

Draft version September 2018

**Motives and sense of belonging of community-supported fishery members.
*The case of Yeu Island, France.***

Debucquet G. ^a, Guillotreau P. ^b, Lazuech G. ^c, Salladarré F. ^{d,b}, Troiville J. ^d

Abstract:

In a Community-Supported Fishery (CSF), members commit to pay a periodic fixed amount to benefit from pre-arranged deliveries of products creating a direct interaction between fishermen and members. With an original survey online of 556 French seafood consumers belonging to the Yeu Island CSF, and additional individual interviews, this research aims at analyzing the sense of belonging to the CSF for its members. Among a large range of motivations, the analysis reveals the existence of three factors: process attributes (environmentally-friendly and local productions), relational aspects (meet people), and economic incentives (quality and quantity). We show through an ordered Probit model that the sense of belonging to CSF is influenced by the relational dimension but not by the process factor. Our results raise the importance of relational consideration on the sense of belonging and probably on the long term sustainability of CSF.

Key words: Community-Supported Fishery (CSF) and Agriculture (CSA); Sense of belonging; consumer motives.

^a AUDENCIA Business School, 8 route de la Jonelière, 44300 Nantes Cedex 3, France

^b Université de Nantes, LEMNA, Chemin de la Censive du Tertre, BP 52231, 44322 Nantes Cedex 3, France

^c Université de Nantes, CENS, UFR de Sociologie de l'Université de Nantes, 340 Rue du Fresche Blanc, 44300 Nantes, France

^d Univ Rennes, CNRS, CREM - UMR 6211, F-35000 Rennes, France

1. Introduction

Community-Supported Agriculture (CSA) or Community-Supported Fishery (CSF) seeks to create a direct relationship between farmers or fishers and CSA/CSF members through regular, pre-arranged deliveries of products (Bolton et al., 2016). Under CSA/CSF arrangements, the risks are shared by the two side. There are multiple market and non-market benefits from these programs (Brinson et al., 2011): fishermen receive higher prices for fish, are guaranteed a stable income, and can activate political and regulatory support through direct interaction with consumers.

As a result, CSAs/CSFs address economic, environmental¹ and social issues echoing among alternative consumers. But while commitment motivations of members are well documented in the case of CSAs (Bougherara et al., 2009; Peterson et al., 2015), little is known about the values shared by members of CSFs or the motivations to accept and deal with some constraints relative to fish delivery and preparation (Campbell et al., 2014). One of the characteristics of both CAS and CSF is to foster a social connection between producers and consumers (Brinson et al., 2011). CSFs remains infrequent in France but the success and the ongoing growth of the first one implemented on the Atlantic coast, is an opportunity to better understand to what extend these alternative consumers are forming a community.

With an original online survey of 556 French seafood consumers belonging to the Yeu Island CSF, and additional individual interviews, this research aims at analyzing the sense of belonging to the CSF for its members. After a literature review on the sense of belonging, its interest and applications in marketing, a focus will be carried out on sociological and cultural factors involved in the specific case of food communities and worth being taken into account in communities supported fisheries. In a second part, methodology and description of the data are presenting. The relationships between the socio-demographic and CSF characteristics of respondents and their feeling of belonging are analyzed. Lastly, a quantitative and qualitative analysis reveals, among a large range of motivations, the existence of three factors: process attributes (environmentally-friendly and local productions), relational aspects (meet people), and economic incentives (quality and quantity). We show through an ordered Probit model that the sense of belonging to CSF is influenced by the relational dimension but not by the process factor. The sense of belonging to a CSF community is not related to environmental or local considerations for members. Our results raise the importance of relational consideration on the sense of belonging to a CSF community and probably on the long-term sustainability of CSF.

2. Literature review

Conceptual framework about sense of belonging

Sense of belonging – or belongingness – may be defined as the experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment (Hagerty et al., 1992) or more generally, as one's feeling of membership and acceptance in a specific group (Good et al., 2012). Membership and acceptance – by opposition to rejection – are the two main and necessary components of belongingness. It may also entail a sense of being valued and accepted by other members.

¹ CSFs often include sustainable fishing practices (resource over-exploitation, habitat destruction, energy, food miles, etc.) (McClenachan et al., 2014).

Community is complex and has various definitions, coming from several disciplines and applied in many different areas. Therefore, these disciplines have built and adapted an appropriate definition and conceptualization to suit to the specific characteristics of their investigations. For example, in medicine and public policy research, community is investigated to explain pathologies and child troubles when they experience the feeling of rejection or exclusion, that is, the impression of not being accepted and valued in a specific community. In sociology and psychology, belongingness frequently serves to explain behavioral differences between genders in terms of power or intelligence representations. Within an economic and marketing perspective, community has been massively investigated in the last thirty years in the relationship with brand. The basic framework hypothesizes that the more a person – a consumer – believes to belong to a brand community, the more he/she will be loyal to this particular brand which consequently should increase positive word-of-mouth and purchases of the branded products. In this vein, many articles have explored consumer behaviors with big brands such as Harley-Davidson, Apple or Nutella. However, brand communities or brand tribe (Arnould et al., 2002) are defined around the central role of the brand that need to be patronized by all members of the community (Muniz and O’Guinn, 2001). This leads to assess that brand community is a specific community and differs from the perspective of the current research.

