Profiling the Natural Food Cooperative Members: Strategic Implications in Terms of Market Positioning and Governance

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Abstract This article contributes to current research by assessing the specificities and key points of differentiation of natural and organic food cooperative members versus customers of private natural food retailers. This is accomplished by identifying and comparing behavioral, attitudinal, and lifestyle characteristics of members and non-members in regard to organic food and sustainable practices such as buying local. Results reveal that food cooperative members are for the most part more "idealistic" than non-members but also identify a duality between idealism and pragmatism among members that could trigger serious governance issues. Consequently recommendations in terms of target market, positioning, communication, customer experience, and governance are determined.

1 Introduction

Popular in the 1960s and 1970s (Wertheim 1976), the "new wave" food cooperatives have experienced renewed interest in the USA fueled by the growing appeal for organic food. Simultaneously, chains such as Whole Foods Market (WFM), Natural Grocers, and Trader Joe's have emerged with sustained growth catering to middle- to upper-middle-class customers. At first glance, both private organic retailers and natural food cooperatives seem to target similar customers interested in purchasing quality fresh food from ethical-minded retailers. Overtime the specificity of the food cooperative model seems to have eroded as those organizations today tend to mimic other health food stores in their assortment and prices. Is this situation sustainable in the long range?

Food cooperatives have a long tradition in Europe starting with the Rochdale Equitable Pioneers' Society in England in 1844 (Lambert 1968). Many consumer

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cooperatives have then been created throughout Europe, but few are still operational unlike retailer's cooperatives which are strongly represented in France (E. Leclerc, Intermarché, Système U), Germany (Edeka), the Netherlands (Spar), Switzerland (Migros), etc. In France, for instance, Coop, a food consumer cooperative, was important till the 1960s with a large number of food convenience stores. Then they could not invest enough in order to follow the hypermarket movement developed by company-owned retail companies or food retailer's cooperatives. And now only four regional Coop food cooperatives are still in business: Coop Alsace, Coop Atlantique, Coop Champagne, and Coop Normandie-Picardie (Clercet and Gouil 2006). Hence one can ponder whether these new food cooperatives can survive in the USA.

Ashforth and Reingen (2014) focused on the difficulty for food cooperatives to stay true to their mission due to the tension exacerbated by the growing competition on traditional grocers between idealism and pragmatism. This is not a new situation; Sommer et al. (1981) had already identified this dichotomy as a potential impediment for survival for consumer cooperatives. Sommer et al. criticized the conclusions reached by Curhan and Wertheim (1972–1973, 1975–1976) who believed that the main motivation for cooperative members was the sense of belonging along with social community identity, while other contemporary authors believed that low price and food quality were the main reasons for joining a cooperative. In view of these results, Curhan and Wertheim (1972–1973, 1975– 1976) were concerned about the long-range survival of food cooperatives based on the competing value of social belongingness. As food cooperatives began to lose their low price advantage and uniqueness in product assortment, they tried to compete with their high-end competitors and started to attract more affluent customers, interested in the hedonic aspects of purchasing organic food. This competitive position was a departure from the traditional core membership of customers focused on social justice with strong community ties. However one may wonder whether this strategy is sustainable when high-end retailers such as WFM are present in local markets.

During the 1970s natural food cooperatives competed on price, food quality, and the availability of specialty items hard to find in regular supermarkets. With the development of large health food chains such as WFM, and the growing presence of traditional grocers in the organic and natural food distribution, food cooperatives needed to reinvent themselves. It is now unrealistic for a food cooperative to use low price as a sole competitive advantage against traditional supermarkets that may offer similar brands at lower prices. Natural food cooperatives are also known for implementing short distribution circuits and to favor local food supplies. However, both WFM and Natural Grocers are also positioning themselves as supporters of local sourcing. How can natural food cooperatives differentiate themselves versus their competition? What are the key motivations of their members?

In this paper, the authors propose to research whether food cooperative members still respond to social engagement values as well as continuing to support idealistic versus pragmatic or hedonic values. According to Zitcer (2015), food cooperatives today are wrestling with several moral challenges that conflict with their founding

principles of social justice and ethical consumption: co-op memberships have become exclusive and attract an elite who can afford to pay high prices and appreciate the food selection of this organizational model. To date few recent academic articles have focused on specificities and points of differentiation of the natural food cooperatives in comparison to traditional grocers and major health food retailers. This paper attempts to fill part of this research gap.

This paper starts with theoretical backgrounds and hypothesis definition. Then after a description of the methodology and the data, results are presented, analyzed, and discussed.

2 Theoretical Backgrounds

In this section food cooperatives are defined within the context of organic and local food products. Various motivations of cooperative members regarding as opposed to idealism and pragmatism are discussed prior to determining a number of hypotheses on the impetus to becoming a member of a food cooperative.

