

# The (un)making of “CSA people”: member retention and the customization paradox in Community Supported Agriculture (CSA) in California

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## Highlights

Former CSA members say the share not meeting their needs is a top reason for leaving.

However, CSA share customization has no effect on CSAs' retention rates.

Together these findings are the *customization paradox*, to be investigated further.

"CSA people" are those willing and able to subject themselves to CSA's requirements.

CSA people can be cultivated, but structural processes are eroding the population.

# The (un)making of “CSA people”: member retention and the customization paradox in Community Supported Agriculture (CSA) in California

## Abstract

Community Supported Agriculture (CSA) faces substantial challenges in increasingly saturated and competitive markets that highlight their localness. Retention of members is crucial for the model to provide benefits to farmers; otherwise, excessive losses of members requires considerable recruitment efforts and undercuts farmer well-being. We conducted statewide research on CSAs in California, including surveys of 409 former members, 1,149 current members, and 111 CSA farmers to examine former members' reasons for leaving. We answer three questions: How do former and current members differ in their satisfaction with CSA? Why do former members leave their CSAs? And, does share customization increase retention rates? Examining the datasets together shows what we call the *customization paradox*: while it appears that former members' primary reasons for leaving could be addressed by offering them share customization, from the farm-level data we find that offering share customization has no effect on CSAs' retention rates. The discussion offers three hypotheses to further examine the customization paradox, and argues for a deeper theorization of CSA people to understand the limitations of choice as a strategy for member retention. We conclude with specific routes that CSAs can take, individually and collectively, to retain members and cultivate CSA people.

**Key words:** Community Supported Agriculture (CSA); member retention; retention rates; former CSA members; CSA people; alternative food networks (AFNs)



## **i. Introduction: the challenge of retaining CSA members**

Direct marketing, and alternative food networks (AFNs) more generally, are supposed to cultivate solidarity between consumers and producers through socially embedding the economy (DuPuis and Goodman, 2005; Hinrichs, 2000). Much has been written to this effect, from the celebratory (Lyson, 2004) and the critical (Guthman, 2008; Winter, 2003). Here we examine the making and unmaking of “Community Supported Agriculture (CSA) people” — those willing to subject their preferences to a single, farm-based market outlet directly tied to the seasons. Specifically, we analyze current and former member satisfaction with their CSAs, former members’ reasons for leaving, and whether share customization enhances member retention.

CSA is a relationship established between a farm and a supporting community of members. Upon starting in the United States in the 1980s, the relationship required a season-long commitment by members, paying in advance for a regular (usually weekly) share of a farm’s bounty, and sharing the risks of production so that if certain crops did not produce, members would not receive them (Henderson and Van En, 2007). The number of CSA operations has grown rapidly since, to many thousands of operations serving hundreds of thousands of members (Galt, 2011). While often romanticized, “few [CSAs] are really sharing the burdens of food production or the embodied experience, but are providing a pleasant and thoroughly necessary brand of subscription farming” (DeLind, 2011: 6).

Retaining members from season to season is a crucial aspect of CSA, and is becoming more central to the future of CSA. Many of CSA’s benefits to farmers — knowing the size of demand, potentially

reducing the effort needed to sell one's produce compared to other market channels, and having a loyal customer base — require high retention rates.<sup>1</sup> As Huntley (2016) notes, “[a] high retention rate makes the life of the CSA farmer easier in marketing, it points to a happy customer base who will recommend the farm, and it creates conditions where farm profitability may exist.” Low retention rates undermine a core element of the CSA model: reciprocity with consumers that the farmer can count on into the future.

A number of processes make retention challenging. In some regions, direct marketing saturation creates increasing competition from other direct marketing channels and other CSAs (Galt et al., 2016). Additionally, other market channels — often termed industrial organic — increasingly mimic some aspects of CSA, but without much, or any, social embeddedness (Lockie et al., 2006). Food delivery services like Blue Apron and Amazon Fresh promise to connect the consumer to fresh, local produce while the firms prioritize profit maximization through the potential for high profit rates from local and/or organic food. This process of mimicry by powerful food companies has impinged upon CSA for years now. Delind (1999: 7) notes the challenges of CSA members not actually needing their CSA: “Members can find food elsewhere .... Likewise, there is no necessity to abide personal dislikes and discomforts. ... Neither do we have a local tradition or a culture history to fall back on.” Thus, CSAs have to work harder as more convenient options mimic them.

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<sup>1</sup> We conceptualize *retention rate* as the annual rate of retention — the percentage of members who are the same from the start of one year to the end of that year — which is the inverse of *turnover rate* or *attrition rate*.

While the early decades of CSA saw almost constant growth in overall membership numbers, data from California show that during the Great Recession a larger number of CSAs experienced declines or stagnation in membership (Galt et al., 2011; Galt et al., 2012). Recent popular articles have titles like “When Community-Supported Agriculture Is Not What It Seems” (Moskin, 2016), about imposter CSAs, and “CSA, We Have a Problem” (Huntley, 2016). In the latter, Simon Huntley, who runs Small Farm Central, a company that supports CSAs with software and other services, notes that “many farms are reporting declining CSA sales, though I should note that this decline has not yet shown up in our data” (Huntley, 2016).

Here we use data from our statewide research project on CSA in California to answer three questions relevant to retention: How do current and former members differ in their satisfaction with CSA? Why do former members leave their CSAs? And, does share customization affect member retention rates, as other studies and the former member data suggest? We use data from three statewide California surveys — of current CSA members, former CSA members, and CSA farmers — to answer these questions. We hope to illuminate the broken link between CSAs and their former members. This can shed light on the impetus for the growing demand for food delivery services that mimic CSA, and answers calls to bring more consumer perspectives into the literature on AFNs (Tregear, 2011).

Below we present a new finding: the *customization paradox*. Our data and many smaller studies show that former members leave largely because the product mix of their CSA share did not meet their needs, either due to lack of variety, unfamiliar produce, etc.; thus, being able to customize their share seems the best response to retain most members who would otherwise leave from lack of choice.



However, our farm-level data show that there is no statistical association between a CSA's retention rate and offering share customization. The customization paradox is that giving more choice about the CSA share does not increase retention rates, even though all indications are that it should. We make sense of this through engaging with the choice theory literature and discussing the importance of actively cultivating CSA people, an undertaking that counters the expectations of food purchasers that grocery stores have cultivated in North America over the last century.

The paper is organized as follows. We first review the literature on former CSA members, then discuss the methods we used to survey current CSA members, former CSA members, and CSA farmers in California. We present findings in three parts corresponding to the research questions above. Our discussion hypothesizes about the customization paradox and calls for an engagement with political ecology to better theorize CSA people. We conclude with the important lessons about why members leave and future research questions.

## **2. Previous research on former CSA members' experiences**

Most research on CSA members investigates members' reasons for joining and continuing members' satisfaction (Andreatta et al., 2008; Bougherara et al., 2009; Brehm and Eisenhauer, 2008; Cone and Myhre, 2000; Cox et al., 2008; DeLind, 1999; Durrenberger, 2002; Goland, 2002; Hinrichs and Kremer, 2002; Kolodinsky and Pelch, 1997; Lang, 2005; Pole and Gray, 2013; Pole and Kumar, 2015; Shelton, 2012; Shi et al., 2011; Zepeda and Jinghan, 2006). A smaller literature also exists on the health and lifestyle changes members experience, and the benefits that members derive from participation (Brown and Miller, 2008; Center for Integrated Agricultural Systems, 2001; Cohen et al., 2012; Cooley

and Lass, 1998; Hayden and Buck, 2012; Macias, 2008; MacMillan Uribe et al., 2012; Quandt et al., 2013).

The question of who CSA members are demographically has also been explored in some depth.

Studies show that membership is disproportionately white and middle- and higher-income (Cone and Myhre, 2000; Cooley and Lass, 1998; DeLind and Ferguson, 1999; Durrenberger, 2002; Galt et al., 2017; Perez et al., 2003; Schnell, 2007; Shi et al., 2011). Some research has focused on how the CSA model remains inaccessible and/or unattractive for many people of color and those with lower incomes (Bradley and Galt, 2014; Guthman, 2008; Kato, 2013).

The literature on former members and their reasons for leaving is considerably smaller than the above topics. Since we explore the concept of satisfaction in our analysis below, we note that satisfaction does not directly equate to continued CSA participation — since, as we explore in the analysis section, some former members may be satisfied with their CSA but unable to continue participation due to unforeseen external circumstances — but that in the literature, satisfaction is often used as an indicator for likelihood of continuing CSA membership. We also review literature on the individual changes and perceived benefits of CSA membership, and, where possible, we discuss the relationship of these factors with former members' decision to leave their CSA.