Community refers to people identity and the conscious and active feeling of being part of a group (Bromberg, 1996). For Kozinets (2002), the community is constituted insofar as symbolism, meanings and consumption patterns are involved and shared. As for the sense of belonging, the participation in a group (e.g., a class for pupils, a fraternity) is a necessary but not sufficient condition when referring to a community. Indeed, the sense of fitting in or being fully accepted (Lambert et al., 2013) is also a requirement. In this perspective, the sense of belonging to a community characterize more a belief than a fact in a specific environment (e.g., literally being physically in or out of a group). We, therefore conceptualize sense of belonging following Good et al. (2012) as one’s personal belief that one is an accepted member of a community whose presence and contributions are valued. Hereinafter, some further considerations in food are highlighting the specificities of food communities and their relationship with the building of food identities.

Sociological and cultural factors underlying sense of belonging to food communities

Determinants of food habits are influenced by objective factors (price, convenience, food availabilities) but also by subjective factors relative to food culture, familial practices and social groups or peers (Rozin et al., 2006). While eaters are widely aware of the impact of objective factors, it is not the case for the subjective factors, as they are in fact a set of values, norms and rules influencing non-consciously food representations, food choices and food behaviors (Poulain, 2002; Cook et al., 1999; Fischler and Masson, 2008). The sharing of values and norms can reinforce food identity and consequently the building of food communities. In the context of migrations, numerous research have focused during the past decades on food communities, driven by religious and cultural habits (Susmann, 2000; Crenn et al., 2010). The belonging to a food community helps eaters to choose, in a non-consciously manner, food. In that way, choice criteria are actually defined “from the outside”, by others, by members of the group and community. Thus, the definition of norms inside the group and not individually resonates with the concept of heteronomy (Castoriadis, 1975).

Researchers have applied the concept raised by Castoriadis to food choices in order to better understand the evolution of food choices in modern societies. With the increasing discourses on healthy diet, on nutrition, and recently on sustainable food, Fischler and Masson (2008),

have shown that food choices become more and more an individual and personal issue, as eaters have to decide individually what to eat and differently if they are health-oriented, pleasure-oriented or environmental-oriented (Michaelidou and Hassan, 2008). These changes have led to more autonomy in food choices and if not, to anomy when cacophony is generated by some contradicting messages, issued from nutritionists, ecologists, vegans, vegetarians, etc. (Fischler, 1979). In the same time, some research showed that new norms and expectations like gluten and lactose avoidance, search of raw food, concern for animal welfare, etc., can lead to new food communities (Enticott, 2003; Moore, 2014), real or virtual. Indeed, these consumers with particular diet are increasingly discussing on blogs and websites, exchanging informations, recipes, ways of sourcing food, etc. (Merdji and Debucquet, 2015). Furthermore, the sense of belonging to an alternative food community can help eaters to face with personal difficulties when choosing food.

Alternative ways of supplying food, because of economic incentives, relational motivations or environmental convictions, are gaining popularity and offer new sets of criteria when choosing food. How these criteria can contribute to the emergence of new communities? To what extent the alternative purchasing issue or the food issue are contributing to define the broad outlines of these communities and to increase the sense of belonging? Our research aims at addressing these questions in the specific case of CSFs.

Community, sense of belonging and CSFs

CSAs and CSFs are groups of consumers and farmers/fishers that collectively decide to contract together to sell/buy food products. CSAs and CSFs are clearly groups of people that freely decide to join and enjoy interactions. More precisely, in these communities, rules imply to spend resources (e.g., time, effort, money) to obtain the food basket, illustrating the desire to be a member. These groups have given birth to a specific kind of trade where producers and consumers play a more active role than in major current trade system (e.g., hypermarket retailers). CSAs/CSFs are often systems that people join for different reasons and with various motivations which may impact the sense of belonging (Kates, 2002; Canniford, 2011). Three major kind of motivations are outlined.

Regarding CSAs/CSFs, members frequently share many common values, a deep involvement for better food practices (e.g., extensive production, organic products), the wish to provide fair wages to producers and an animosity or hostility toward liberal policies and the business sector (Lazuech and Debucquet, 2017). These strong values may be considered as a collective meaning driving specific consumption patterns and behaviors and outlining the basic of a community or even a subculture (Goulding et al. 2002).

