitudes. A useful next step would be to conduct a broader study that collects data from a general population in one community, multiple communities, or a region of the United States.

This study focused on three factors for joining a CSA: motivations, environmental attitudes, and community attachment. Researchers could identify other factors that influence an individual to join a CSA. A study could reveal the demographic and socio-economic characteristics that the shareholders in the three [state] CSAs share. Studies concerning CSA membership in the United States have shown that many shareholders have the common characteristics of gender, ethnicity, and level of education. Other characteristics revealed in these studies included age, household structure, number of children in household, income, political affiliation, length or residency, and location of residency. When designing a CBSM campaign, CSA owners should know about the audience interested in joining. CSA owners could more efficiently invest their time and marketing efforts by knowing the demographic characteristics of individuals interested in joining a CSA.

References

- Low SA, Adalja A, Beaulieu E, Key N, Martinez S, et al. (2015) Trends in U.S. local and regional food systems. United States Department of Agriculture.
- Brown C, Miller S (2008) The impacts of local markets: A review of research on farmers markets and community supported agriculture (CSA). Am J Agric Econ 90: 1296-1302.
- Woods T, Ernst M, Ernst S, Wright N (2009) 2009 survey of community supported agriculture produces. University of Kentucky, USA.
- Cone CA, Myhre A (2000) Community-supported agriculture: A sustainable alternative to industrial agriculture? Hum Organ 59: 187-197.
- Conner DS (2003) Community supported agriculture pricing and promotion strategies: Lessons from two Ithaca NY area farms. Department of Applied Economics and Management, College of Agriculture and Life Sciences, Cornell University, Ithaca, NY, USA.
- Hassanein N (2004) Locating food democracy. 67th Annual Meeting of the Rural Sociological Society. Sacramento, CA, USA.
- 7. Kelvin R (1994) Community supported agriculture on the urban fringe: Case study and survey. Rodale Institute Research Center, Kutztown, PA, USA.
- Lang KB (2010) The changing face of community-supported agriculture. C&AFE 32: 17-26.
- Polimeni JM, Polimeni RI, Shirey RL, Trees CL, Trees WS (2006) The demand for community supported agriculture. JBER 4: 49-59.
- 10. Zepeda L, Li J (2006) Who buys local food? JFDR 37: 1-11.
- 11. Adam K, Balasubrahmanyam R, Born, H (1999) Direct marketing. Appropriate Technology Transfer for Rural Areas, NCAT, Butte, MT, USA.
- Bregendahl C, Flora CB (2006) The role of collaborative community supported agriculture: Lessons from Iowa. North Central Regional Center for Rural Development, Iowa State University, IA, USA.
- 13. Kolodinsky JM, Pelch LL (1997) Factors influencing the decision to join a community supported agriculture (CSA) farm. J Sustain Agr 10: 129-141.

- Woods T, Tropp D (2015) CSAs and the battle for the local food dollar. JFDRS 46: 17-29.
- Fishbein M (1967) Readings in attitude theory and measurement. John Wiley, New York. USA.
- Ajzen I, Fishbein M (1980) Understanding attitudes and predicting social behaviour. Prentice-Hall Inc.
- Buckley JK (2009) Food, land, and community: A social movement in Humboldt County. Humboldt University, Berlin, Germany.
- Hassanein N (1999) Changing the way America farms: Knowledge and community in the sustainable agriculture movement. University of Nebraska Press, Lincoln, NE, USA.
- Brehm JM, Eisenhauer, BW (2008) Motivations for participating in communitysupported agriculture and their relationship with community attachment and social capital. J Rural Soc Sci 23: 94-115
- McKenzie-Mohr D (2011) Fostering sustainable behavior: An introduction to community-based social marketing. New Society Publishers, Canada.
- Putnam RD (1993) Making democracy work. Princeton University Press, NJ, USA.
- Krishna A, Shrader E (1999) Social capital assessment tool. Conference on Social Capital and Poverty Reduction, The World Bank, Washington, USA.
- Kennedy AL (2010) Using community-based social marketing techniques to enhance environmental regulation. Sustainability 2: 1138-1160.
- Creswell JW, Plano Clark V (2007) Designing and conducting mixed methods research. Sage Publishing, CA, USA.
- 25. http://www.localharvest.org/
- Hara SUO, Stagl S (2001) Global food markets and their local alternatives: A socio-ecological economic perspective. Popul Environ 22: 533-553.
- Dunlap RE, Van Liere KD, Mertig AG, Jones RE (2000) Measuring endorsement of the new ecological paradigm: A revised NEP scale. J Soc Issues 56: 425-441.
- Narayan D, Cassidy MF (2001) A dimensional approach to measuring social capital: Development and validation of a social capital inventory. Curr Sociol 49: 59-102.
- 29. Saguaro Seminar (2000) The social capital community benchmark survey.
- 30. Ary D, Jacobs L, Razavieh A, Sorensen C (2006) Introduction to research in education. Wadsworth, Belmont, CA, USA.
- Greenberg Quinlan Rosner Research (2002) Report on building support for buying local.
- Stone W (2001) Measuring social capital: Towards a theoretically informed measurement framework for researching social capital in family and consumer life.
- Catton WR Jr, Dunlap RE (1980) A new ecological paradigm for post-exuberant sociology. Am Behav Sci 24: 15-47.
- 34. Weatherell C, Tregear A, Allinson J (2003) In search of the concerned consumer: UK public perceptions of food, farming and buying local. J Rural Stud 19: 233-244.
- 35. Pederson LH (2000) The dynamics of green consumption: A matter of visibility. J Environ Pol Plan 2: 193-210.
- Lea E, Worsley T (2005) Australians' organic food beliefs, demographics and values. Brit Food J 107: 855-869.
- Storstad O, Bjorkhaug H (2003) Foundations of production and consumption of organic food in Norway: Common attitudes among farmers and consumers? Agr Hum Values 20: 151-163.
- Hinrichs CC (2000) Embeddedness and local food systems: Notes on two types of direct agricultural market. Journal of Rural Studies 16: 295-303.