Kane and Lohr (1997) explored the relationship between members' satisfaction with share variety and their decision to continue their CSA membership at seven CSAs in the southeastern U.S., using interviews and a survey. They note that “rates of 30-50% turnover are not uncommon for many CSAs

in the U.S.” (Kane and Lohr, 1997: 1). Their phone interviews with new CSA members before and after the season showed that members were excited in spring, but often disillusioned in fall. The perceived monetary value of the share dropped for 64% of the members, largely because expectations were not met, mostly around variety of the share. Their survey found that: (1) members who experienced an increase in the amount and variety of vegetables they ate had significantly higher levels of satisfaction; (2) satisfaction increased with the proportion of the households’ produce needs met by the CSA; and (3) members who were involved in the farm or CSA had higher satisfaction rates. The study emphasizes the importance of getting variety right: “In the spring, new shareholders expressed an apparent willingness and desire to try different vegetables, that is, vegetables other than the ones they were used to eating. Yet it is precisely the variety aspect of the CSA experience that posed the most problems for new shareholders” (Kane and Lohr, 1997: 5). The mail surveys also found that “variety received one of the lowest satisfaction scores” (Kane and Lohr, 1997: 13). They suggest that “new varieties should be offered as *compliments* to, rather than *substitutes* for, the basics” (Kane and Lohr, 1997: 5, original emphasis).

Since then, many other studies have corroborated these findings about the importance of share variety and/or consumer choice to continued CSA participation (Kane 1998 and DeLind and Harman-Fackler 1999, cited in Andreatta, 2000: 47). Goland (2002: 20), doing similar pre-season and post-season member surveys of two CSAs in central Ohio, also found that the likelihood of joining in the future was most strongly correlated with satisfaction with the share variety. As with Kane and Lohr’s (1997) study, the dissatisfaction stemmed mostly from too much of unfamiliar items, and not enough staple

items. Tegtmeier and Duffy (2005: 20) report farmers' perspectives about member dissatisfaction, which echo the findings of the literature from former members: "[t]o improve retention, concerns with too much produce, too much preparation time and lack of choice should be addressed." Perez et al. (2003: 3) also found that issues around choice were "the primary reason given [for leaving] ... .[T]wo-thirds (out of 57 households) of those who did not intend to renew their CSA membership or who were unsure about returning, mentioned something that related to choice or the lack of it. This includes the 44% who gave reasons for leaving that related to product mix."

Some studies have sought to better explain why some members stay and others leave by looking at changes or benefits experienced by CSA participants. A number of studies have shown that continuing members are more likely to experience changes in their behaviors as a result of CSA participation, and these changes are seen positively. Perez et al. (2003: 4) note that "82% of households that experienced a change in eating habits would sign on again, whereas 65% of those without such a change were not likely to rejoin." Bregendahl and Flora (2006) compared benefits received by current members and former members using the community capitals framework. Current members were significantly more likely to experience financial, social, human, and cultural capital benefits compared to former members, and they were more likely to experience collective benefits (e.g., feeling that they helped a local farmer or economy). Their logistic regression model predicting likelihood of staying showed that "members who experienced greater levels of social capital benefits were more likely to stay" (Bregendahl and Flora, 2006: 39), and that "*diversity* of member capital benefits is statistically important in predicting retention" (Flora and Bregendahl, 2012: 342, original emphasis). Feagan and

Henderson's (2009) study of a CSA in Ontario, Canada, found that 36% of members were more committed and knowledgeable, and, as a group, indicated their eating habits had changed in a beneficial way. The other 64% were less committed and were much less satisfied with the value and quality of the share, emphasized the convenience of home delivery, had not visited the farm, did not feel like they got to know the farmers, and had "many negative comments regarding too many vegetables that they did not like/could not use" (Feagan and Henderson, 2009: 214). All of the latter group was either not sure of renewing, or definitely would not renew.

These themes of benefits and differences between current and former members also appear in Russell and Zepeda's (2008) findings, which add important nuance around choice. Their focus group discussions revealed that continuing members liked the lack of choice and associated it with positive behavioral changes related to food preparation habits and diet, increased awareness about seasonality and weather constraints, and more empathy for farmers. The group of former members had a strong preference for self-selecting produce by shopping and generally did not experience behavioral changes. Following upon this, Zepeda et al. (2013) used self-determination theory from psychology to examine whether CSA membership helped fulfill basic psychological needs for autonomy, competency, and relatedness by conducting focus groups with current and former members of a single CSA in Madison, Wisconsin. They interpret the following CSA activities through the framework: "picking up food weekly, volunteering, reading the newsletter, visiting the farm, and encountering others can be viewed as expressions of relatedness; trying new foods reflects autonomy; while cooking more and dealing with disappointment are manifestations of competency" and note that the framework "implies individuals

whose basic needs are unfulfilled are most likely to be unmotivated to perform a given environmental behavior” (Zepeda et al., 2013: 608). They found that participating in CSA enhanced the 18 continuing members’ sense of all three of these psychological needs. However, “all five non-renewing members discussed membership as reducing their sense of autonomy and relatedness, and four of the five mentioned that it reduced their sense of competency” (Zepeda et al., 2013: 610). By focusing on a single CSA, Zepeda et al. (2013) show that individuals experience the same CSA in widely different ways. The authors conclude with the recommendation that CSA farmers could potentially improve retention by enhancing a member’s sense of autonomy, competence, and relatedness, but go on to warn that the extent of the success may be limited. They illustrate this by showing that discontinuing members of the studied CSA were aware of opportunities provided by the farmer to enhance these factors but failed to take advantage of them.

Overall, the literature on why some CSA members leave emphasizes that former members leave mainly due to dissatisfaction with the share, especially its variety and/or their ability to customize it to their needs (Goland, 2002; Kane and Lohr, 1997; Perez et al., 2003; Tegtmeier and Duffy, 2005). This shows that despite the structure of CSA, different people experience the same CSA very differently. Other studies on retention have sought to explain why members experience CSA differently. These studies have shown that members who experience changes perceived as positive are more likely to stay (Feagan and Henderson, 2009; Perez et al., 2003; Russell and Zepeda, 2008), that continuing members experience many more benefits from participation than former members (Flora and Bregendahl, 2012; Zepeda et al., 2013), and that former members report fewer reasons for joining (Landis et al., 2010).

Almost all of these studies have been based upon case studies of one or a handful of CSAs. We decided to cast the net broader by conducted a statewide study to see if the same relationships held across many CSAs and their many populations of members.

### **3. Methods**

#### *3.1. Current and former CSA member surveys*

The data for this paper come from our large-scale study of CSAs across California. We created surveys with mostly closed-ended questions for current CSA members and former CSA members. These were informed primarily by a previous study of CSAs in California that involved interviewing farmers about issues they were facing, in addition to collecting a great deal of other data (Galt, 2013b; Galt et al., 2011; Galt et al., 2012). Farmers raised retention as an issue, so we designed the member surveys to be able to compare current and former members ratings of importance of, and satisfaction with, various CSA attributes, and to ask former members why they left. Issues of demographic representativeness also informed survey creation, as we wanted to be able to examine membership by income, race/ethnicity, and other characteristics (Galt et al., 2017).

We distributed the current and former member surveys in the following way. In the CSA farmer survey (discussed below), we asked if respondents would be willing to share surveys with current and former members. We asked each willing CSA to share links to two online surveys, one for current members and one for former members. These member surveys were open from April 2014 to January 2015, during which time we encouraged the CSAs to remind their members about the survey. For current members, 1,149 complete responses from 41 CSAs were collected. For former members, 409

complete responses from 27 CSAs were collected.

For both of these surveys, determining the overall response rate is not possible because we do not know the total number of CSA members (current or former) in California. It is possible to report response rates at the individual CSA level for current members. Using member number data from the CSA farmer survey, we see that of the 41 CSAs with current members responding, 11 have response rates between 20 and 76%, with an average of 31%. Current member responses from these 11 farms constitute 84.8% of the sample (974 of 1149 responses). The remaining 175 responses are from 30 other CSAs in the state with one to nine member responding for each CSA (and therefore likely response rates are low). We keep these responses in the analysis to represent a broader range of the CSA member population.

Calculating response rates at the individual CSA level is not possible for the former member survey.

We did not ask CSA farmers for the total number of former members they have, nor could we confirm the completeness of the list of former members with which CSA farmers shared the survey.

Nevertheless, as with the current member survey, five CSAs with high response numbers (between 13 and 123) make up 86% of the sample (352 of 409 responses), with the remaining 57 responses are spread over 22 other CSAs (from one to five members per CSA).

The current member survey included sections on reasons for joining, importance of and satisfaction with various CSA attributes, CSA involvement and activities, share value, income and food access, and household demographics. The former member survey included the same sections, with an additional



section on reasons for discontinuing. For those questions asked of both groups, we compared the resulting variables using *t*-tests, and then used more in-depth analysis for specific questions. We also analyzed questions asked only of former members using a variety of techniques.

