

THE ASSOCIATION BETWEEN SENSE OF COMMUNITY AND SUPPORT FOR LOCAL FARMERS' MARKET

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The role of psychological sense of community on willingness to pay for food at a farmers' market was not investigated in the literature. This study examined the influence of two distinct forms of psychological sense of community, the traditional concept of sense of community and the concept of sense of community responsibility. Moreover, the present research investigated the role of reasons for buying local food products as a mediating pathway through which psychological sense of community leads to WTP for food at a farmers' market. Participants were 409 Italian people recruited through snowball sampling as well as advertisements on social networks. Participants filled out a questionnaire including measures of psychological sense of community, the relationship between sense of community, reasons for buying local food products, and willingness to pay for food at a farmers' market. Controlling for gender, age, and household income, results revealed that sense of community was associated with willingness to pay for food at a farmers' market. However, sense of community responsibility was associated with willingness to pay an extra-price of approximately 15 percent for the costs of food at a farmers' market, while sense of community was associated with willingness to pay more than such a small extra-price for local food. Mediation analyses revealed that community support and connection and quality of products (but not environmental reasons) mediated the association between sense of community and willingness to pay for food at a farmers' market.

Keywords: Willingness to Pay, Local Food, Sense of Community, Community Support

1. Introduction

In the community psychology literature, sense of community plays a significant role in determining involvement in community engagement and development (Talò, 2018; Talò et al., 2014). The traditional concept of sense of community (SOC) was defined by McMillan and Chavis (1986, p. 9) as “a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together.” Recent work by Boyd and Nowell (2014, 2017) highlighted that the traditional concept of sense of community has been drawn primarily from needs-based theories that characterize community as a potential resource for meeting key psychological and physiological needs of the individual. Boyd and Nowell (2014, 2017) expanded this understanding of psychological sense of community by arguing that sense of community may be related not solely to an expectation of physiological and psychological benefit for the individual but also to a sense of responsibility for the well-being of the community. Based on this reasoning, they elaborated the concept of sense of community

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responsibility (SOC-R) which can be defined “as a feeling of personal responsibility for the individual and collective well-being of a community of people not directly rooted in an expectation of personal gain” (Nowell & Boyd, 2014, p. 231). According to the theory of community as resource and responsibility (Boyd & Nowell, 2017; Nowell & Boyd, 2014), both SOC and SOC-R can be considered predictors of community engagement. However, the theory of community as resource and responsibility suggests that there is a differential impact of SOC and SOC-R on community engagement with the latter being more direct. Therefore, SOC-R could be viewed as a complementary aspect of the experience of community and proposed that it is thought to predict engagement in community settings in a different manner compared to SOC. Indeed, there is evidence supporting the idea that SOC and SOC-R are two separate, albeit related, constructs. Moreover, although there is clear evidence that SOC plays a significant role in determining involvement in community engagement and development (Talò, 2018; Talò et al., 2014), recent studies suggest that SOC-R is more likely to exhibit a stronger direct association with indices of participation and community engagement compared to SOC (Boyd & Nowell, 2017; Nowell & Boyd, 2014; Prati et al., 2020). A novelty of the present work is that two validated measures of psychological sense of community were used.

According to Obach and Tobin (2014), the support for small-scale agriculture in which farmers sell goods to the local market can be conceptualized as participation and community engagement. According to Giampietri et al. (2016, p. 1), farmers’ markets “have the potential to encourage sustainable agricultural production and consumption. By reducing the number of actors and distances along the food chain, these alternative food systems foster the reconnection between farmers and consumers and contribute to different social, economic and environmentally sustainable goals.” The interest in locally produced food has been linked to a sense of community for customers (Muniz Jr & O’Guinn, 2001; Pearson et al., 2011; Schnell, 2013). However, these theoretical assumptions regarding the relationship between sense of community (SOC and SOC-R) and support for local farmers’ markets have not been tested. In behavioral economics, public support for economic initiatives can be measured using willingness to pay (e.g., Matzek & Wilson, 2021). Willingness to pay refers to the maximum price a customer is willing to pay for a product or service. Sense of community can be conceptualized as an important driver of support for local food initiatives in the form of higher willingness to pay (WTP) for food at farmers’ markets. I contend that community members with higher levels of sense of community would prefer buying food at a farmers’ market than at a supermarket. However, to my knowledge, no previous research has examined the relationship between psychological sense of community and higher willingness to pay for food at farmers’ markets using two validated scales measuring both aspects of sense of community.