2.1 Food Cooperatives

According to Novkovic (2008), cooperatives serve as "laboratories for social innovation" and promote ethical business practices and social entrepreneurship. Cooperatives have the ability to function through democratic governance since they are owned by members. "The cooperative movement is composed of individuals working in groups and networks to bring people, materials and products together to meet people's needs without pursuing profits over social well-being" Beach (2011). Established at the turn of the twentieth century, the original purpose of the food cooperatives was to provide an outlet for farmers to sell their goods locally at a reasonable price. Grounded in their communities, food cooperatives maintained this tradition during the 1960s and 1970s by establishing themselves in economically challenged areas and acting as a lifeline for families below the poverty level (Gabriel and Lang 2005; Johnston 2008).

The founding purpose of cooperatives, as determined by the Rochdale pioneers, was to join forces to reduce costs (Mercer 1947; Thompson 1994). Therefore retail cooperatives became increasingly popular during difficult economic times but lost momentum during prosperous periods. Prevalent in the 1930s and 1940s, the "supermarket cooperatives" consisting of larger stores with professional management and staff started to compete in the 1960s with the "new wave" cooperatives, called participative cooperatives. These new wave outlets were small entities selling organic or natural food and relying mostly on volunteer labor. They emerged as an alternative model with leftist social movement tendencies. The new wave cooperative memberships have indeed been entrenched primarily on ideological

reasons such as social justice and community empowerment (Cox 1994; Hoyt 1995; Finch et al. 1998).

2.2 Organic Versus Local

Organic food shoppers are not only motivated by health concerns but are also about the environment (Schifferstein and Oude Ophuis 1998; Dimitri and Greene 2002; Harper and Makatouni 2002; Zepeda and Leviten-Reid 2004; Zepeda and Deal 2009; Bartels and Onwezen 2014). Heavy organic shoppers usually want to know the origin of their food and to build relationships with the farmers (Zepeda and Deal 2009). However, Wier et al. (2008) argue that personal values such as being health conscious are more important than social values when making a decision to purchase organic food. Bartels and Hoogendam (2010) argue that health, safety, quality, and hedonic elements are the leading factors for purchasing organic food.

Nie and Zepeda (2011) identified four lifestyle segments to categorize the US food shopper in regard to purchasing organic food: The adventurous segment comprises individuals who are the most active purchasers of organic and local food and are the most frequent purchasers at farmers markets. This group often follows special diets for health or religious reasons and is the most environmentally conscious. This category is younger and many belonging to minority groups. Rational customers who have a higher income are active organic and local food shoppers who are not as involved as the adventurous segment, but are also health conscious and like cooking. The rational group prefers to shop in specialty stores and farmers market. They are typically middle aged and white. Careless consumers are the least likely to purchase organic or local food. This category's primary motivation is convenience. Most do not enjoy cooking. The last segment, named conservative uninvolved consumers, also prioritizes convenience in their purchase decision. This group is occasional purchasers of organic food and is very brand oriented. Although they do not particularly enjoy cooking, they cook frequently due to their lower income level.

Roininen et al. (2006) determined that local and organic food buyers have distinct motives: local food shoppers bought local because it supported the local economy and products are fresher and more trustworthy, while organic shoppers stressed health, safety, and concern for the environment as their main reason for purchasing organic food. Jefferson-Moore et al. (2014) highlighted the fact that organic and local food was somewhat interchangeable in the customer's mind when consumers are not educated about nutrition issues. Similar to organic food, local food was perceived as healthier, more nutritious, and tastier than conventionally sourced food items.

According to Zepeda and Leviten-Reid (2004), local food shoppers are characterized by their concerns for the environment and their community involvement. Zepeda and Deal (2009) determined that approximately one third of the organic shoppers prioritized local versus organic food. This purchase decision stems mostly

from the consumer's distrust for large corporations while maintaining a positive and trusting perception of local farmers. They believe that buying closer to home is safer. Additionally, Jefferson-Moore et al. (2013) argue that consumers most often do not clearly differentiate between local food and certified organic food. Also Jefferson-Moore et al. (2013) found that consumers are willing to pay more for locally grown food, even without an organic label that they do not necessarily trust.

2.3 Trade-Off Between Ideology and Pragmatism

Johnston (2008) defines the modern "citizen consumer" as a consumer with strong environmental awareness who consumes carefully and differently, while the "hybrid citizen consumer" is characterized as a consumer trying to reconcile choice, status, and environmental concerns. She argues however that it is difficult to balance these three consumerist interests and that choice and status usually dominate in a traditional retailing model: these trade-offs are not necessarily attractive to the common natural food consumer who would be more rewarded by choice and status and a "feel good" impression for patronizing a self-positioned ethical and sustainable private retail chain. Various studies (Grunert 1993; Grunert and Juhl 1995; Bartels and Onwezen 2014) indicate consumers who are particularly concerned about social and environmental issues are less likely to have hedonic expectations in their shopping experience compared to other customers.