For the analysis of former members' responses, we removed members who left for reasons completely exogenous to the CSA-member relationship, such as moving out of the service area. To do this we grouped reasons for leaving into a three-part typology:

1. completely exogenous, which are reasons for leaving the CSA-member relationship that are completely unrelated to CSA management choices;
2. mostly exogenous, which are reasons for leaving the CSA-member relationship that have to do mostly with the personal and household circumstances of a member; and
3. endogenous, which are reasons for leaving the the CSA-member relationship that have to do with a members' dissatisfaction with the CSA experience in some way.

We applied the three categories to all 409 former members' responses to determine the relative importance of exogenous, mostly exogenous, and endogenous reasons for leaving. For the 81% of former members who agreed with at least one of the closed-ended responses in the survey question of why they left, we counted members giving only completely exogenous reasons, only mostly exogenous reasons, only endogenous reasons, and a mix of exogenous and endogenous reasons. For the 19% of respondents who did not agree with any of the closed-ended reasons, we coded their open-ended responses to the question, and examined their responses about the gap between importance and

satisfaction, and life circumstances interfering with membership.<sup>2</sup> We combined these analyses to create overall counts as shown in Figure 1. Overall, 32 former members (9%) left for completely exogenous reasons — they moved out of the CSA service area or experienced the CSA ending operation or stopping deliveries to a specific location upon which members depended. Removing them from the analysis makes the former member sample size 377 when we compare former members to the 1,149 current members below.

### *3.2. CSA farmer survey to determine retention rates*

To address our research question of whether share customization influences retention rate, we use data from our California statewide survey of CSA farmers.<sup>3</sup> To determine the survey population, we made a list of all CSAs in the state using internet databases, then verified that each was in operation (for more, see Galt, 2011; Galt et al., 2016). We gathered responses for the CSA farmer survey from July 2013 to January 2014, resulting in 103 responses from existing CSAs and 8 responses from recently discontinued

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<sup>2</sup> This coding revealed reasons for leaving not captured in the closed-ended question. In applying the typology, we found that: 30 left for completely exogenous reasons (21 moved out of the area; 6 experienced changes to finances or travel or domestic situations that required ending participation; and 3 experienced the end of their CSA delivery location); 15 former members left for endogenous reasons (6 experienced low-quality produce or poor service, and 9 were “seasonal members” who join only during spring and summer when the produce they want is available and then discontinue in the winter); 12 left for a mixture of both endogenous and exogenous reasons, as they had low satisfaction generally and experienced life circumstances that interfered with participation; and 12 left for an unknown reason (5 had high satisfaction levels and did not experience life circumstances interfering with participation; 5 turned to gardening or farmers’ markets but did not state why; and 2 participated only because of an external subsidy and left when it ended). These are all included in Figure 1.

<sup>3</sup> A few of the survey respondents are not farmers, but rather hired CSA managers or coordinators of multi-farm CSAs. For ease of presentation, however, we refer to the CSA farmer survey respondents as farmers.

CSAs,<sup>4</sup> for a total of 111 responses from a population that we determined to be 244 in size (for population size calculations, see Galt et al., 2016: 496-7). Of the 111 responses, 80 provided usable information on retention rates and whether they customize their shares. To analyze retention rates and its relationships to share customization, we ran a Pearson's bivariate correlation between them, and also built a multiple regression model. We will report more details of the methods used and all of the relationships examined in a future article.

## 4. Findings

### 4.1. Comparing current and former members

This section compares current members' and former members' experience with CSA, with a focus on satisfaction. Before the analysis, it is important to determine the extent to which current and former members are similar before joining a CSA. Through *t*-tests, we compared variables for current and former members in four areas: demographics, use of subsidized food access, reasons for joining CSA, and enjoyment of food-related activities.

The comparisons are as follows. First, current members and former members are similar populations demographically (see also Galt et al. in press Table 3).<sup>5</sup> Second, we found no differences between

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<sup>4</sup> An additional 34 CSA farmers responded, but we included only respondents answering more than half the questions.

<sup>5</sup> For demographic variables — household size, age, race/ethnicity, gender, education, car ownership — only three of 24 were different statistically. Former members have more members working full time (1.4 vs. 1.3), and current members have more members working part time (0.4 vs. 0.3) ( $p=0.04$  for both), which corroborates findings below that former member households experience more work schedule interference with CSA participation. The other demographic difference is in education, with current members more likely to have graduate degrees (62.3% vs. 54.7%,  $p=0.01$ ).

current and former members' use of subsidized food access such as CalFresh (see also Galt et al. in press Table 4). Third, while current and former members' ratings of reasons for joining CSA are similar overall, there are three main differences (Table 1). Former members place greater value on one individual benefit — convenience — while current members place greater value on two collective benefits — supporting alternative/organic agriculture and farmworker well-being. This is similar to Flora and Bregendahl's (2012) findings about the greater importance of collective benefits to current members. Fourth, our comparison of the enjoyment members receive from six food-related activities showed that current members enjoy all six activities more than former members (see Galt et al., in press Table 1). This suggests that enjoyment of cooking, learning about cooking, etc. might be predictive of continuing membership, as CSA participation likely enhances members' sense of competence in these enjoyed realms (Zepeda et al., 2013).

As we noted in the methods section, we exclude data on former members who left for completely exogenous reasons, as keeping them in creates noise in the data.<sup>6</sup> Below we present these data in three ways: 1) importance-satisfaction analysis for current and former members, 2) logistic regression for

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<sup>6</sup> To examine this, we used *t*-tests (two-tailed, unequal variance assumed,  $p \leq 0.05$ ) to compare the 32 removed former members to all current members regarding importance, satisfaction, and the importance-satisfaction gap for all 13 criteria. There were no significant differences in importance or in gap, while for satisfaction the only difference is the 32 removed former members were significantly more satisfied with *health, dietary, and/or lifestyle impacts from membership* ( $p=0.04$ ). Overall, these 32 former members who left for completely exogenous reasons are as satisfied as current members, so leaving them in the analysis would tilt the former member averages closer to current members, masking some dissatisfaction of former members leaving for more endogenous reasons.

leaving a CSA using various member characteristics as the independent variables (i.e., household and demographic characteristics; conditions interfering with CSA; reasons for joining; enjoyment of food-related activities; and importance of, satisfaction with, and the gap between satisfaction and importance for various CSA attributes), and 3) a comparison of current and former members of customizable CSAs — those that allow their members to configure their share items — with standard CSAs — those with only a standardized box.

#### 4.1.1 Importance-satisfaction analysis

Asking about members' satisfaction with certain criteria should include asking about importance of those criteria, since an individual might be highly satisfied with something that is unimportant to that individual. Thus, we used a modified version of importance-performance analysis (IPA), commonly conducted for retail businesses (Martilla and James, 1977). IPA “generates a clear picture of how important certain elements are in comparison with how satisfying they are to clients or customers” (Warner et al., 2016). It involves selecting a set of criteria to be evaluated by customers, and then asking them to rate the importance of each criteria and their satisfaction with each.

We call our modification of IPA “importance-satisfaction analysis” (ISA). We modify how the four areas of attention for businesses are determined; instead of dividing the data into quadrants according to the grand mean of satisfaction and importance as is commonly done, we use a thick, dashed diagonal line to show the “equator” where importance and satisfaction are equal. We argue that this equator line should act as the cutoff line between criteria for management to address. The area above it, where importance exceeds satisfaction, should be addressed, and the area below it, where satisfaction exceeds

importance, should be maintained. We created four gap regions by drawing lines based on half-step differences: a line above the equator where importance exceeds satisfaction by half a point, and a line below the equator where satisfaction exceeds importance by half a point. These three lines divide the chart into four regions, and for these regions we have used the traditional names of IPA. Overall, ISA retains the same intent and benefits of IPA, but its categories better reflect the correspondences and gaps between importance and satisfaction.

Figures 2 and 3 chart current and former member data, respectively, plotting importance ( $y$ -axis) against satisfaction ( $x$ -axis) as done by ISA.<sup>7</sup> Figure 2 for current members shows no large gaps, which means little could be done to improve their experience. In contrast, Figure 3 for former members shows that, while much is working for former members, five attributes could be addressed to increase their satisfaction: diversity, quantity, choice, quality, and affordability. This suggests that, even with choice — which can affect diversity and quantity — the dissatisfaction with quality and affordability might be attributes CSAs cannot easily make attractive to former members.

Comparing the two ISAs, we see the vast difference in satisfaction between the two groups: everything is below the “Region I: Concentrate here” for current members, while former members have 5 of 13 criteria in that region. In particular, *ability to choose share items/contents* is in “Region I: Concentrate here” for former members, while it is in “Region IV: Possible overkill” for current members. Very

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<sup>7</sup> Table 5 in Galt et al. (in press) shows the ISAs’ raw data comparing current and former members’ ratings of importance and satisfaction and the gap between them (see also Galt et al., 2017: 10).

clearly, not having choice works well for current members, but is a deal breaker for many former members, similar to what Zepeda et al. (2013) found regarding CSA participation's enhancement of current member autonomy and threat to former member autonomy.