The second reason to join a CSF/CSA is utilitarian and product-oriented. Consumers join to have access to distinctive products. In fact, most CSF serve local organic food with a high level of quality making this specific channel of distribution more attractive for consumers who want to eat this kind of food products.

The third reason is cultural oriented insofar as consumers may join a CSF/CSA to discover and share information related to the food sold. In this perspective, consumers and producers or/and consumers together enjoy the common objective to develop and shared food knowledge. Lazuech and Debucquet (2017) showed that this issue is particularly acute in the case of CSFs because of a lowest degree of familiarity with “sea world” and sea products (e.g., getting knowledge on variety of fishes, seasonality, cooking recipes). In the same vein as craft beer amateurs or Starbuck coffee fans that may build community to share a common culture

(Kozinets, 2002), 'food connoisseurship' is a relevant reason to join the CSF and develop a specific relationship with people that care about it.

These reasons are sufficient strong to maintain CSAs/CSFs as a real and efficient trade structure across time and space. In France, according to the Inter-regional Federation of CSAs MIRAMAP (www.miramap.org), around 2000 CSAs supplied 320,000 CSAs consumers in 2015. However, a deeper understanding of the sense of belonging in a CSF community can shed light on motivations people have to join and belong to the CSF. In a parallel of the marketing perspective, the belief to belong to the CSF community may lead to important issues related to price sensibility and intention to subscribe and therefore on the economic performance of the CSF.

3. Description of the data

The data collection was made in 2016 by the University of Nantes and Audencia Business school in partnership with the volunteer leaders of the CSF². As a first stage of the research and in order to understand the strong motivations underlying the commitment of Yeu Island CSF members and the factors involved in the sense of belonging, in depth and individual interviews were carried out among members of the CSF (In total, 16 persons of varying ages, professional occupations, male and female and engaged in the CSF for greater or lesser periods), including some volunteer leaders (5) involved in the management of the CSF. A thematic analysis of the content of the qualitative materials resulted in the formulation of some hypothesis about the subjective factors that possibly contribute to increase the sense of belonging.

As a second step, our hypothesis derived from the qualitative analysis were tested through an extensive on-line survey. The purpose of this survey was to investigate CSF seafood consumers' perceptions and motivations for fresh seafood products. The survey consisted of around fifty questions dealing with seafood consumption habits of members, CSF perceptions and how do they buy and consume fish. The database includes 556 questionnaires completed on-line³ and representing approximately one fourth of the CSF membership. Our analysis focuses on answers to the following question: "as a CSF member, do feel member of a community?" Three answers were possible 'not at all' (8.3% of respondents), 'not 'really' (53.6%), 'Fully' (38.1%). In this paper, we suppose that the sense of belonging to a community is linked with other issues connected with socioeconomic features, CSF characteristics, and membership's reasons.

Respondents' descriptive statistics are given in Table 1 which exhibits several potential relationships between variables. The respondents are 48-year-old on average and age appears positively related to the sense of belonging. Women are over-represented (around 74%) in the sample, but they seem to have a lower feeling of belonging in a community than men. Respondents are highly educated (nearly 55% of CSF consumers have completed at least a Bachelor or Master degree), and rather in urban areas (60%). High education level and living in a city seem to be positively related to the sense of belonging. More than three quarter of respondents belong to a voluntary association. Members report a high level of satisfaction with

² More specifically, the survey covers the three 'Departments' (or counties) of the 'Pays de La Loire region'. This survey is largely based on the Master thesis of Marianne Gérard, a sociologist of the University of Nantes, and the authors are grateful for her significant contribution to this study.

³ Internet and e-mails are the usual ways of interacting among the membership to collect fees and disseminate location and time information about deliveries

price and delivery frequency, as well as with the fact that CSF increases their fish knowledge. For this latter variable, it appears to be positively linked to the sense of belonging.