The interest in local eating manifests itself as support for local food initiatives such as farmers’ markets (Schnell, 2013). Schnell (2013) investigated the most common reasons for local eating¹. The most common reasons given by participants were to get fresh, nutritious, seasonal, and good-tasting food. These reasons reflect the belief that local food is a high-quality product. Related to quality, another common reason is the desire to know where food comes from (e.g., who is the producer and what agricultural production methods were used). In addition, other participants reported reasons not related to product quality. On the one hand, participants reported social considerations for local eating: A common motivation is

¹ Local eating refers to the consumption of local food. In the present article, local food can be defined as “food produced, retailed and consumed mainly in the specific area” (Bosona & Gebresenbet, 2011, p. 294).

wanting to establish a connection with the local farmer and to support the local economy. On the other hand, local eating was driven by concerns over the environmental impact (i.e., reducing carbon emissions involved in transporting food) and because local food was perceived as a sustainable alternative to industrial agriculture. These three main reasons for buying local food products have also been found in other studies (e.g., Bougherara et al., 2009; Pearson et al., 2011) and can play a central role in WTP for food at a farmers' market. It is also possible to hypothesize that the influence of sense of community on WTP for food at a farmers' market may be explained by three main reasons (i.e., high quality, support for the local community, and perceived environmental benefits). Shared consumption experiences and a felt sense of duty or obligation to the community resemble the need to make a connection with the local farmer and to support the local economy (Muniz Jr & O'Guinn, 2001). Indeed, community satisfaction is associated with the desire to support a community's local economy (Brehm & Eisenhauer, 2008) and community attachment plays a significant role in promoting community members' support for local farmers (Shin et al., 2018). Moreover, sense of community is associated with environmental concern, pro-environmental behavior, and environmental volunteerism and activism (e.g., Dixon et al., 2015; Kurz et al., 2007; Omoto & Packard, 2016). Finally, Miller (2001) demonstrated that community attachment was associated with satisfaction with the quality merchandise or service provided by local retailers.

1.1. The current study

In the present study, I hypothesize that both SOC and SOC-R would predict higher WTP for food at a farmers' market than at a supermarket (H1). In addition, the current study sought to investigate the relationship of sense of community to the three main reasons for buying local food products and WTP for food at a farmers' market, with the research question being "Do the three main reasons for buying local food products (i.e., high quality, support for the local community, and perceived environmental benefits) mediate the relationship between sense of community (SOC-R and SOC) and WTP for food at a farmers' market?". If the hypothesized relations are correct, sense of community is expected to influence the main reasons for buying local food products (i.e., the mediating variables) which, in turn, are thought to affect WTP for food at a farmers' market.

2. Method

2.1 Participants and procedure

I recruited participants through snowball sampling as well as messages and advertisements on social networks. Following the guidance of Patton (2002) on snowball sampling, I asked "well-situated people" for their assistance in finding participants. Then the recruits were asked if they could recommend additional participants for the study and the process continued. Both traditional and virtual snowball sampling methods were used (Baltar, 2012). Invitations to participate were given verbally and through the following apps and social networks: WhatsApp, Facebook, Instagram, and Twitter. Potential participants were approached in person or through messages and advertisements on social networks. The data collection period lasted seven months, from November 2018 to May 2019. All participants provided informed consent to participate in the research study. To promote participation, small

incentives (e.g., freebies, gadgets) were given to participants. Respondents were 409 (61.4% women) mostly young Italian people. The mean age of participants was 24.88 years, SD = 6.13, ranging from 19 to 67 years. Most of the participants were born in Italy (93.9%) and students (74.3%)². The survey was delivered to the people living in Italy. The use of snowball sampling as well as advertisements on social networks was useful to reach participants from different local communities. Therefore, participants were potentially from the main geographical areas (North-West, North-East, Center, South, and Islands) of Italy.