#### 4.1.2 Logistic regression

Based on the analysis presented above, we created a logistic regression model that incorporates major differences between the experiences of current and former members (Table 2). The dependent variable is *left CSA*, a binary variable determined by whether the respondent was a current member or a former member. For the independent variables we tested household variables (income, work situations, food access, household ages, etc.); demographic variables for individual respondents (education, race, gender, etc.); conditions interfering with CSA; reasons for joining; enjoyment of food-related activities; and importance of, satisfaction with, and the gap between satisfaction and importance for various CSA attributes.<sup>8</sup> We had to be selective in the use of satisfaction variables, since they are strongly correlated, so we chose those that were strongest in the model and correlated with each other at  $r \leq 0.4$ .<sup>9</sup>

The model we arrived at has a number of significant variables. Based on coefficient size, the variables with the strongest relationship to members leaving are *satisfaction with appropriate diversity of*

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<sup>8</sup> Reasons for leaving for former members could not be included in the model, as the variables did not pertain to current members. Additionally, based on the literature, it would have been productive to test the effects CSA had on current and former members (Perez et al., 2003; Russell and Zepeda, 2008), and the benefits they perceive receiving (Flora and Bregendahl, 2012), but we did not collect detailed data on these aspects for both former and current members.

<sup>9</sup> We used bivariate correlations to examine the multicollinearity of all variables in the model; all  $r \leq 0.5$ , below the “rule of thumb” of 0.6 for multicollinearity problems in regression models (Hamilton, 2006).

*products in the share* and *satisfaction with convenient pickup/delivery location*, followed closely by *transportation interfered with CSA participation* (these last two variables are negatively correlated,  $r=-0.17$ ). Dissatisfaction in these two areas, and interference from transportation issues, lead to a much higher likelihood of leaving the CSA. The next strongest effects are for *importance of ability to choose share items/content* (the more important it is to members, the higher likelihood of leaving) and *satisfaction with ease of communication with CSA staff/farmer* (less satisfaction means more likelihood of leaving). The background variables of *enjoys cooking* and *education level* also have an effect; higher levels of each make members more likely to stay. Overall, the model shows that satisfaction with the diversity of products in the share has the strongest influence, followed by transportation issues, then by members' views of the importance of choice in the share. Enjoying cooking and education appear to be resiliency factors, helping members stay in the face of other challenges.

#### 4.1.3 Satisfaction with customizable CSAs

In this section we compare current and former members of customizable CSAs with members of standard CSAs to examine how choice impacts satisfaction with the CSA. However, there are some important caveats to this analysis. First, we received current member responses from only two customizable CSAs ( $n=118$ ), and former members from only one of these responded ( $n=65$ , and this customizable CSA's retention rate was 66%, slightly higher than the average of 62.9%). Thus, the data on former members of customizable CSAs are from one farm, so we cannot know how representative they are of all former members from customizable CSAs. Hypothetically, if poor customer service in



this one CSA negatively affected members' experiences, their negative responses about the ability to choose share content would not necessarily reflect other CSAs' members' general experience with share customization. Second, the kind of customization this farm offers allows members to substitute up to two items for their upcoming share. This is less customizable than other options offered by a small number of CSAs in California allowing members to customize all products in the box. These caveats mean that the analysis should be considered exploratory, since we cannot assume the representativeness of one customizable CSA.

Table 3 examines ratings of importance of, and satisfaction with, *ability to choose share items/content* by current and former members of the customizable CSA and standard CSAs. Looking first at importance, current members of customizable CSAs rate the importance of choosing significantly higher than current members of standard CSAs (3.6 compared to 2.5,  $p=0.00$ ). Former members of the customizable CSA also rate the importance of choosing significantly higher than former members of standard CSAs (4.0 compared to 3.6,  $p=0.03$ ). These data suggest that share customization was a reason for selecting a customizable CSA, and/or that experiencing share customization led members to see it as important. Turning to satisfaction, current members of customizable CSAs are significantly more satisfied with choosing than current members of standard CSAs.<sup>10</sup> There are, however, no differences between the two former member groups in satisfaction with *ability to choose share*

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<sup>10</sup> For the customizable CSA with former member data, the current member data contains 107 responses about satisfaction with *ability to choose share items/content*. The average is 4.2 — between very satisfied (5) and satisfied (4) — with only 3 indicating unsatisfied.

*items/content*. Thus, despite the customization options they had, former members of customizable CSAs are just as unsatisfied with their ability to choose as former members of standard CSAs are of their ability not to choose.

The reasons former members of customizable CSAs leave begin to highlight a challenging paradox for CSA operators. Rather than choice ameliorating top problems, former members of the customizable CSA agree more strongly with *the product mix did not meet my needs* and *too little diversity in products in the share* as reasons for leaving, compared to former members of standard CSAs (*t*-tests, with  $p=0.03$  and  $p=0.01$ , respectively). Also important is that agreement with *lack of choice about products included* is the same between the two former member groups. Given that former members of the customizable CSA could swap two items of their share, their dissatisfaction with these criteria either means that they wanted to customize the share more, or that they are more broadly dissatisfied with a produce selection limited to what is available seasonally on a local farm. If the second reason is correct, offering more choice within the set of seasonally-available produce will not satisfy these former members.

Overall, the data above show that, while customization works well for current members of customizable CSAs, former members of the customizable CSA saw customization as important, and were generally unsatisfied with their share customization experience. Unfortunately, it is impossible to distinguish the extent to which they left due to (1) being restricted to a set of seasonally-available produce or (2) the kind of share customization of the CSA involved (the ability to swap two items).

#### 4.2. Former CSA members' reasons for leaving

We use various analyses in this section to examine the complex question of why CSA members leave.

Figure 1 shows the results of applying the exogenous/endogenous typology, discussed in the Methods section, to the 409 former member responses. Overall, 38% left for only endogenous reasons, and 41% left for both endogenous and mostly exogenous reasons; these groups are those that might be influenced by CSAs' management decisions. Another 9% who left for mostly exogenous reasons — lack of time to cook, lack of cooking knowledge, and inconvenience of receiving the share — from household circumstances and values. Another 9% of former members left for completely exogenous reasons. Lastly, it is unclear why the remaining 3% left. Although management decisions can affect the first two categories (79% of former members), addressing the reasons for leaving the CSA (e.g., by allowing for customization) cannot prevent all members from leaving, as we explain below.

We applied our endogenous/exogenous typology to Table 4, which shows the reasons for leaving for the 385 former members who answered the closed-ended question: "Why did your household discontinue your CSA membership? Please indicate whether you agree or disagree with the following reasons." Table 4 also includes a correlation matrix of all 11 reasons to show how they interact with one another, discussed below. One variable in Table 4 is completely exogenous: *the CSA stopped operation*. Three variables in Table 4 are mostly exogenous — *lack of time for cooking or processing the food*, *inconvenient to pick up or receive the share*, and *lack of knowledge for food preparation*. All remaining reasons in Table 4 are endogenous to the CSA-member relationship, meaning that CSA management choices directly affect them.

Table 4 reveals that four of the top six reasons relate to share composition. The top three received agreement from more than a third of respondents, and all reflect concern about variety and choice. The top reason was *the product mix did not meet my needs* (47% agreed), while *too little diversity in products in the share* was the third most common reason (35% agreed). It is possible that these two issues could be ameliorated with tackling the second most commonly-cited reason, *lack of choice about products included* (42% agreed; we will examine this below), and the fifth most-cited reason, *lack of choice about quantity and/or frequency* (24% agreed). This last reason, if seen as a choice over the quantity of specific items, reinforces the first three. The correlation matrix shows that these four reasons are all strongly correlated with one another, as well as with other share-specific reasons, including *too low of a value* and *too little food in the share*. These data strongly support what has been identified in the CSA retention literature, that dissatisfaction with share variety, and its corollary of lack of choice, is the main reason former members leave CSA (Andreatta, 2000; Goland, 2002; Kane and Lohr, 1997).

Other share characteristics have to do with produce quantity. Nineteen percent agreed with the reason of *too much food in the share*. This reason correlates strongly with *lack of time for cooking or processing the food*, *lack of knowledge for food preparation*, and *lack of choice about quantity and/or frequency*. This is a logically consistent clustering, and shows the value of correlation matrices as applied to reasons for leaving. The opposite reason for leaving was *too little food in the share* (10% agreed or strongly agreed). This has a distinct correlation pattern with *the product mix did not meet my needs*, *too little diversity in products in the share*, *price per box is too high*, and *too low of a value*,

showing a cluster of reasons around low perceived value.

The payment period is the least important endogenous reason. Only 3% agreed with *payment period is too long* as a reason for leaving. This speaks to the high incomes of former members. However, given the mid- to high-income customer base and our previous findings that lower income consumers tend to be more commitment CSA members (Galt et al., 2017), these data raise questions about how to attract lower-income members in the first place.