Table 1 Descriptive Statistics

	Mean	SD*	Min	Max	Sense of belonging		
					Not at all	Not really	Fully
Socio-demographic							
Age (years)	48.36	11.24	25	77	45.74	47.58	50.02
Gender : Women	0.74		0	1	0.80	0.73	0.73
Education							
Secondary or Primary	0.29		0	1	0.41	0.29	0.26
Short-cycle tertiary	0.16		0	1	0.11	0.16	0.17
Long tertiary	0.55		0	1	0.48	0.55	0.56
Living place							
Near the sea	0.06		0	1	0.07	0.08	0.03
Rural area	0.34		0	1	0.28	0.37	0.32
City	0.60		0	1	0.65	0.55	0.65
Member of association	0.76		0	1	0.61	0.77	0.76
CSF characteristics							
Satisfaction with price	0.97		0	1	0.89	0.97	0.97
Satisfaction with delivery	0.87		0	1	0.85	0.87	0.87
CSF increases fish knowledge	0.89		0	1	0.72	0.86	0.96
Membership's reasons							
Environment	4.71	0.57	1	5	4.43	4.70	4.78
Origin	4.70	0.55	1	5	4.65	4.68	4.73
Support fishers	4.62	0.60	1	5	4.56	4.57	4.70
Local fish	4.61	0.59	1	5	4.46	4.58	4.69
Quality	4.39	0.74	1	5	4.35	4.43	4.35
Support local economy	3.97	0.83	1	5	3.87	3.87	4.13
Quantity	3.66	1.11	1	5	3.72	3.62	3.71
Consumption	3.57	1.03	1	5	3.09	3.54	3.73
Meet fishers	3.54	0.86	1	5	3.07	3.44	3.79
Meet new persons	2.98	0.88	1	5	2.43	2.89	3.21
Total	556				46	298	212

* SD Standard deviation

Source: University of Nantes

The members' motives to join a CSF were examined by using ten questions based on a Likert scale: "how much do you agree with the following motives to explain your participation (five responses are possible for each proposal: strongly disagree, disagree, don't agree nor disagree, agree, strongly agree)⁴?" Motives related to the production process and product (Environment, Origin, Support fishers, and Local fish) are characterized by higher levels than those linked to the relational dimension (Meet fishers or Meet new persons). On the whole, membership's reasons appear to be positively related to the sense of belonging. Before turning to econometric

⁴ The items are the following: "I wanted to encourage environment-friendly fishing techniques, to eat fish which I know the origin of, to support small-scale fishers, to buy local fish, to eat fish of higher quality, to support the local island economy, to eat more fish, to live a new consumption experience, to meet fishers, to meet new persons."

analysis to test and to highlight the assumptions between variables, we need to go further in the description of the data.

To test the reliability of the answers, a correlation matrix has been computed for all membership's reasons. Among the CSF motives, several variables are strongly and positively correlated suggesting the presence of underlying factors which could be discovered with through factor analysis.⁵ According to the Kaiser criterion, two factors emerged from the analysis and are represented on Fig.1. The first factor encompasses five variables (Known origin, Support fishers, Local fish, Support local economy, and Environment). It can be considered as a production process factor. The second factor encompasses three variables (Meet new person, Consumption experience, and Meet fishers) and may be thought of as a relational motive. The other CSF motives are treated separately (Quality and Quantity). In Fig.2, we represent the predicted smoothed sense of belonging issued from naive ordered Probit models including the motive scales.⁶ If the relational factor is positively linked to the sense of belonging, this is less the case of the quality. The process factor appears to be U-shaped. However, the average score for the credence factor is 4.5 with a minimum around 4, the relationship seems positive among respondents.

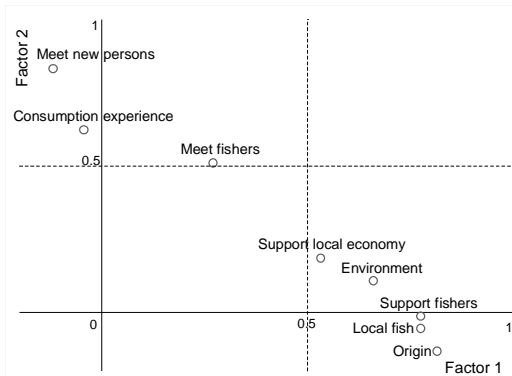


Fig. 1 Factors loadings for CSF motive

Note: Factors loadings obtained by factor analysis of CSF motive polychoric correlation matrix.

Source: University of Nantes

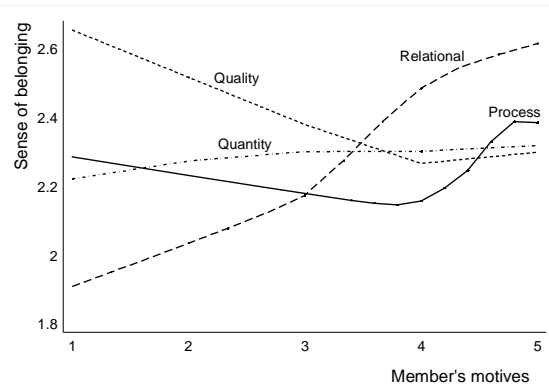


Fig. 2 Predicted sense of belonging by member's motive

Note: Symmetric nearest-neighbor linear smoother.