To provide some data on the Italian agricultural context, I refer to the Agricultural census in Italy by Eurostat³. In 2010, the number of agricultural holdings in Italy was 1,620,880; this value was the second highest within the EU-27. Italy reported one of the highest values of utilized agricultural area among the EU Member States: 12.9 million hectares which represents 43% of the whole territory. The animal livestock – expressed in livestock units – was 9.9 million in 2010. In Italy, the number of persons working in agriculture was 3.4 million in 2010. In 2010 the Italian agricultural labor force represented 14% of the Italian economically active population.

Table 1. Socio-demographic characteristics of the sample

	M	DS	%
Gender (women)			61.4
Age	24.88	6.13	
Student status			74.3
Born in Italy (yes)			93.9
Knowing where food comes from			
Less than €20.000			20.5
€20.000-€39.999			33.7
€40.000-€59.999			11.7
€60.000-€79.999			4.4
More than €80.000			4.2
I do not know			25.4

2.2 Measures

The questionnaire included two WTP questions. Specifically, participants answered two questions:

- (1) WTP1: “Imagine you need to buy food. You can find this food in a supermarket or a farmers’ market. Now assume that the same food with the same quality costs 1.42 euros at the supermarket. Would you be willing to pay 1.68 euros for the same food with the same quality at a farmer’s market? Yes or No?”

² This high percentage of students might be explained by the fact that students were quicker to respond and spread the questionnaire as much as possible through their network which may be composed by other students as well.

³ [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Archive:Agricultural census in Italy&oldid=379554](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Archive:Agricultural_census_in_Italy&oldid=379554)

(2)WTP2: And let us continue to assume that the same food with the same quality costs 1.42 euros at the supermarket. If the same food with the same quality were available in a farmers' market, the most I would pay is €_____."

I developed a list of 14 reasons for consuming foods produced locally based on the findings reported by Schnell (2013). Specifically, I investigated the following reasons: freshness, taste, nutritional content, ecological sustainability, knowing where food comes from, support of local economies, personal connection with farmers, seasonality, support of small-scale business, community creation/sustenance, connection with place and with local ecology, stewardship of local environment, open space preservation, and reducing carbon footprint. Participants were asked to determine whether shopping at a farmers' market is similar or different from the supermarket in terms of each reason using a scale from 1 (*no difference compared to a supermarket*) to 10 (*great difference with respect to the supermarket*). Exploratory factor analysis was performed (in this study) using principal axis factoring followed by Oblimin Quartimin rotation. To determine the number of factors to retain in the exploratory factor analysis, parallel analysis and comparison data methods were used because these methods perform well in simulation studies (Ruscio & Roche, 2012). Both the parallel analysis and comparison data methods indicated the extraction of three factors. The variance explained by exploratory factor analysis was 68.95%. Table 2 displays the full factor pattern matrix. Absolute factor loadings greater than .35 were considered salient. The three factors were labeled: Community support and connection, Quality, and Environmental reasons. The first factor (53.57% variance accounted for) consisted of six items relating to the relationship with the local community that is promoted by the purchase of products at a farmers' market. The six items loading on this factor were averaged to create a scale with very good reliability ($\alpha = .93$). The second factor (9.65% variance accounted for) consisted of five items relating to the quality of the products that are found at a farmers' market. The five items loading on this factor were averaged to create a scale with good reliability ($\alpha = .81$). Finally, the third factor (5.74% variance accounted for) also consisted of three items relating to environmental reasons for buying products at a farmers' market. These four items were averaged to create a scale, with good reliability ($\alpha = .87$).

In addition, the questionnaire included two scales to assess SOC and SOC-R. Items of both SOC and SOC-R scales were scored and averaged such that higher scores indicated greater levels of sense of community. I used the Italian version of the SOC-R (Nowell & Boyd, 2014; Prati et al., 2020). The referent was the participant's territorial community. Examples of items on this scale are: "I am always ready to help out people in my community even if it creates hardship for me" and "I feel it is my duty to give to my community without needing to receive anything in return." Participants answered SOC-R items using a 7-point response option format ranging from 1 (strongly disagree) to 7 (strongly agree). Cronbach's alpha was .86. I measured sense of community using the Italian version of the SOC scale (Chiessi et al., 2010). The scale comprises 20 items and participants were asked to report their agreement using a 5-point scale ranging from 1 (completely disagree) to 5 (completely agree). Cronbach's alpha was .91. Using both exploratory and confirmatory factor analyses, Prati et al. (2020) demonstrated that the Italian version of the SOC-R scale is unidimensional and that there is evidence of discriminant validity of SOC and SOC-R on key outcomes such as well-being, mental health, participation, neighborhood cohesion, and empowerment (Nowell & Boyd, 2014; Prati et al., 2020).