Paff-Ogle et al. (2004) argue that although consumption seems to act as the key motivator, certain purchases are still influenced by strong social consciousness (Kim and Damhorst 1998; Kim et al. 1999; Ray and Anderson 2000; Domina and Koch 2002; Shaw and Newholm 2002). Paff-Ogle et al. (2004) describe these "social-minded" consumers as "socially responsible, ethical, culturally creative, green and/or environmentally responsible." According to the authors, social identity stems from kinship and attachment to an organization. According to Curhan and Wertheim (1972–1973), cooperative memberships require certain sacrifices from their members in terms of restricted choices and governance uncertainties that could lead to dissatisfaction. Somerville (2007) considers that cooperatives could be characterized by their "institutional" form or their "values." He believes however that the institutional form is not sufficient by itself to distinguish it from other forms of enterprises and that its substance and long-term survival comes from its core values. Brown (2003) considers that cooperatives are a form of social enterprise. Somerville (2007) and Cornforth (1988) argue that over time the cooperative may lose its identity and become similar to other forms of capitalist enterprises. The tensions inside the cooperative may lead to degeneration where the cooperative starts abandoning its founding principles due to weak governance. Commenting on the current revival of cooperative enterprises, Somerville (2007) identifies a new form of enterprise called "community cooperatives." The difference between these organizations and the traditional cooperatives is that they emphasize above all community ownership by requiring employment and residence in a specific

geographic area to become a member. Their main purpose is to enhance the well-being of a community.

2.4 What Are the Motivations to Become a Member?

We examine here the motivations to become a food consumer cooperative member and develop hypotheses. It is important to note that the authors are comparing the motivations of members of food cooperatives to those of individuals who are also regular purchasers of organic food but haven't joined a food cooperative. The hypotheses below are therefore formulated accordingly.

Originally the motivations of members to shop at participatory cooperative were lower prices, quality, and natural foods (Finch et al. 1998), while the reasons to shop at supermarket cooperatives were convenience, low price, and organizational (cooperative) philosophy including consumer protection (Sommer and Fjeld 1983). By contrast, low prices, convenience, and a variety of assortments were the key motives to shop at commercial supermarkets. Today it is increasingly difficult to use those criteria to distinguish between these three forms of organizations. Participating cooperatives have evolved into organic supermarkets, while commercial supermarkets have started to offer organic foods. A number of retailers such as WFM or Natural Grocers are 100% organic and command higher prices. Therefore one may wonder what the criteria are that currently differentiate the members of contemporary food cooperatives from the customers of commercial supermarkets.

According to Wilkins (1996), food cooperative members have a strong preference for locally produced food versus non-members. This preference stems mostly from environmental concerns. Sommer et al. (1983) researched the respective profiles of both participatory and supermarket cooperative members and customers of commercial supermarkets. Reasons to buy local may vary: concerns for sustainability and environmental concerns may come first, while rejection of "industrialized" agriculture controlled by large conglomerates may also be present (Adams and Salois 2010). Additionally, Roininen et al. (2006) stress that organic and local food shoppers have different motivations and that local food shoppers mainly want to support their local community for altruistic reasons, while organic shoppers are mostly motivated by personal concerns. These postulates are used to pose the first hypotheses:

Hypothesis 1 (H1) *Members of food cooperatives are strongly concerned by environmental issues.*

Hypothesis 2 (H2) Buying local food is more important than buying organic products for food cooperative members.

According to Sommer et al. (1983), members in participatory cooperatives were also particularly satisfied with the social atmosphere and the ability to purchase organic products. Similarly, Curhan and Wertheim (1972, 1975) and Bartels and Onwezen (2014) emphasize the correlation between social identification among

members and positive attitudes toward organic and natural food. One can therefore develop the subsequent assumption:

Hypothesis 3 (H3) Social belongingness is the main motivator for joining a food cooperative.

Recently, Marini et al. (2015) showed that integration of consumer cooperatives could lead to a better welfare under some specific conditions compared to profit maximizing retail companies. Hibbert et al. (2003) highlighted the volunteer motivation for participating to a community-based food cooperative for disadvantaged people. One may also wonder if customers are ready to sacrifice hedonic features for their ideals (Grunert 1993; Grunert and Juhl 1995; Bartels and Onwezen 2014) and to potentially pay higher prices to support their values (Zitcer 2015). This leads us to the following hypotheses:

Hypothesis 4 (H4) Food cooperatives' members are more community minded than non-members.