4. Econometric model

The sense of belonging was retained as the dependent variable. From the theoretical section and descriptive analysis of the data, we hypothesize that this feeling can be explained by several explanatory variables. We have introduced in a model the combined effects of socio-demographic characteristics, some CSF characteristics, and the participation motives identified by the factor analysis. As our variable reflecting the sense of belonging is ordered, this issue is analyzed through an ordered Probit model. Ordered probability model can be drawn from a latent variable model. Let us assume that latent variable Y_i^* is determined by:

⁵ Near all correlation coefficients are superior to 0.3. The Bartlett test of sphericity concludes that a factor analysis is relevant and the Kaiser-Meyer-Olkin measure of sampling adequacy is equal to 0.76, thus indicating that the sampling method is adequate.

⁶ We use the arithmetic mean of the variables concerned for each factor, whereas the quantity, and quality variables are treated as continuous despite their ordinal nature.

$$Y_i^* = X_i\beta + Z_i\gamma + W_i\delta + \varepsilon_i$$

where β , γ , and δ are vectors of unknown parameters, X_i , Z_i , and W_i are vectors of respectively socio-demographic characteristics, the participation motives, and some CSF characteristics, and ε_i is the error term assumed normally distributed. The observed ordinal variable reflecting the sense of belonging to CSF takes values 0 through 2 according to:

$$Y_i = j \Leftrightarrow \alpha_{j-1} < Y_i^* \leq \alpha_j$$

where $j = 1,2,3$ is the number of possible outcomes and $\alpha_0 = -\infty$ and $\alpha_3 = +\infty$. The model is estimated with a maximum likelihood function.

5. Results

The results of quantitative analysis are presented in Table 2. Moreover, selected quotations from individual and in depth interviews (Table 3) provide qualitative materials to make sense with the quantitative results.

The probability of sense of ‘fully’ belonging to a community given the rest of the variables at their mean value is around 36%, whereas this probability is equal to 58% for the modality ‘not fully’ and 6% for ‘not at all’.

Looking at the role of socio-demographic variables, the age of respondent is positively related to the sense of belonging to a community⁷ probably because older respondents eat on average more fresh fish than younger household and give more importance to what they eat (FRANCEAGRIMER, 2017). Moreover, in the Pays de la Loire region, some of older respondents have experienced in the past fish deliveries in rural areas. Some fishers used to come in a lorry to sell fish certain days of the week, hence contributing to the building of a community around fish (Table 3). When fish deliveries in rural areas stopped, Yeu Island CSF offered a replacement solution and went on reinforcing a local collective identity around fish. As one member said, it was a way “*to get involved in fish again*”. Lastly, the involvement in the CSF can be higher for retired respondents, increasing this feeling. However, no influence of gender affects the probability of belonging to a community. The education level of respondents is positively and increasingly linked to their feeling of belonging to a community probably because education induces a more intense search for new norms and expectations (Enticott, 2003; Moore, 2014). Our results do not show any effect of the living place or the fact to be a member of an association on the sense of belonging to a community.

Among the membership’s motives, the relational factor is positively linked to the sense of belonging whereas the process factor has no effect. If buying sustainable and local food matters a lot when joining a community-supported scheme, CSF represents only one way of meeting these characteristics that can also be encountered across other market channels (Salladarré et al., 2018)⁸ and production processes. Conversely, the relational factor is positively related to the sense of belonging to a community. Meeting new persons and fishers, having a new consumption experience are prone to increase the feeling of belonging to a community. But analysis of interviews reveals that the relationship between members and between members and fishers is widely driven by informal discussion around fish as food rather than fish as natural

⁷ As the age squared is not significant, the relationship is linear.

⁸ For instance, direct sales from producers, street markets, green groceries, labelled products in multiple stores.

resources. When members stay discussing with fishers, they are more interested in learning advices for preparing and cooking fish than discovering fishing techniques or addressing environmental issues: “*We mainly talk about fish, what type of fish it is, whether it needs scaling, gutting, what are the recipes, sometimes they even tell us that it can be put on the barbecue.*” (Table 3). Other forms of conviviality and reciprocity were cited by members, like informal meeting with “fish eaters” to “*create a tight bond between us*”, interpersonal arrangements “*to swap products that some do not like with others*”, organized groups to collect “*the packages for the others*” leading to “*a car share for fish*”. Finally, the quantity variable is not linked to the community feeling whereas the quality variable is conversely associated to this probability. For this latter category of respondent, the CSF membership may be only instrumental.

Table 2 Estimation results

Sense of belonging	
Sociodemographic characteristics	
Age	0.014*** (0.005)
Gender (ref Men)	-0.082 (0.117)
Education (Ref Primary/Secondary level)	
Short-cycle tertiary level	0.285* (0.164)
Long-cycle tertiary level	0.343*** (0.128)
Living place (ref. City)	
Living in a rural area	0.013 (0.110)
Living near the coast	-0.251 (0.220)
Member of association	0.101 (0.118)
Membership’s motives	
Process factor	0.128 (0.111)
Relational factor	0.453*** (0.086)
Quality	-0.417*** (0.160)
Quantity	-0.147 (0.106)
CSF characteristics	
Satisfaction with price	0.174 (0.280)
CSF increases fish knowledge	0.809*** (0.164)
Satisfaction with delivery frequency	-0.004 (0.148)
Observations	556
Log likelihood	-454.54

Note: Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Source: University of Nantes.