Table 2. Factor Pattern Matrix Using Principal Axis Factor and Oblimin Quartimin Rotation

	Community support and connection	Quality	Environmental reasons
Freshness	-.014	.830	-.051
Taste	-.072	.832	.040
Nutritional content	-.023	.625	-.201
Ecological sustainability	.187	.054	-.736
Knowing where food comes from	.304	.425	-.070
Support of local economies	.858	.008	-.070
Personal connection with farmer	.819	-.032	-.019
Seasonality	.399	.474	.054
Support of small-scale business	.898	.053	.052
Community creation/sustenance	.917	.031	.015
Connection with place and with local ecology	.725	-.103	-.271
Stewardship of local environment	.453	.077	-.424
Open space preservation	.100	.133	-.648
Reducing carbon footprint	-.078	.003	-.940

Note. Coefficients in bold face were retained for that factor.

2.3 Statistical analysis

The variables included in the current research had small amounts of missing data (less than 5%); therefore, pairwise deletion was used.

To investigate the hypothesis (H1) of the present study, I specified logit and ordinal logit models to estimate the relationship between sense of community variables (SOC and SOC-R) and WTP for food at a farmers' market, while controlling for gender, age, and household income. In all the analyses, SOC and SOC-R were considered distinct variables and were never treated as intertwined. Subsequently, to answer the research question, a mediation analysis was performed after including in the models the reasons for consuming foods produced locally (i.e., mediators). I conducted mediation analysis using the *khb* procedure in Stata (Kohler & Karlson, 2019). This procedure decomposes the total effect (i.e., the effect of the independent variable on the dependent variable without controlling for mediating variables) of the independent variable on the dependent variable into direct (i.e., the effect of the independent variable on the dependent variable when controlling for mediating variables) and indirect (i.e., the effect of the independent variable on the dependent variable through the mediating variables) effects. In addition, the *khb* method calculates the confounding ratio (i.e., the size of the total effect divided by that of the direct effect) and the confounding percentage (i.e., the proportion of the total effect that is due to the effects of the mediating variables). Indeed, an advantage of the *khb* method is the calculation of all effects (i.e., total, direct, and indirect) on the same scale, thereby allowing meaningful comparisons across different coefficients. Lastly, the *khb* procedure determines the contribution of each mediator to the confounding. A simulation study revealed that the *khb* method performs remarkably well in estimating mediation in ordinal and logit models (e.g., Breen et al., 2013; Karlson et al., 2012; Smith et al., 2019).

3. Results

In the present study, 67% of participants were willing to pay 1.68 euros for the same food with the same quality at a farmer's market. Table 3 reports the correlations among and descriptive statistics for key study variables. SOC was significantly associated with WTP2, while SOC-R was significantly related to WTP1. Community support and connection, Quality, and Environmental reasons were highly correlated with each other. WTP1 and WTP2 were significantly associated with Community support and connection, Quality, and Environmental reasons.

To answer hypothesis of the study (H1), SOC-R statistically predicted WTP1, $b = 0.23$, $SE = 0.09$, $p = .009$, 95% CI [0.06, 0.41], while SOC was not associated with WTP1, $b = -0.04$, $SE = 0.20$, $p = .861$, 95% CI [-0.43, 0.36]. Moreover, SOC-R did not predict WTP2, $b = 0.07$, $SE = 0.07$, $p = .356$, 95% CI [-0.08, 0.22], while SOC statistically predicted WTP2, $b = 0.35$, $SE = 0.16$, $p = .032$, 95% CI [0.03, 0.67]. These analyses revealed that SOC-R was associated with WTP1, while SOC was associated with WTP2 while controlling for gender, age, and household income. Additional analyses revealed that student status did not moderate the relationships between SOC and WTP1, $b = -0.36$, $SE = 0.36$, $p = .316$, between SOC-R and WTP1, $b = 0.02$, $SE = 0.10$, $p = .857$, between SOC and WTP2, $b = -0.36$, $SE = 0.36$, $p = .316$, and between SOC-R and WTP2, $b = -0.08$, $SE = 0.05$, $p = .098$.