Hypothesis 5 (**H5**) Food cooperative members are more idealistic than non-members and are willing to make sacrifices in order to support their local food cooperative.

Hypothesis 6 (H6) Hedonic features are more important to non-members than to members of food cooperatives.

Hypothesis 7 (H7) Food cooperative members are willing to potentially pay higher prices in order to support their local food cooperative.

Hypothesis 8 (H8) Altruistic values are the strongest behavioral predictors for shopping at a food cooperative.

3 Methodology

The preferred methodology was an empirical research study consisting of a self-administered questionnaire that was implemented as an electronic survey. In order to ensure that all respondents had an interest in natural and organic food, only individuals who regularly purchased organic food were selected for the survey. And to further qualify their responses, the authors also asked respondents to specify how much of their food purchase was made up of organic products.

3.1 Measurements

Scales used in the survey were adapted from the literature and are presented in Table 1. They consisted in the following constructs: community mindedness, green values, health consciousness, value consciousness, local preference, and social belongingness. All were measured on Likert scales of 1–5.

Table 1 Review of the variables selected for the empirical assessment

Selected	To	A dl
constructs	Items	Authors
Community mindedness	I like to work on community projects Active on social or church org. Volunteer work	Wells and Tigert (1971) Lumpkin and Darden (1982) Lumpkin and Hunt (1989)
Green values	Products do not harm the environment Consider environment impact Purchase habits reflect environmental concerns Environmentally responsible Willing to be inconvenienced Willing to make personal sacrifices Willing to stop buying products from polluting companies	Haws et al. (2010)
Health consciousness	Very health conscious Sacrifices to eat healthy Important to know how to eat healthy	Schifferstein and Oude Ophuis (1998)
Value consciousness	Very concerned about low price and product quality Try to maximize the quality I get for the money I spend I like to get my money's worth When I buy organic food I choose stores with the lowest price	Lichtenstein et al. (1993)
Local preference	Local products are more environmentally friendly Local products are healthier Local products taste better The quality is better for local products Local products are cheaper I am ready to pay a premium for local products	Denver and Jensen (2014)
Social belongingness	I like to shop where people know me I try to get to know the clerks I like to shop where the clerks know me	Lumpkin (1985)
	I like to shop at locally owned stores	Gaski and Etzel (1986)

Each of the constructs outlined in Table 1 was tested for reliability using the Cronbach's α values. All were equal or higher than 0.70. The results are presented in Table 2.

3.2 Sample Description

Sample consisted of 88 usable questionnaires evenly distributed, 48 and 40 responses, respectively, between members and non-members of natural food cooperatives. A total of 58 of the respondents were under the age of 40 and 30 over

elected Constructs	Cronbach's α
Community mindedness	0.768
Green values	0.900
Health consciousness	0.768
Value consciousness	0.707
Local preference	0.745
Social belongingness	0.874

40 years of age. The sample was composed of 20 students, while 22 were managers or professionals; another 26 were employees while 20 participants were placed in the other category based upon self-selection. Among the student respondents, 4 were cooperative members and 16 non-members. All respondents were regular purchasers of organic food. It is important to note that in the sample, the cooperative members were slightly older than non-members with 26 members under 40 vs. 32 non-members over 40 years of age.

4 Statistical Analysis

In order to test for differences between food cooperative members and non-members, an independent sample t-test was conducted on the entire sample. Key results are presented in Table 3. Although all respondents had to be regular purchasers of organic food, in order to participate in the survey, the authors wanted to take into consideration the percentage represented by organic products in their overall food purchase and control that factor. The same t-test was therefore conducted on a restricted sample of respondents whose overall food purchase was made up of at least 20% organic products. The findings of this second t-test analysis were fairly consistent between the two samples and are outlined in Table 4.

In both cases, the social aspect of the customer experience is essential to food cooperative members: these customers want to shop at a place where the clerks and other customers know them; they want to engage in relationships and support their community by buying local. They are also willing to pay a premium to support their local food cooperative if necessary. In this circumstance local takes even precedence over the USDA organic label. As a contrast, noncooperative members, who are also regular purchasers of organic food, are however more value conscious and will shop where prices are the lowest. They frequently compare prices across stores and are not as engaged socially. It is also interesting to note that there are no significant differences in terms of community mindedness and health consciousness between cooperative members and non-members. Therefore those two criteria are not distinguishable between food cooperatives and commercial supermarkets. In order to refine the analysis, three additional constructs were developed and tested for reliability: willingness to sacrifice, attitude toward organic food, and hedonic features. Their Cronbach's α scores are all above 0.70 at 0.88, 0.73, and 0.73,

Table 3 Differences between cooperative members and non-members (*t*-test results)