Shifting to mostly exogenous reasons, Table 4 reveals that members' responsibilities of getting the share and cooking it are important. *Lack of time for cooking or processing the food* (27% agreed), *inconvenient to pick up or receive the share* (24% agreed), and *lack of knowledge for food preparation* (18% agreed) all impinge upon former members' participation in CSA. These also demonstrate distinct clustering. *Inconvenient to pick up or receive the share* does not correlate strongly with any other reason in Table 4, suggesting that logistical difficulty is its own distinct and important reason for discontinuing.<sup>11</sup> On the other hand, *lack of time for cooking or processing the food* is strongly correlated with *too much food in the share* and *lack of knowledge for food preparation*. *Lack of knowledge for food preparation* is also correlated with *lack of choice about products included*, suggesting that receiving vegetables with which one is less familiar, or which one does not like, goes

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<sup>11</sup> A separate question asked about conditions interfering with CSA participation: work schedules, child care issues, and transportation. Former members are significantly more likely to have experienced each type of interference ( $p \leq 0.01$ ; see Galt et al., in press Table 2). All three strongly correlate with *inconvenient to pick up or receive the share*, likely making them contributing factors to leaving.

hand in hand with lack of knowing how to prepare it. While providing greater choice seems a possible remedy to these challenges, the findings about customization presented above and immediately below suggest otherwise.

#### 4.3 *Share customization and retention rates*

CSA farmers often consider whether certain ways of managing their CSA — i.e., customizing shares, changing delivery frequencies, shortening payment periods, etc. — result in different retention rates. According to the literature and much of our data presented above, the strategy of *share customization* seems likely to help retain more former members. Yet, using our farm-level data from 80 CSAs (13 of which are customizable CSAs), share customization has no correlation with retention rate ( $t=-0.07$ ,  $p=0.27$ ). In other words, for the 16% of customizable CSAs, retention rates are no different from standard CSAs.<sup>12</sup> Additionally, for all OLS regression models we built (not shown here), *share customization* was not a significant independent variable in explaining variation in retention rate as the

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<sup>12</sup> In considering this comparison, it is important to know how similar the two CSA types are. Using bivariate correlations, we compared many variables for customizable CSAs and standard CSAs. Customizable CSAs are no different in product orientation (vegetables, fruit, and livestock) than standard CSAs, and there are no differences between most other variables, including membership size, acres farmed, organic certification, crop diversity, and profitability. Customizable CSAs have slightly lower retention rates than standard CSAs (59.4% compared to 63.2%) but this is not statistically significant ( $t=0.57$ ,  $p=0.29$ ). There are some differences, however. Customizable CSAs are: less likely to share risk with their members ( $t=1.92$ ,  $p=0.03$ ), lower on an index of classic CSA characteristics ( $t=1.71$ ,  $p=0.05$ ), more likely to drop off shares at individual homes ( $t=-2.70$ ,  $p=0.00$ ), more likely to offer different share sizes ( $t=-2.07$ ,  $p=0.02$ ), and more likely to offer add-ons ( $t=-2.89$ ,  $p=0.00$ ). Thus, customizable CSAs also offer other modifications that move CSA toward a customer-oriented model — emphasizing CSAs' market orientation and commodity exchange relation — and away from a farm-member partnership model — emphasizing its radical philosophical nature and risk-sharing equity relation (Cone and Kakaliouras, 1995; Galt, 2013b). More analysis of these changes would be fruitful for teasing apart causes and consequences of offering customization.

dependent variable. These findings correspond well to our analysis of customizable CSA in our sample, which showed that customization does not improve the level of satisfaction amongst former members. Yet these findings also contradict most of the literature, as well as our analysis of why former members leave. We turn to this contradiction below.

## 5. Discussion

This paper is the first to examine why former members leave together with an analysis of whether share customization influences retention rates and member satisfaction. The combined analysis reveals what we call the *CSA customization paradox*: while the literature and our analysis of former member responses strongly suggests that allowing share customization would retain many former members, the retention rate analysis from 80 CSAs shows that share customization does not affect retention rates, which is backed up by data showing former members of customizable CSAs are just as unsatisfied with choice as former members of standard CSAs. We divide the discussion into two parts: we first hypothesize about reasons for the customization paradox, and we then engage with political ecology to theorize CSA people.

### 5.1. *Hypothesizing about the customization paradox*

We propose three hypotheses about the customization paradox to be explored through further research. The first hypothesis is that former members mention lack of choice about items in the CSA share as a reason for leaving, but actually want more choice for non-seasonal produce. This means that CSAs share customization does not, and cannot, please those who leave due to a lack of choice, since it is addressing choice at the wrong level. This could be examined in future studies with additional

questions of former members, asking about out-of-season produce preferences and consumption and the market outlets they currently use to meet their produce needs. More generally, open-ended questions should be asked about whether being tied to a specific outlet with strong seasonality has any downsides.

The second hypothesis is that some ways of offering share customization increase retention rates while others decrease them. There could be an intervening variable at the CSA level — type of customization offered — that we did not measure but that is affecting retention rates of customizable CSAs. This could be examined through CSA farmer surveys that ask questions about retention rates, as we have done here, coupled with specific questions about share customization and specific methods of doing it — such as through Small Farmer Central’s Harvie (Huntley, 2017), Farmigo’s “prefilled editable store orders” and “build-by-credit” options (Farmigo, 2018), or other methods like swapping noted above. A regional or national sample is likely needed for a large enough sample size, as only 16% of our responding CSAs offered customization, and could be done in partnership with one or both organizations offering CSA customizability support.

The third hypothesis is that any gains made in membership retention through share customization are offset by losses of otherwise happy-not-to-choose members who experience the “tyranny of choice” (Schwartz, 2004). This is based on recent advances in choice theory. Rather than more choice leading to higher satisfaction — an ideology behind consumer capitalism — much psychological research on choice shows that too much choice can be paralyzing (Iyengar et al., 2004; Iyengar and Lepper, 2000), and can lead to dissatisfaction with decisions once made (Reutskaja and Hogarth, 2009). Grant and



Schwartz (2011: 68) note that “several studies have shown a nonmonotonic, inverted-U-shaped relationship between the number of options available and both the likelihood of choice ... and satisfaction with one’s choices.”<sup>13</sup> Thus, while share customization may appease some of the population that would have been former members of standard CSAs, it may worsen the experience for the members more sensitive to the burden of choice since “[m]ore choices offer the promise of achieving better outcomes, which means that experiences are evaluated against a higher standard ... . Providing more options ... increases the risk of disappointment” (Grant and Schwartz, 2011: 68). It may indeed be a zero-sum game of pleasing more potential former members and displeasing CSA members who enjoy lack of choice. This hypothesis could be examined by identifying CSAs offering share customization, and engaging them in participatory action research to understand membership composition shifts, and member satisfaction, resulting from customization. Conducting interviews with current and former members of these CSAs could qualitatively examine the positive and negative impacts of share customization, and the point at which customization is experienced as tyranny of choice for different members and whether members express more dissatisfaction with their choices as a result of second-guessing them. The questions could also explore family discord, since individuals with different preferences within families could come into increasing conflict with customization.

## *5.2. Theorizing CSA people*

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<sup>13</sup> Famous food-related studies include the following: “in a gourmet food store, participants who had the opportunity to taste 24 varieties of jams were less likely to purchase jams (3%) than those who had the opportunity to taste only 6 varieties (30%). In a laboratory experiment, participants were less satisfied with the prospect of receiving a box of chocolates, and less likely to select it, when it was part of an array of 30 options than when it was part of an array of 6” (Grant & Schwartz 2011: 68).

We also suggest that future CSA research engage more with political ecology and its theorization of subjectivities to better understand the (un)making of CSA people. By CSA people we mean willing CSA subjects, i.e., people willing to subject their preferences to a single, farm-based market outlet directly tied to the seasons. We draw on Robbins' (2007) theorization of "lawn people" and the substantial literature has developed around subjectivities and the discourses and structures that produce them (Agrawal, 2005; Galt, 2013a; Gibson-Graham, 2006; Guthman and DuPuis, 2006; Jarosz, 2011).<sup>14</sup> Robbins' (2007) work identifies the ideologies and structures that maintain the paradoxical behavior of lawn people: they buy into the cultivation of a lawn, and the toxic chemical use that entails, despite their concerns about the dangers. Applying the idea to CSA people, we can start to identify the ideologies and structures that make and unmake CSA people.

We start below by theorizing how CSAs require certain subjectivities of their members. Members have to like, or at least tolerate, being subjected to the following conditions:

1. Eating what is seasonally available; CSA people must constantly cycle through seasonal foods, rather than a standard set of recipes year round.
2. Lack of choice in weekly produce selection, which means that the CSA, not the member, chooses its share items from the farm. Even with customizable CSAs, seasonality strongly constraints availability. This creates an economic risk for households that their needs or

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<sup>14</sup> We see rational choice theory and subjectivities as two sides of the structure-agency debate, since individuals have agency within a milieu shaped and constrained by ideology and social structures.

preferences will not be met and that the share will need to be supplemented (Galt et al., 2017).