Table 3. Correlations Among and Descriptive Statistics for Key Study Variables

	<i>M (SD)</i>	1	2	3	4	5	6	7
1. SOC	3.15 (0.60)	—						
2. SOC-R	4.65 (1.32)	.36	—					
3. Community support and connection	7.14 (2.18)	.17	.22	—				
4. Quality	7.41 (1.95)	.11	.12	.54	—			
5. Environmental reasons	6.77 (2.42)	.08	.22	.68	.51	—		
6. WTP1	—	.06	.13	.49	.42	.39	—	
7. WTP2	1.91 (0.60)	.12	.08	.30	.23	.23	.42	—

Note. WTP1 was coded as 1 (No) and 2 (Yes). The correlations with the WTP1 (i.e., dichotomous variable) are point-biserial correlations. Correlation coefficients greater than ± 0.11 were significant at $p < .05$. SOC = sense of community; SOC-R Sense of community responsibility; WTP = willingness-to-pay.

To answer the research question, a mediation analysis was performed. As Table 4 shows, SOC-R significantly predicted WTP1 (total effect). However, SOC-R did not predict WTP1 when the selected potential mediating variables (direct effect) were included. The total effect of SOC-R on WTP1 was 3.3 larger than the direct effect of education alone (confounding ratio). Additionally, 69.49% of this total effect could be ascribed to the mediating variables (confounding percentage). As shown in Table 3, SOC significantly predicted WTP2 (total effect). Again, SOC was not associated with WTP2 when the selected potential mediating variables (direct effect) were included. The total effect of SOC on WTP2 was 2.5 times larger than the direct effect, with 60.14% of the total effect attributable to the mediating variables. A significant indirect effect suggests that at least one of the three mediating variables mediated the associations between SOC-R and WTP1 and between SOC and WTP2. As Table 4 shows, Community support and connection and Quality were significant mediators in the associations between SOC-R and WTP1 and between SOC and WTP2. Environmental reasons did not mediate these associations. Both SOC-R and SOC had the strongest indirect effect on WTP1 and WTP2, respectively, through Community support and connection. In a nutshell,

mediation analyses revealed that the association between psychological sense of community and willingness to pay for food at a farmers' market is explained by an increased perception of the quality of the product and perceived support for community and connection (mediators).

Table 4. Direct and Indirect Effect of SOC-R and Mediators on WTP1 (Model A) and of SOC and Mediators on WTP2 (Model B).

	<i>b</i>	<i>SE</i>	<i>Z</i>	<i>p</i>	95% CI	
Model A						
- Total effect	0.29	0.10	2.97	.003	0.10	0.49
- Direct effect	0.09	0.10	0.90	.369	-0.11	0.29
- Indirect effect	0.20	0.06	3.62	.000	0.09	0.31
Model B						
- Total effect	0.47	0.15	3.07	.002	0.17	0.77
- Direct effect	0.19	0.16	1.21	.228	-0.12	0.49
- Indirect effect	0.28	0.08	3.50	.000	0.13	0.44

Table 5. Contribution of each mediator on the association between SOC-R and WTP1 (Model A) and of SOC and WTP2 (Model B).

Mediating variable	<i>b</i>	<i>SE</i>	<i>p</i>	% indirect effect ^a	% total effect ^b
Model A					
-Community support and connection	0.13	0.04	.002	64.12	44.56
-Quality	0.05	0.03	.045	25.08	17.43
-Environmental reasons	0.02	0.03	.429	10.81	7.51
Model B					
-Community support and connection	0.20	0.07	.003	68.75	41.35
-Quality	0.09	0.04	.030	31.60	19.00
-Environmental reasons	0.00	0.02	.955	-0.35	-0.21

Note. SOC = sense of community; SOC-R Sense of community responsibility; CI = confidence interval; WTP = willingness-to-pay. Analyses were conducted controlling for gender, age, and household income. ^a Contribution (%) to the indirect effect. ^b Contribution (%) to the total effect.