Variables	Member or non-member Y/N	Mean	Standard deviation	Sig.
Community mindedness	Y	3.61	1.004	0.332
	N	3.40	1.049	
Green values	Y	4.31	0.481	0.000***
	N	3.78	0.798	
Health consciousness	Y	4.35	0.476	0.382
	N	4.24	0.610	
Value consciousness	Y	3.81	0.621	0.065*
	N	4.04	0.532	
Local preference	Y	3.82	0.512	0.062*
	N	3.62	0.510	
Social belongingness	Y	3.84	0.670	0.000***
	N	2.99	0.881	
Willingness to sacrifice	Y	4.20	0.44	0.000***
	N	3.70	0.73	
Attitude toward organic food	Y	3.71	0.523	0.019**
	N	3.40	0.686	
Willing to pay a premium for locally grown	Y	3.88	0.815	0.002***
food even without the USDA organic label	N	3.27	0.949	
It is important to me to know the origin of my	Y	4.25	0.700	0.002***
food as much as possible	N	3.60	1.081	
Assortment variety is important	Y	3.21	1.031	0.020**
	N	3.73	1.049	
Will pay a premium to purchase from a food	Y	4.08	0.613	0.000***
co-op versus a regular grocery chain	N	3.05	1.011	
Hedonic features	Y	3.06	0.669	0.042**
	N	2.74	0.779	

Significance values: *P < 0.10, **P < 0.05, ***P < 0.01

respectively. More details about the composition of these three constructs are available in Appendix. All three constructs show statistically significant differences between members and non-members of food cooperatives. In consideration of these preliminary results, the willingness to sacrifice in terms of choice, prices, and/or convenience may be the key differentiator between members and non-members of food cooperatives. Very similar results were obtained by conducting a cross-tabulation analysis on median split values for these respective constructs. The results in Table 5 are consistent with the findings of the t-test analyses and confirm the clear distinctions between members and non-members in terms of values.

The construct "willingness to sacrifice" represents the idealistic aspirations of the respondents. The literature has identified a duality between idealism and pragmatism among organic food purchasers that potentially creates serious governance disparities

Median	Chi-square	C:-
2.67		Sig.
3.67	1.616	0.204
4.00	5.191	0.023**
4.33	0.013	0.909
4.00	2.085	0.149
3.83	4.048	0.044**
3.5	13.372	0.000***
4.00	5.383	0.020**
3.60	3.046	0.081*
4.00	4.826	0.028**
4.00	2.530	0.112
4.00	5.834	0.016**
4.00	5.769	0.016**
3.00	2.272	0.132
	4.00 3.83 3.5 4.00 3.60 4.00 4.00 4.00	4.00 2.085 3.83 4.048 3.5 13.372 4.00 5.383 3.60 3.046 4.00 4.826 4.00 2.530 4.00 5.834 4.00 5.769

 Table 4
 Differences between cooperative members and non-members (median split, chi-square results)

Significance values: *P < 0.10, **P < 0.05, ***P < 0.01

for food cooperatives (Ashforth and Reingen 2014). In order to further research whether this duality was present in this study sample, several dummy variables were created and used to conduct a cross-tabulation analyses. The cross-tabulation analyses yielded the following results: it appears that only 56% of the members of food cooperatives scored high in their willingness to sacrifice (chi-square 0.020). This implies that a small majority has strong idealistic values while the rest of the members may be more pragmatic.

Additionally, the cross-tabulation of the two dummy variables social belongingness and willingness to sacrifice showed that the participants who had low idealistic scores also had low social belongingness scores. Since social belongingness appears to be one of the cohesive factors of a food cooperative, it is worrisome that almost half of the members do not highly respond to concept. There is indeed a moderate positive correlation (0.336, P < 0.05) between those two variables. This shows the duality between the idealists and pragmatists among food cooperative members. Pragmatic food cooperative members are likely to be tempted by commercial supermarkets that may offer better prices and/or better assortment, enhanced atmospherics, or superior convenience.

What is the profile of the respondents who score high on the sacrifice index? After conducting an independent t-test analysis comparing respondents with high and low scores of willingness to sacrifice, the following statistically significant differences appeared. Individuals with high scores are typically less willing to do price comparisons across brands and are not as interested in assortment variety or shopping convenience. Instead these consumers are ready to pay a premium to purchase from a food cooperative instead of from a commercial supermarket; they

Table 5 Differences between cooperative member and non-members (among the higher purchasers of organic food: >20%) (*t*-test results)