Among the CSF characteristics, if the satisfaction with price and delivery frequency does not affect the sense of belonging to a community, the fact that CSF increases fish knowledge is positively linked to it. The probability of sense of fully belonging to a community for respondents answering positively to the question ‘CSF increases fish knowledge’ given the rest of the variables at their mean value is around 40% whereas this probability is equal to 14% for a ‘no’. The discussion and exchange of information can increase the feeling of belonging to a community. Indeed, distance between French eaters and fish products is higher than for land products (Geistdoerfer, 1998), especially in the hinterland of the region selected for our survey. Knowledge about species remains widely unknown by members (“*I knew practically nothing [about fish species] so everything was new except for pollock, hake, whiting and salmon, but there weren’t any ..*”), like seasonality (“*I know that there is a season for tomatoes, but for fish I just did not know*”). Yeu Island CSF contributes as well to help members to reconnect with animality (“*There was one that I took a photo of. Just the color, it had a certain beauty and the brilliance of the scales!*”), to consider “*fish as an animal*” and not only as a food. At the end, informal discussion between members and with fishers contributes to reduce food anomy in modern society: “*We have to relearn how to feed ourselves, how to cook, because the passing on of cookery skills from mother to daughter has become less common since society has found frozen foods, and ways of always taking on tasks. [...]. What is interesting about this CSF, are the suggestions on how to cook the fish, because it is not always obvious how to do it.*” Thus, the exchange of information around fish contributes to provide to members, more or less consciously, some food norms - influencing food habits and choice -, to influence social representations of this kind of food. In turn, this contributes to increase the feeling of belonging to a community, more precisely a community of ‘fish eaters’.

Table 3: Subjective factors increasing the sense of belonging

Factors identified	Positive effect	Quotations
Living in a rural area	Local collective identity around fish	<ul style="list-style-type: none"> • “<i>There have been meetings about fish...and I became passionate about it. I am a landlubber and know nothing about fishing and I was curious to learn about this world...And now we talk about fish a lot and how to prepare it.</i>” (Woman, age 64, member for 8 years) • “<i>There used to be deliveries in our area on certain days of the week. Someone came in a lorry to sell fish. But that disappeared 10 years ago and with the Yeu Island CSF, we are now getting involved in fish again.</i>” (Woman, age 50, member for 4 years)
Interpersonal relationships	Conviviality with other members	<ul style="list-style-type: none"> • “<i>In the Yeu Island CSF, when there is a delivery, there are some that stop and chat and others that just leave with their fish; they are more consumers that anything else. I have set up evening sessions with people who eat fish, and meet with 4 people each time and we really get to know each other, I tell them about life as a fisherman. That creates a tight bond between us.</i>” (Woman, age 55, member for 6 years) • “<i>Yeah, those of us in CSF recognize each other in the street, I talk with about ten people and that gives a nice side to this, in other words on that day we are all drawn by the same thing, by fish, I see that we have some common ground and that is positive.</i>” (Man, age 60, member for 3 years)
	Reciprocity and mutual aid around fish	<ul style="list-style-type: none"> • “<i>I don’t think about doing it because it is a good thing to do, I don’t think like that. It’s more because it is pleasant to meet people, it’s nice to give a hand, we only live once...we try to swap products that we do not like with other; we do not leave them in the baskets.</i>” (Woman, age 64, member for 8 years) • “<i>We have organized groups for the delivery with other CSF members in my village, one person collects the packages for the other eight. We take it in turns and with this small group people get to know each other better. We have a car share for fish!</i>” (Woman, age 66, member for 8 years)