3. Cooking with whole ingredients, rather than with processed or partially-processed produce (e.g., pre-washed salads and cut vegetables). This requires a) substantial household labor, b) a value system that directs this usually-scarce labor toward washing, storing, cutting, and cooking whole produce, and c) stable living situations with access to an appropriately-equipped kitchen.

4. Having to retrieve their produce from different place than where they shop for other food. In some cases this is a small burden — as when shares are delivered to one’s work office or to one’s home — but in most cases it requires an additional trip each week, meaning extra time and transportation access.

5. Paying in advance for produce, requiring reserves of money.

A political ecology perspective also points to structures enabling and constraining CSA people. Jarosz’s (2011: 321) study on CSAs run by women reveals that “we produce our subjectivities through the interconnectivities of our life experiences and how we are positioned within the trajectories of politics, history, ecological and cultural change.” Jarosz’s theorization shows that there can be countervailing forces and structures working as impediments to the making of CSA people. Each of the five above conditions to which CSA people willingly subject themselves go against five strongly held norms and prevailing social trends, and the structures that have shaped them. These are:

1. Year-round availability of produce, starting in the 1980s for most consumers in the United States, due to the boom in new export products from Latin America during North American winters (Freidberg, 2009; Galt, 2014). While a recent historical development, this situation has existed for the majority of most consumers' lifespans.
2. Consumerism based upon the ideology that more choice leads to more satisfaction. With food, seeing choice positively during shopping is about a century old. The first self-serve grocery stores had to train and discipline consumers to choose their own products rather than relying on a grocer behind a counter doing it for them (Christensen, 2016; Patel, 2012). Going against choice in produce selection counters this strong cultural norm successfully cultivated by grocery stores in the last century.
3. The decades-long trends in U.S. food consumption toward eating away from home, and eating more processed food (Briefel and Johnson, 2004; Guthrie et al., 2002). While cooking from whole foods has been valorized since the early 2000s in popular books (e.g., Pollan, 2006), it demands more labor for preparation and cooking from the household, while amount of time spent cooking has been level across income groups since the 2000s (Smith et al., 2013). Thus, although attempts have been made to revalorize cooking, their aggregate impacts on the general population appear minimal.
4. A steady, decades-long decline in the amount of hours allocated to housework (Bianchi et al., 2000), making less household labor available than in previous decades, thereby

cutting into the labor time needed for cooking and food procurement (Bowen et al., 2014). A major reason for this decline is increased labor demands outside of the household due to stagnating real wages, requiring longer hours and/or multiple jobs by wage earners (Bluestone and Rose, 1998; Wisman, 2013).

5. For much of the population, large sums of money needed to pre-pay for produce is not available. This reality is also due to stagnating wages among the lower and middle classes, and more generally a funneling of wealth toward the wealthiest class (Harvey, 2005; Wisman, 2013).

Due to these larger trends, most people are *supermarket people*, a concept that, based on the five attributes above, has more parallels with lawn people than CSA people. Even some who think they might be CSA people do not become CSA people through their participation. Goland (2002: 21) notes that many CSA members in her study “seem unable, or unwilling, to adopt new patterns and behaviors that allow them to eat with the rhythms of the farm.” These members remain supermarket people, and were not able or willing to become CSA people; the level of social embeddedness requires too much commitment and does not work within the severe constraints facing many households.

Thinking structurally means that no matter how much choice is offered through share customization, structural barriers to CSA participation will remain insurmountable for a very large part of the population. Thinking ideologically means recognizing what DeLind (1999: 5) calls “the pervasive market mind set – the tyranny of capital – that overwhelmed [her and her fellow CSA farmers/organizers] and demoralized organizers and members alike.”

Yet, others clearly are CSA people, although they are a small minority. We theorize that certain understandings and values — what we call “resiliency factors” — allow members to be more forgiving of when CSA shares do not meet expectations or continue even when external circumstances reduce their resources and labor available for CSA participation.

1. Valuing a production-consumption system that simplifies choices, rather than seeing this as taking away agency. Many studies (DeLind, 1999; Russell and Zepeda, 2008; Zepeda et al., 2013) have shown that current members experience the lack of choice positively, rather than as a burden.
2. Understanding the difficulties of farming (Russell and Zepeda, 2008) and the ways mainstream markets hide farmers’ and farmworkers’ struggles.
3. Valuing other CSA aspects, including benefits to farmers, farmworkers, and the environment, and personally experiencing these collective benefits as positive (Flora and Bregendahl, 2012: 341). This suggests that CSA people’s value systems are more collectively oriented.

CSA peoples’ value system act as resiliency factors for specific behaviors of current members, especially the “willingness to incorporate the foods provided by the CSA into meals, to use the food bounty distributed by the CSA to drive menu planning” (Goland, 2002: 21), and the other behavioral change that comes from it, which has been found in many studies (Carolan, 2017; Cox et al., 2008; DeLind, 1999; Feagan and Henderson, 2009; Perez et al., 2003; Russell and Zepeda, 2008). They also act as

buffers against situations that threatens members' continued participation, such as interference with allocating household labor and monetary resources toward CSA participation. Experiencing the collective benefits positively allows for resilience of participation; if CSA people do not experience membership benefits individually — which can happen periodically due to the prevalence of certain share items, or a family situation that makes cooking more challenging — they continue membership due to the strength of the positive feelings about the collective benefits.

The stronger the interference of these external conditions with CSA engagement, the stronger one's resiliency factors must be to remain a member. Indeed, Galt et al. (2017) showed that lower-income CSA members in California “are highly committed CSA members,” even more committed than higher-income households in their willingness to pay and their valuing of various CSA attributes. This fits our theorization here: lower-income members need to be more committed CSA people because economic conditions they experience are more likely to interfere with CSA participation. Some CSA people will remain members no matter the struggles they face since their commitment to CSA is so strong. Others' subject positions are not nearly as strongly aligned with CSA, which means that only a small amount of interference can end the membership.

These subjectivities, values, and understandings form an ideal type — CSA people — willing to subject themselves to CSA's conditions, and who possess enough resiliency factors to remain subjected despite challenges. Much future work remains to both cultivate and better understand CSA people, as well as the structures and ideologies impeding CSA participation.

## 6. Conclusion

Our data and the customization paradox show that there is no single optimal structure to CSA shares that will please current and former members. Russell and Zepeda (2008: 144-5) ask, “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 suggests a few routes forward for CSA: (1) meet some members’ demands for choice, (2) seek out CSA people, and (3) cultivate CSA people.<sup>15</sup> We discuss each in turn below.

As noted above, efforts have been underway by the main service providers for CSA in the U.S. — Farmigo and Small Farm Central — to offer share customization. These use sophisticated software to handle members inputting their preferences and/or choices, and to help the logistical side of configuring customized boxes. These service providers should compare the retention rates of farms not using customization with those using customization to see whether the customization paradox exists in their context. If customization does not increase retention rates, as our data show in California, CSA farmers need to know so that time and energy can be spent on other strategies.

Finding CSA people who are not yet part of a CSA is a challenging activity, but might yield additional long-term members. CSA people enjoy food-related activities, have value systems that prioritize collective benefits of CSA in addition to personal ones, experience lack of produce choice positively,

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<sup>15</sup> For other pragmatic suggestions, Docter and Hildebrand (1998) remains relevant.



have regular monetary reserves for pre-payment, and can allocate sufficient household labor to cooking from scratch and learning how to cook novel produce. CSA people also value health and lifestyle changes that involve eating more whole plant foods. On this, Russell and Zepeda (2008: 145) offer a suggestion for recruitment toward “a population poised for behavior change” that “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.” Targeting recruitment this way makes sense, yet the extent to which desire for dietary change corresponds with other attributes of CSA people is unknown.

The cultivation of CSA people seems a promising route, and one that can and does take many forms. Already-existing initiatives and connections in the local food movement — farmers’ markets, events celebrating local agriculture, etc. — arguably help cultivate some aspects of CSA people, although typically in the form of “a highly individualized or personalized resistance — a resistance primarily of consumers — not of citizens” (DeLind, 1999: 8). Cultivating CSA people can be done as a collective effort for all CSAs. CSA began in Japan with citizen reading groups concerned about the ecological and social effects of industrial agriculture; they informed themselves and then established relationships with farmers who would farm agroecologically. CSA farmers, committed CSA members, and their allies should work together at regional, state, national, and international levels to advocate for their needs and create joint efforts to promote CSA and alternative food networks in which they are involved. This should include concerted efforts to make CSAs welcoming spaces for people of color

(Bradley and Galt, 2014; Galt et al., 2017).