Variables	Member or non-member Y/N	Mean	Standard deviation	Sig.
Value consciousness	Y	3.68	0.609	0.040**
	N	4.04	0.564	
Social belongingness	Y	3.91	0.670	0.000***
	N	3.15	0.881	
Willing to pay a premium for locally grown	Y	3.97	0.810	0.029**
food even without the USDA organic label	N	3.39	0.916	1
Will pay a premium to purchase from a food	Y	4.14	0.593	0.003***
co-op versus a regular grocery chain	N	3.24	1.033	

Significance values: P < 0.10, P < 0.05, P < 0.01

 Table 6
 Ranking comparisons between food cooperative members and non-members

	Food cooperative			
Ranking	members	Mean	Non-members	Mean
#1	Health consciousness	4.35	Health consciousness	4.24
#2	Green consciousness	4.31	Value consciousness	4.04
#3	Willingness to sacrifice	4.20	Green consciousness	3.78
#4	Social belongingness	3.84	Willingness to sacrifice	3.70
#5	Local preference	3.82	Local preference	3.62
#6	Value consciousness	3.81	Community mindedness + (organic preference)	3.40
#7	Organic preference	3.71		
#8	Community mindedness	3.61	Social belongingness	2.99
#9	Hedonic features	3.06	Hedonic features	2.74

will also typically choose to shop at a food cooperative of equal price and quality. Fair-trade and GMO-free products are more important to this market segment who is more interested in shopping at locally owned stores, to buy mostly seasonal food and to know the origin of their food. They have a more positive attitude on purchasing organic food. In addition they are more likely to prepare meals from raw ingredients, to be vegetarians, to enjoy the arts, or to garden. Last, social belongingness seems more important to them.

In order to better understand the motivations of the food cooperative members, a ranking according to the mean obtained for each of the key constructs was developed (see Table 6). Health consciousness is the number one value among respondents of both members and non-members of food cooperatives. Environmental issues along with the willingness to sacrifice are rated higher among food cooperative members than non-members. Organic preference and community mindedness are among the lowest rated categories in both groups. Non-members rate value

Table 7 Regression results
("I typically shop at a food
cooperative")

Variables	Full-model	estimates	
	Estimates	t	VIF
Community mindedness	0.135	1.524	1.068
Green values	0.411	4.134***	1.336
Health values	0.023	0.242*	1.265
Value consciousness	0.072	0.797	1.105
Local food attitude	0.191	2.080**	1.136
Social belongingness	0.189	1.980*	1.236
F	9.035		
\mathbb{R}^2	40.1%		
Adjusted R ²	35.7%		
p-Value	0.000		

Significance values: *P < 0.10, **P < 0.05, ***P < 0.01

consciousness as their second highest value and social belongingness as their lowest.

A series of regressions (multiple and bivariate) help to predict participant behavioral intentions such as willingness to shop at a food cooperative or willingness to pay a higher price to shop at a food cooperative. The first model, presented in Table 7, attempts to predict the intention to shop at a food cooperative:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon$$

where:

Y = I typically choose to shop at a food coop

 $X_I =$ Community mindedness

 X_2 = Green values

 X_3 = Health values

 X_4 = Value consciousness

 X_5 = Local food preference

 X_6 = Social belongingness

A second regression was conducted in order to predict the willingness of consumer to pay a premium to purchase from a food cooperative versus a commercial supermarket. Results are presented in Table 8.

Both models displayed a reasonable explanatory power of 40.1 and 42.4, respectively. All the VIF were below 2.0. The variables, as indicated in Table 9, were for the most part non-correlated or moderately correlated.

Both regression models were significant at P < 0.01, and the following constructs were significant predictors for both models: green values, local food preference, and social belongingness. Health consciousness was a statistically significant predictor in the first regression.

After conducting bivariate regressions for the remaining three new constructs, it appears that the attitude toward organic food is a poor predictor of the intention to

Table 8 Regression results ("I will pay a premium to purchase from a food cooperative versus a regular grocery chain")

Variables	Full-model	Full-model estimates	
	Estimates	t	VIF
Community mindedness	0.91	1.043	1.068
Green values	0.343	3.523***	1.336
Health values	0.060	0.638	1.265
Value consciousness	-0.36	-0.410	1.105
Local food attitude	0.243	2.701***	1.136
Social belongingness	0.243	2.596**	1.236
F	9.940		
\mathbb{R}^2	42.4%		
Adjusted R ²	38.1%		
p-Value	0.000		

Significance values: *P < 0.10, **P < 0.05, ***P < 0.01

buy at a food cooperative. The regression is statistically significant (p = 0.016), but the R-square is only 0.066. Similarly preference for hedonic features is a poor predictor. Willingness to sacrifice is however the best predictor with an R-square of 0.363 (p = 0.000).