4. Discussion

The main aim of the current study was to investigate the relationship between sense of community (SOC-R and SOC) and WTP for food at a farmers' market. Moreover, based on the review of the existing research on sense of community and reasons for buying local food, the current study addressed the research question of whether the three main reasons for buying local food products (i.e., high quality, support for the local community, and perceived environmental benefits) mediate the relationship between sense of community and WTP for food at a farmers' market. I found evidence supporting the relationship between sense of community and WTP for food at a farmers' market. In addition, high quality and support for the local community (but not perceived environmental benefits) did mediate the relationship between sense of community and WTP for food at a farmers' market.

A novelty of the present work is that two validated measures of psychological sense of community were used. These two measures represent the traditional concept of sense of

community developed by McMillan and Chavis (1986) as well as the concept of sense of community responsibility (Nowell & Boyd, 2014, p. 231). The findings of the present research revealed that SOC and SOC-R have different effects on willingness to pay for food at a farmers' market depending on the type of WTP measure. A sense of personal responsibility for the well-being of a community of people, as implied in the concept of SOC-R (Nowell & Boyd, 2014), was associated with willingness to pay an extra-price of approximately 15 per cent for the costs of food at a farmers' market. However, levels of SOC-R were not associated with willingness to pay more than such an extra-price. As I argued, the concept of SOC-R refers to a sense of duty or obligation to the community and its members. Such sense of duty or obligation to the community may be unlikely to extend far beyond one's own perceived fairness of the cost of food at a farmers' market. In contrast, higher levels of SOC were associated with willingness to pay more than such extra-price for the cost of food at a farmers' market. The traditional concept of SOC refers to a community that is conceptualized as a resource for meeting key needs (e.g., need for belonging, influence, and connection). Therefore, higher levels of SOC mean that a person is in a community that satisfies one's needs and promotes feelings of belonging, influence, and connection. According to the norm of reciprocity (Coleman, 1988; Putnam et al., 1993), in communities in which people can receive help and support and their needs are met, community members are more likely to engage in reciprocal actions and, therefore, support local farmers by paying more than a small extra-price for local food. Indeed, Miller (2001) demonstrated that reciprocity mediates the relationship between community attachment and rural community inshopping behavior. The role of the norm of reciprocity as well as of sense of duty or obligation to the community and its members was further confirmed by mediation analysis which revealed that the relationship between sense of community and WTP for food at a farmers' market was mediated by the perceived quality of the product (even if participants were told that the quality did not differ) and, for the most part, by the willingness to support the community and interact with the local farmer. Moreover, concerns over the environmental impact as well as the perception that local food is a sustainable alternative to industrial agriculture do not explain the link between sense of community and WTP for food at a farmers' market. Previous research has not attempted to examine the role of reasons for buying local food products as a mechanism through which psychological sense of community leads to WTP for food at a farmers' market. In this way, the current research provided a novel contribution to our understanding of WTP for food at a farmers' market.

Upon interpreting the results of this study, some limitations should be acknowledged. First, the cross-sectional nature of the study design precludes causal inference about the observed associations. Notwithstanding, the directionality of the associations hypothesized in this research was derived from theoretical and empirical work in the literature. Future research can use insights from interviews and focus groups to further examine the processes leading from sense of community to willingness to pay for food at a farmers' market. Second, the results are based on self-reported measures; therefore, measurement bias such as response bias, social desirability, and recall bias, should be acknowledged too. Third, the generalizability of the present research is limited because nonrandom sampling procedures were used and only one country was involved. Future cross-national studies are needed to replicate these findings. However, it should be noted that results hold when controlling for gender, age, and household income. In the literature, there is a debate whether a study designed to test theoretical research questions must be conducted using representative samples. There are clear disagreements about the importance of external validity for theory-testing research: "It

is not important whether specific findings are also found among other populations; what is important is drawing valid conclusions about a theory given the empirical evidence.” (Stroebe, Gadenne, & Nijstad, 2018, p. 386). In the present study, I tested theoretical research questions that are not conceptualized on a universal level. Students' financial circumstances may not be similar to many other purchasers of local food. However, the processes leading to the purchase of local food may not be substantially different from that of other people such as workers or retirees. It should be noted that the results revealed that student status does not affect the relationship between sense of community and WTP. Notwithstanding, I reported several limitations that warrant caution when interpreting results.