	Dialogue with fishermen	<ul style="list-style-type: none"> • “Yes, I get to talk with them when there are not too many people around. Then they take their time, they explain how to filet a fish, suddenly that creates an opportunity to talk about their fishing, the fish we are going to eat, because it is more difficult than with vegetables or fruit from the other CSAs.” (Man, age 37, member for 5 years) • “The delivery is quite fast,, ...and then there are a lot of people all the same and everyone is out for a while in the evening, but we mainly talk about fish, what type of fish it is, whether it needs scaling, gutting, what are the recipes, sometimes they even tell us that it can be put on the barbecue.” (Woman, age 56, member for 4 years)
Increase of fish knowledge	Knowledge about fish species and seasonality	<ul style="list-style-type: none"> • “I know how potatoes grow, but with fish, I have no idea how it was caught, so the relationship at the start is different and we went from discovery to discovery.” (Woman, age 64, member for 8 years) • “I had never asked myself if there was a season, I know that there is a season for tomatoes, but for fish I just did not know.” (Woman, age 55, member for 6 years)
	Knowledge about recipes and how cooking fish	<ul style="list-style-type: none"> • “With Yeu Island CSF, you also get to discover new fish...red mullet, things that I have never bought, or skate wings. I know them, I ate them as a little child, but I have never bought them. And now I am discovering interesting recipes.” (Woman, age 66, member for 8 years)
	Reduction of food anomy	<ul style="list-style-type: none"> • “We have to relearn how to feed ourselves, how to cook, because the passing on of cookery skills from mother to daughter has become less common since society has found frozen foods, and ways of always taking on tasks. [...]. What is interesting about this CSF, are the suggestions on how to cook the fish, because it is not always obvious how to do it.” (Woman, age 42, member for 3 years). • “I think that with certain CSF members we have the same objectives, a wish to consume in a different way. There are a lot of couples today with young children, and they really want to change the way they consume, they want to pass something on to their children, and fish is a good example.” (Woman, age 56, member for 4 years).
	Reconnection with animality	<ul style="list-style-type: none"> • « At the beginning there were few purists, there were the consumers who wanted their fish in filets, but one day we had boxes of filets and no-one wanted them anymore! They asked us to get back to whole fish. They look a lot better and are more interesting.” (Woman, age 64, member for 8 years) • “I knew practically nothing so everything was new except for pollock, hake, whiting and salmon, but there weren't any ...And then there was one that I took a photo of. Just the color, it had a certain beauty and the brilliance of the scales!” (Woman, age 64, member for 8 years) • “You have to be really interested in fish, fish as a food, fish as an animal...and the way to cook it ...if not it is easier just to buy filets.” ((Woman, age 38, member for 5 years)

Conclusion

From an original survey of 556 CSF members belonging to the Yeu Island CSF, and additional individual interviews, we used a factor analysis on CSF motives followed by an estimation of the determinants of the sense of belonging to a community. Our results show that the sense of belonging to CSF is influenced by the relational dimension but not by the process factor. Personal contacts with producers and other consumer tend to increase the sense of belonging to community. This result raise the importance of relational consideration on the sense of belonging to a CSF community and probably on the long-term sustainability of CSF if the sense of belonging is linked to loyalty. Moreover, when members stay discussing with fishers, they declare to be more interested in learning advices for preparing and cooking fish than discovering fishing techniques or addressing environmental issues. Among the CSF characteristics, the fact

that CSF increases fish knowledge is positively linked to the sense of belonging to a community. Informal discussion between members and with fishers tend to contribute to reduce food anomy in modern society

From the sociological perspective, the factors increasing sense of belonging to a community are mainly driven by the relation members of CSF have with fish, and by the evolution from the first membership. Our results show the positive role of sociality around CSF deliveries (notably, self-organization between members to gather fish baskets collection), around ways of preparing and cooking fish, as well as the opportunities to increase knowledge around sea food. More generally, Yeu-Island CSF offers an opportunity for a “convivial reconstruction” (Illich, 1973), through the implementation of a shorter channel bringing nearer fishermen and eaters and especially, reinforcing links in a community of “fish eaters” (Geistdoerfer, 1998).

References

Arnould, E., Price, L. and Zinkhan, G. (2002), *Consumers*, McGraw-Hill, New York, NY.

Bolton, A.E, Dubik, B.A., Stoll, J.S., Basurto X. (2016), Describing the diversity of community supported fishery programs in North America. *Marine Policy* 66, 21–29.

Bougherara, D., Grolleau, G., Mzoughi, N. (2009). Buy local, pollute less: what drives households to join a community supported farm? *Ecological Economics* 68(5), 1488-1495.

Brinson, A., Lee, M.-Y., Rountree, B. (2011). Direct marketing strategies: The rise of community supported fishery programs. *Marine Policy* 35 (2011), 542–548.

Bromberg, H. (1996). Are MUDs communities? Identity, belonging and consciousness in virtual worlds. In R. Shields (Ed.), *Culture of internet: Virtual spaces, real histories, living bodies* (pp. 143–152). London: Sage Press.

Campbell, L. M., Boucquey, N., Stoll, J., Coppola, H., Smith, M. D. (2014). From vegetable box to seafood cooler: applying the community-supported agriculture model to fisheries. *Society & Natural Resources* 27(1), 88-106.

Canniford, R. (2011). A typology of consumption communities. In *Research in consumer behavior* (pp. 57-75). Emerald Group Publishing Limited.

Castoriadis, C. (1975). *L'institution imaginaire de la société*, Paris: Seuil.