In view of these findings, the following conclusions can be made in regard to the validity of our hypotheses. Members of food cooperatives are strongly concerned by environmental issues (H1). This hypothesis was verified. The variable "green consciousness" received the second highest rating among food cooperative members. In addition the t-test analysis comparing members and non-members showed that food cooperative members are more environmentally conscious than non-members with a mean of 4.31 versus 3.78 for non-members. This variable was also the strongest predictor in the regression models. Buying local food is more important than buying organic products for food cooperative members (H2). This hypothesis was also confirmed through the t-test analyses comparing members to non-members. Local preference appears to be a significant predictor in both regression models (0.191 and t value of 2.080 at P < 0.05 and 0.243 and t value of 2.701 at p < 0.01, respectively). Social belongingness is the main motivator for joining a food cooperative (H3). This hypothesis was partly validated. Social belongingness is definitely a discriminant criterion between members and non-members, but it does not appear to be the main motivator for joining a food cooperative. Social belongingness is a statistically significant component in both regression models (0.189 and t value of 1.980 at P < 0.1 and 0.243 and t value of 2.596 at P < 0.05,respectively). Food cooperatives' members are more community minded than non-members (H4). This hypothesis was not verified. Although members seem more concerned about local preferences and social belongingness, they do not appear to be more involved in their community through volunteer work or social engagement. Food cooperative members are more idealistic than non-members and are willing to make sacrifices in order to support their local food cooperative (H5). This hypothesis was verified by testing the construct "willingness to sacrifice." This construct combined items stating sacrifices for the sake of the environment, health,

Table 9 Correlations

		Community	Green customer	Health	Value	Local food	Social
		mindedness	values	values	consciousness	attitude	belongingness
Community	Pearson	1	0.165	0.191	0.042	0.137	0.127
mindedness	correlation						
	Sig. (2-tailed)		0.123	0.073	269.0	0.201	0.235
Green customer	Pearson	0.165	1	0.370**	-0.178	0.183	0.328**
values	correlation						
	Sig. (2-tailed)	0.123		0	0.095	0.086	0.002
Health values	Pearson	0.191	0.370**	1	0.136	0.129	0.271*
	correlation						
	Sig. (2-tailed)	0.073	0		0.204	0.228	0.01
Value	Pearson	0.042	-0.178	0.136	1	0.072	-0.029
consciousness	correlation						
	Sig. (2-tailed)	2690	0.095	0.204		0.501	0.784
Local food attitude	Pearson	0.137	0.183	0.129	0.072	1	0.314**
	correlation						
	Sig. (2-tailed)	0.201	0.086	0.228	0.501		0.003
Social	Pearson	0.127	0.328*	0.271*	-0.029	0.314**	1
belongingness	correlation						
	Sig. (2-tailed)	0.235	0.002	0.01	0.784	0.003	

and local support and seemed to be an adequate proxy for testing this hypothesis. Willingness to sacrifice appears to be among the strongest predictors for supporting a food cooperative. This construct is also a differentiation criterion between members and non-members. Hedonic features are more important to non-members than to members of food cooperatives (H6). Surprisingly this hypothesis was not verified. Furthermore, the opposite appears to be true, although the statistical results are fairly weak. This may be explained by the duality between idealistic values and pragmatic values among cooperative members. Certain members may be solely attracted to the ability to purchase certain items not available in commercial supermarkets but may still be attracted to the general shopping experience in natural food retailers such as WFM. Food cooperative members are willing to pay higher prices in order to support their local cooperative (H7). This hypothesis was strongly verified. Members are not as price conscious as non-members. Value consciousness is ranked as the second highest for non-members but is much lower for food cooperative members. Altruistic values are the strongest behavioral predictors for shopping at a food cooperative (H8). This hypothesis was verified in multiple instances. Green consciousness, willingness to sacrifice, local preferences, and willingness to pay higher prices to support the local cooperative seem to be an essential pillar for members of food cooperatives.

In addition to these hypotheses, one may also reflect on the role of health consciousness as a predictor for patronizing a food cooperative. Heath consciousness is actually the strongest motivator for both members and non-members to purchase organic food, and this construct is rated as the highest level for both groups. Health consciousness is not a discriminant criterion between food cooperative and natural commercial supermarkets. It is a point of parity.

5 Discussion

The empirical research conducted by the authors yielded the following results: food cooperative members are in general more interested in developing relationships and prefer to shop where people know them, particularly in locally owned stores. Buying local is important to members who are more willing to make some forms of "sacrifices" to buy homegrown goods such as purchasing only seasonal food, potentially at a higher price. It appears that members are usually less price conscious than non-members. However one may question whether the food cooperative members constitute a homogeneous segment. The findings indicate that there are two distinct segments among the food cooperative members: the idealistic and the pragmatic groups. These members seem to have different motivations for joining a food cooperative.