Future research opportunities abound. From our initial theorization of CSA people, future work can examine how CSA people are made and unmade. Longitudinal research into what elements of this ideal type exist in people before joining a CSA, and how they are cultivated or not cultivated with membership, would provide insights into subjectivities generally and create actionable knowledge for CSA allies. Retention rates also deserve more attention, including examining whether the customization paradox exists in other contexts. Comparing retention rates between states and regions and relating them to different initiatives that cultivate CSA people is also promising.

On its radical edge, CSA can work to transform capitalism by cultivating subjectivities that move economic relations beyond a transactional approach aimed at individual well-being, and toward an ethic of being-in-common with others (Gibson-Graham, 2006). This is tough work, as it counters the norm of individualized self-interest. In order to truly build community in CSA, we need to “push an already food conscious and environmentally sensitive membership to move beyond their private concerns and actually engage them in new interdependencies, into a more organic existence” (DeLind, 1999: 8). Yet, as more people become less able to make ends meet, it is counterproductive to ask them to expand beyond their own self-interest. Thus, studying the impact of increasing social inequality on people’s ability and willingness to strongly commit to socially-embedded and agroecologically-oriented agrifood systems is important future research, and one that needs to be attentive to race and class and the way these shape participation and exclusion in AFNs and CSA (Alkon, 2012; Galt et al., 2017; Guthman, 2008). Growing inequality means more of the population faces increased structural

impediments to CSA participation we identified above. Thus, in addition to examining the effects of increased competition within local food and from ready-to-prepare boxed-meal providers like Blue Apron (Galt et al., 2016), we must understand growing inequality's contribution to the decline and/or stagnation of CSA membership.

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Figure 1: Reasons for former CSA members leaving, by endogenous and exogenous categories

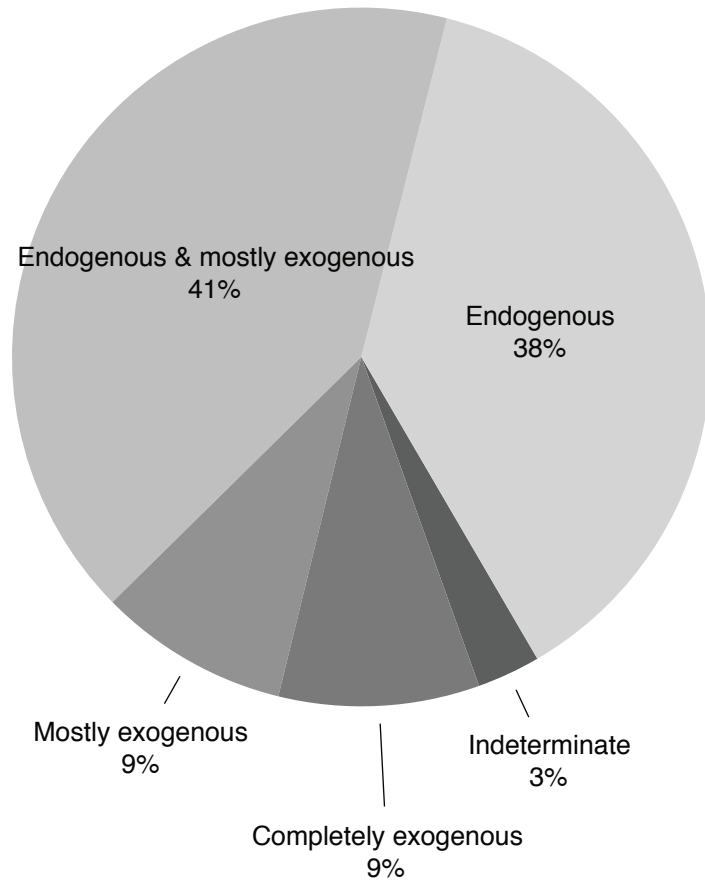




Figure 2: Current members' ISA

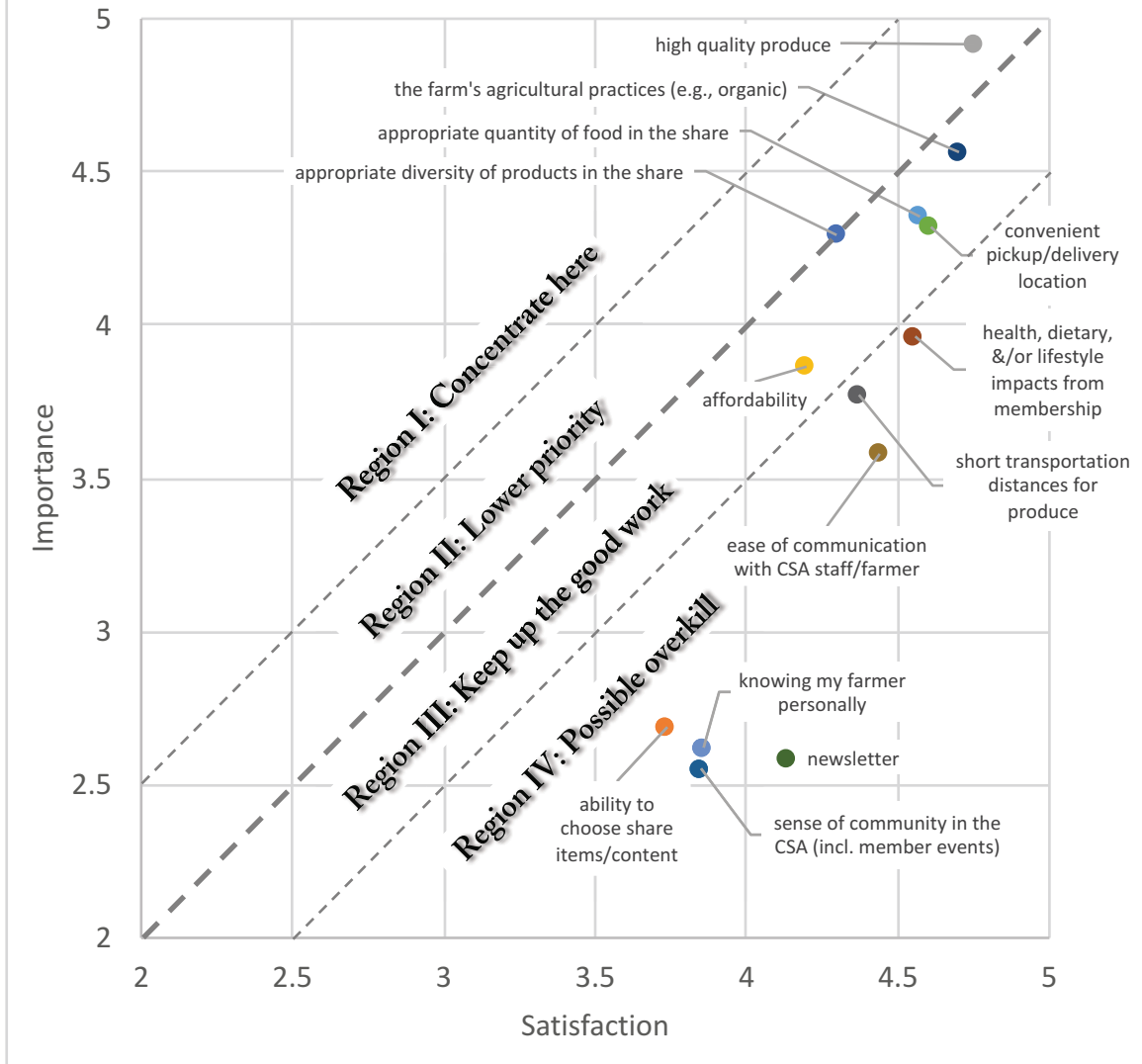
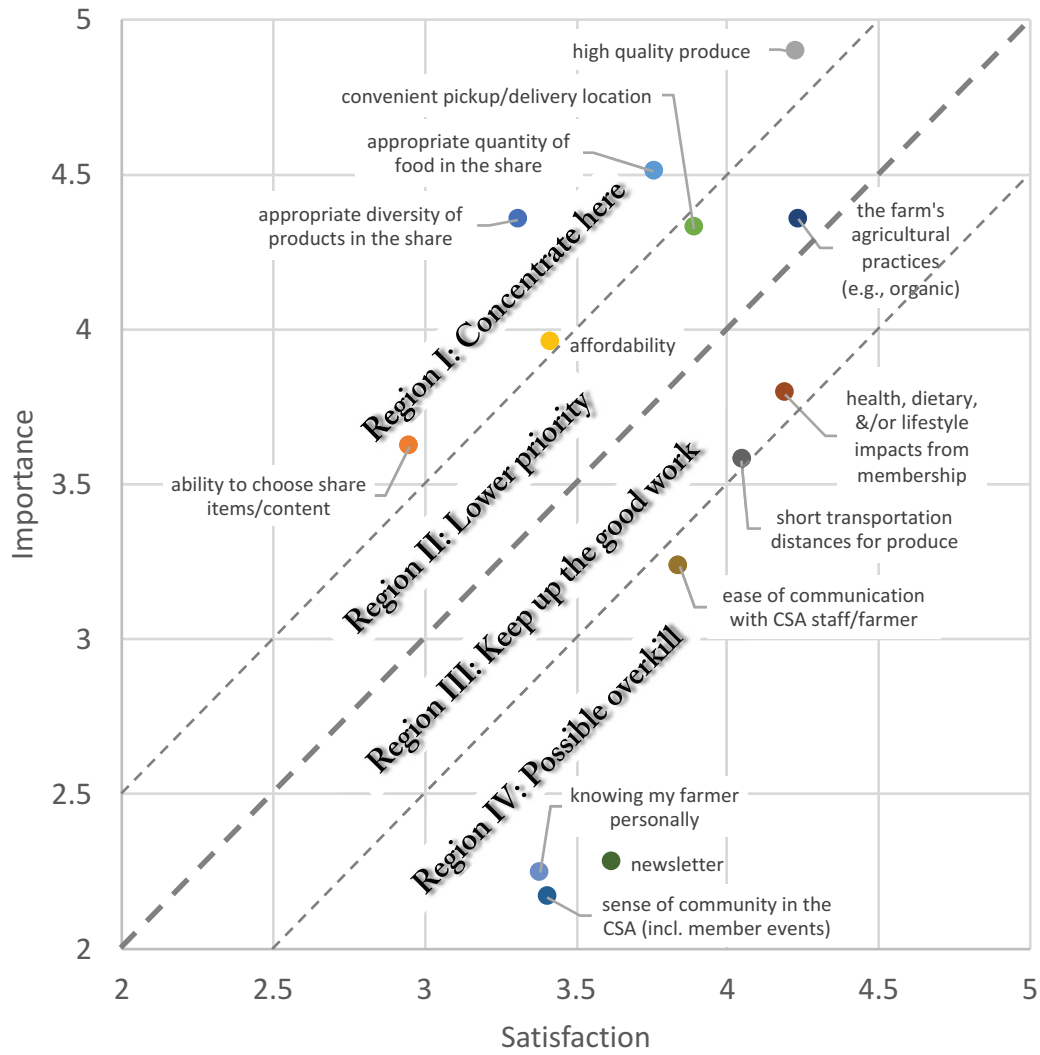