Cook, I., Crang, P., Thorpe, M. (1999). Eating into Britishness: multicultural imaginaries and the identity politics of food. In *Practising identities*. Palgrave Macmillan, London, 223-248

Crenn, C., Delavigne, A. E., Téhoueyres, I. (2010). Migrants' food habits when returning home (in Bamako, Mali, and Dakar, Senegal). To be or not to be a model? *Anthropology of food* (7).

Enticott, G. (2003). Lay immunology, local foods and rural identity: defending unpasteurised milk in England. *Sociologia Ruralis* 43(3), 257-270.

Fischler, C. (1979). Gastro-nomie et gastro-anomie. *Communication*, 31(1), 189-210.

Fischler, C., Masson, E. (2008). *Manger. Français, Européens et Américains face à leur alimentation*. Paris, Odile Jacob: 209-222.

FRANCEAGRIMER (2017). *Consommation des produits de la pêche et de l'aquaculture 2016*. (Données et bilans de FRANCEAGRIMER, juin).

Geistdoerfer, A. (1998). Manger la mer ou manger des protéines. De la mutation d'un animal marin, in M. Garrigues-Cresswell, M.A. Martin (dir.), *Dynamique des pratiques alimentaires*, Paris, Éd. de la Maison des sciences de l'homme, 31-32.

- Good, C., Rattan, A., Dweck, C. S. (2012). Why do women opt out? Sense of belonging and women's representation in mathematics. *Journal of Personality and Social Psychology*, 102(4), 700-717.
- Goulding, C., Shankar, A., Elliott, R. (2002). Working weeks, rave weekends: identity fragmentation and the emergence of new communities. *Consumption, Markets and Culture* 5(4), 261-284.
- Hagerty, B. M., Lynch-Sauer, J., Patusky, K. L., Bouwsema, M., Collier, P. (1992). Sense of belonging: A vital mental health concept. *Archives of Psychiatric Nursing* 6(3), 172-177
- Illich, I. (1973). *Tools for conviviality*. Nueva York: Harper & Row.
- Kates, S. M. (2002). The protean quality of subcultural consumption: An ethnographic account of gay consumers. *Journal of Consumer Research*, 29(3), 383-399.
- Kozinets, R. V. (2002). The field behind the screen: Using netnography for marketing research in online communities. *Journal of Marketing Research*, 39(1), 61-72.
- Lambert, N. M., Stillman, T. F., Hicks, J. A., Kamble, S., Baumeister, R. F., Fincham, F. D. (2013). To belong is to matter: Sense of belonging enhances meaning in life. *Personality and Social Psychology Bulletin* 39(11), 1418-1427.
- Lazuech, G., Debucquet, G. (2017). Culture alimentaire et accord marchand local : une enquête au sein de l'AMAP « Poisson » Yeu-Continent. *Terrain & Travaux* 31 (2), 131-158.
- McClenachan L., Neal B.P., Al-Abdulrazzak D., Witkin T., Fisher K., Kittinger J.N. (2014). Do community supported fisheries (CSFs) improve sustainability? *Fisheries Research*, 157, 62-69
- Merdji, M., G. Debucquet (2015). Food intolerance and allergies: a peculiar affliction? In C. Fischler (Dir), *Selective Eating. The Rise, the Meaning and Sense of «Personal Dietary Requirements*. Paris, Odile Jacob, 61-69.
- Michaelidou, N., Hassan, L. M. (2008). The role of health consciousness, food safety concern and ethical identity on attitudes and intentions towards organic food. *International Journal of Consumer Studies* 32(2), 163-170.
- Moore, A. R. (2014). That could be me: Identity and identification in discourses about food, meat, and animal welfare. *Linguistics and the Human Sciences* 9(1), 59-93.
- Muniz, A. M., O'guinn, T. C. (2001). Brand community. *Journal of Consumer Research* 27(4), 412-432.
- Peterson, H. H., Taylor, M. R., Baudouin, Q. (2015). Preferences of Locavores Favoring Community Supported Agriculture in the United States and France. *Ecological Economics*, 119, 64-73.

Poulain, J. P. (2002). The contemporary diet in France: “de-structuration” or from commensalism to “vagabond feeding”. *Appetite* 39(1), 43-55.

Rozin, P., Fischler, C., Shields, C., Masson, E. (2006). Attitudes towards large numbers of choices in the food domain: A cross-cultural study of five countries in Europe and the USA. *Appetite* 46(3), 304-308.

Salladarré, F., Guillotreau, P., Debucquet, G., Lazuech, G. (2018). Some Good Reasons for Buying Fish Exclusively From Community-Supported Fisheries: The Case of Yeu Island in France, *Ecological Economics* 153, 172-180

Sussman, N. M. (2000). The dynamic nature of cultural identity throughout cultural transitions: Why home is not so sweet. *Personality and Social Psychology Review* 4(4), 355-373.