The idealistic members are willing to sacrifice in order to support altruistic values, while pragmatic members are more interested in the functional aspects of the food cooperative such as its organic product assortments. This duality in membership may be problematic: as described by Ashforth and Reingen (2014), this situation may lead to intergroup conflicts and governance issues. The second concern is that the pragmatic members may be less loyal and could be inclined to

patronize organic commercial supermarkets such as WFM that focus on the customer experience and variety of choices. Food cooperatives should therefore predominantly target "idealistic" members who will strengthen their identity and uniqueness versus the competition. Over time the points of differentiation between food cooperatives and private natural food retailers have eroded. On the one hand, the natural commercial supermarkets offer variety of choices, a high-end shopping experience in a pleasant environment, and hard-to-find gourmet and out-of-season goods. On the other hand, food cooperatives traditionally offered a less enhanced shopping environment, focusing on seasonal goods from local producers respectful of environmental issues. Today, food cooperatives may feel pressured to move away from their roots and to increase their overhead and therefore their prices to compete with private retailers. As a consequence, a local cooperative could stop appealing to their core membership base. Moreover, natural food retailers are also trying to position themselves as stringent defenders of the environment and ardent supporters of local communities and are challenging the food cooperatives on their own turf. Food cooperatives should remain true to their founding principles and reject the urge to mimic the natural food retailers. They should retain their authenticity and simplicity and minimize their overhead costs. It is obvious that the purpose of the food cooperative is more than just providing natural and organic food; it is promoting a certain philosophy of life that is appealing to their core, loyal members. This is their true point of differentiation from the competition. Trying to manage a cooperative as a traditional supermarket is problematic and likely to alienate the "idealistic" members. However current changes such as recent labor law modifications in the USA are also challenging the traditional mode of governance: originally, members were able to volunteer for the cooperative in return for discounts in the store, but this arrangement is under scrutiny as a potential violation of the "fair labor standard act" that regulates minimum wage payments. Trying to avoid potential lawsuits, many cooperatives are now abandoning a practice that was truly distinctive as well as a process to build loyalty and engagement by members. The "idealistic" members seem disturbed by this change which appears to lead to serious dissensions occurring across board members in that regard.

How can the organic food cooperatives adjust to current market demand, increasing competition and changing labor laws while preserving their identity and ability to differentiate from the competition? The answer could vary depending on the intensity of the competition in a given location and the overall market size. In areas where natural food retailers are prevalent, cooperative should mostly attract the "idealistic" segment as their target market remains true to their founding principles by selecting their assortments and processes accordingly. The cooperative becomes a "social" cause where a certain "green" lifestyle is prevalent. In other areas, where market sizes are smaller and without intense competition, cooperatives should try to attract both the "idealistic" and the "pragmatic" segments by paying additional attention to hedonic features as well as by broadening their assortment beyond local products with a special focus on the organic label. These compromises are not without likely disagreements among board members and may become problematic in the long term. This may be the only way for a cooperative to survive in a small market where the membership base is limited or declining.

The following limitations are impacting the current research, and additional research should be conducted: due to the small sample used in this study, in addition, it would be important to collect data in multiple locations, with different competitive landscapes in order to verify the assumptions discussed above. "Willingness to pay" seems to be a critical point for organic product growth, and it could be of great interest for further research.

6 Conclusion

The objective of this research was to understand the motivations of members for joining food cooperatives and to determine whether new wave food cooperatives would be able to differentiate themselves from their competition. The findings confirm and expand the research of Zitcer (2015) and Ashforth and Reingen (2014) that examine the duality between idealistic and pragmatic values among cooperative members and highlight the potential governance issues resulting from this situation. In order to differentiate against competition, food cooperatives should return to their founding principles instead of diluting their focus and resources: this would clearly impact their governance and general business practices.

Appendix: Additional Constructs

Selected	Items	Cronbach's
constructs		α
Attitude toward	Quality is better in organic products	0.73
organic food	Organic products are healthier	
	Organic products are always more environmentally friendly	
	Buying organic is more important to me than buying local	
	goods	
	I am willing to pay a premium to purchase organic food	
Willingness to	It is important to me that the products I use do not harm the	0.88
sacrifice	environment	
	My purchase habits are affected by my concern for our	
	environment	
	I am willing to be inconvenienced in order to take actions	
	that are more environmentally friendly	
	I would be willing to make personal sacrifices for the sake of	
	slowing down pollution	
	I would be willing to stop buying products from companies	
	guilty of polluting even though it might be inconvenient	
	I am prepared to make sacrifices to eat as healthy as possible	
	It is critical to avoid pollution from transportation of goods	
	even if it limits my choices	
	It is important to support the local community by buying	
	locally grown goods even if it limits my choices	

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