Figure 3: Former members' ISA



**Table 1: Reasons for joining a CSA, former and current members**

Reason <sup>^</sup>	Former	Current	<i>t</i> -tests <sup>^^</sup>	
	Members	Members	<i>t</i>	<i>p</i>
to obtain high-quality, fresh food	8.3	8.3	-0.12	0.90
to improve my health or my family's health	6.6	6.4	-1.42	0.16
to support alternative/organic agriculture	6.3	6.8	2.55	0.01 **
for environmental benefits (e.g. reduce food miles)	6.0	6.2	1.52	0.13
to support local farmers' livelihoods	5.6	5.9	1.47	0.14
to obtain safe food	5.4	5.3	-0.68	0.50
for convenience	5.1	4.5	-2.81	0.01 **
to be part of a community or build community	4.3	4.2	-0.19	0.85
to improve farmworkers' working conditions	3.8	4.2	2.73	0.01 **
to save money on food	2.9	2.9	0.30	0.77

<sup>^</sup> Answers based on 0-10 scale, with 0 the least important and 10 the most important.

<sup>^^</sup> Two-sided, unequal variance assumed.

**Table 2: Logistic regression with *left CSA* as the dependent variable**

Log likelihood, iteration 5 = -444.0

Number of observations = 1,081  
 $Chi^2$  (7 independent variables) = 420.07  
 $p$ -value = 0.0000  
Pseudo  $R^2$  = 0.32

Dependent variable

left CSA

Independent variables	Coefficient		Odds Ratio		z	p-value	Coefficient 95% Confidence Interval		
	Coefficient	Standard Error	Odds Ratio	Standard Error			Interval	Interval	
Importance of ability to choose share items/content	0.57	0.07	1.77	0.13	7.85	0.000	***	0.43	0.71
Satisfaction with appropriate diversity of products in the share	-0.83	0.10	0.44	0.04	-8.56	0.000	***	-1.02	-0.64
Satisfaction with convenient pickup/delivery location	-0.77	0.11	0.46	0.05	-7.19	0.000	***	-0.98	-0.56
Satisfaction with ease of communication with CSA staff/farmer	-0.45	0.11	0.64	0.07	-4.05	0.000	***	-0.66	-0.23
Enjoys cooking	-0.25	0.11	0.78	0.09	-2.20	0.028	*	-0.48	-0.03
Transportation interfered with CSA participation	0.62	0.29	1.87	0.55	2.13	0.033	*	0.05	1.20
Education level	-0.13	0.06	0.88	0.06	-1.97	0.049	*	-0.25	0.00
Constant	7.88	1.06	2636.67	2792.48	7.44	0.000		5.80	9.95

**Table 3: Importance of, and satisfaction with, ability to choose share items/content by former and current members of customizable CSAs and standard CSAs**

	Importance of						Satisfaction with					
	ability to choose share items/content <sup>1</sup>						ability to choose share items/content <sup>2</sup>					
	Customizable		Standard		<i>t</i> -tests <sup>3</sup>		Customizable		Standard		<i>t</i> -tests <sup>3</sup>	
	CSA		CSA				CSA		CSA			
mean	<i>n</i>	mean	<i>n</i>	<i>t</i>	<i>p</i>	mean	<i>n</i>	mean	<i>n</i>	<i>t</i>	<i>p</i>	
Former members	4.0	65	3.6	187	-2.19	0.03	2.9	58	3.0	175	0.47	0.64
Current members	3.6	118	2.5	534	-9.92	0.00	4.2	112	3.6	374	-5.83	0.00

<sup>1</sup> 5=Important AND essential for continuing my CSA, 3.75=Important BUT NOT essential for continuing my CSA, 2.5=Of minor importance, 1.25=Not important

<sup>2</sup> 5=very satisfied, 4=satisfied, 3=neutral/mixed feeling, 2=unsatisfied, 1=very unsatisfied

<sup>3</sup> two-tailed *t*-tests, equal variance assumed

**Table 4: Reasons for discontinuing CSA membership**

Responses to the question: "Why did your household discontinue your CSA membership? Please indicate whether you agree or disagree with the following reasons."^

Reason	Endogenous or Exogenous	Strongly agree or disagree or			Correlation matrix of reasons for discontinuing membership^^													
		Agree	Neutral	Disagree	A	B	C	D	E	F	G	H	I	J	K	L	M	
A The product mix did not meet my needs	Endogenous	46.5%	18.9%	34.6%	A	1.00												
B Lack of choice about products included	Endogenous	41.5%	18.1%	40.4%	B	0.54	1.00											
C Too little diversity in products in the share	Endogenous	34.6%	21.0%	44.4%	C	0.61	0.49	1.00										
D Lack of time for cooking or processing the food	Mostly Exogenous	27.1%	16.5%	56.4%	D	0.30	0.32	0.21	1.00									
E Inconvenient to pick up or receive the share	Mostly Exogenous	24.1%	11.9%	64.0%	E	0.02	0.09	0.04	0.09	1.00								
F Lack of choice about quantity and/or frequency	Endogenous	23.9%	18.4%	57.7%	F	0.38	0.62	0.38	0.28	0.15	1.00							
G Price per box is too high	Endogenous	19.9%	25.5%	54.6%	G	0.26	0.29	0.31	0.16	0.07	0.33	1.00						
H Too much food in the share	Endogenous	18.9%	16.8%	64.4%	H	0.20	0.21	0.24	0.37	0.06	0.31	0.19	1.00					
I Lack of knowledge for food preparation	Mostly Exogenous	17.6%	14.2%	68.2%	I	0.33	0.38	0.19	0.56	0.05	0.27	0.21	0.30	1.00				
J Too low of a value	Endogenous	17.6%	25.6%	56.8%	J	0.43	0.36	0.48	0.06	0.07	0.32	0.58	0.08	0.17	1.00			
K Too little food in the share	Endogenous	10.4%	17.6%	72.1%	K	0.41	0.25	0.38	0.05	0.07	0.30	0.43	#####	0.10	0.57	1.00		
L Payment period is too long	Endogenous	3.2%	20.2%	76.6%	L	0.28	0.28	0.31	0.30	0.20	0.37	0.46	0.27	0.35	0.35	0.29	1.00	
M The CSA stopped operation	Completely Exogenous	2.8%	12.0%	85.2%	M	0.03	0.04	0.10	0.12	0.02	0.10	0.06	0.08	0.13	0.11	0.15	0.24	1.00

^Question was a modified Likert-scale question.

^^Color-coding of the correlation coefficients is by quartile.