4.1 Conclusion

The current research adds to the literature on sense of community and support for local food initiatives by demonstrating that two forms of psychological sense of community may have a different effect on willingness to pay for food at a farmers' market. Specifically, the traditional concept of SOC was associated with willingness to pay more than a small extra-price for local food. However, the traditional concept of SOC did not predict WTP when the cost of food differs slightly between supermarkets and farmers' markets. On the other hand, SOC-R predicted willingness to pay an extra-price of approximately 15 per cent for the costs of food at a farmers' market compared to that in a supermarket but not willingness to pay more than such a small extra-price. Mediation analyses revealed that the vast majority of the association between sense of community and willingness to pay for food at a farmers' market was explained by the motivation to establish a connection with the local farmer and to support the local economy. The findings of mediational analyses may be interpreted either in terms of the norm of reciprocity or in terms of sense of duty or obligation to the community.

Taken together, these findings add to the theoretical conceptualization of psychological sense of community and support for local food initiatives. The current findings provide preliminary support for the idea that sense of community and support for local food initiatives are associated. These findings demonstrate that theory of psychological sense of community needs to account for the support for local food initiatives as a potential form of participation and community engagement. Moreover, mediation analysis provided possible explanations for this relationship. The findings of the present study add to the literature that critically questions the concept of homo oeconomicus based on classical model in economic analyses. Specifically, the idea that human beings are consistently rational and narrowly self-interested and calculate costs and profits is not supported. Indeed, a large majority of participants in the present study were willing to pay an extra price for food at a farmer's market and sense of community was an important predictor of this choice. Although the relationship between sense of community and support for local food initiatives has received some attention, this is the first time that this relationship was investigated and received empirical support using two validated scales that measure SOC and SOC-R.

These findings could help provide some practical implications for practitioners. First, the development of a branding strategy for local products produced by local farmers could be an important way to promote a local product (e.g., “zero kilometers” products and initiatives). The findings of the present study may suggest that a psychological sense of community could be incorporated into the development of a branding strategy. In addition, communication campaigns based on the idea of sense of community could be useful to promote local food initiatives. The characteristics of fresh, nutritious, seasonal, and good-tasting food attributed

by potential consumers to local food products are valuable not only in terms of sales and marketing but also in terms of promotion of sustainable and healthy lifestyles.

References

- Baltar, F. (2012). Social research 2.0: Virtual snowball sampling method using Facebook. *Internet Research, 22*(1), 57-74. <https://doi.org/10.1108/10662241211199960>
- Bosona, T. G., & Gebresenbet, G. (2011). Cluster building and logistics network integration of local food supply chain. *Biosystems Engineering, 108*(4), 293-302. <https://doi.org/10.1016/j.biosystemseng.2011.01.001>
- 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. <https://doi.org/10.1016/j.ecolecon.2008.10.009>
- Boyd, N. M., & Nowell, B. (2014). Psychological sense of community: A new construct for the field of management. *Journal of Management Inquiry, 23*(2), 107-122. <https://doi.org/10.1177/1056492613491433>
- Boyd, N. M., & Nowell, B. (2017). Testing a theory of sense of community and community responsibility in organizations: An empirical assessment of predictive capacity on employee well-being and organizational citizenship. *Journal of Community Psychology, 45*(2), 210-229. <https://doi.org/10.1002/jcop.21843>
- Breen, R., Karlson, K. B., & Holm, A. (2013). Total, direct, and indirect effects in logit and probit models. *Sociological Methods & Research, 42*(2), 164-191. <https://doi.org/10.1177/0049124113494572>
- Brehm, J. M., & Eisenhauer, B. W. (2008). Motivations for participating in community-supported agriculture and their relationship with community attachment and social capital. *Southern Rural Sociology, 23*(1).
- Chiessi, M., Cicognani, E., & Sonn, C. (2010). Assessing sense of community on adolescents: Validating the brief scale of Sense of Community in Adolescents (SOC-A). *Journal of Community Psychology, 38*(3), 276-292. <https://doi.org/10.1002/jcop.20364>
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*, S95-S120. <https://doi.org/10.1086/228943>
- Dixon, G. N., Deline, M. B., McComas, K., Chambliss, L., & Hoffmann, M. (2015). Saving energy at the workplace: The salience of behavioral antecedents and sense of community. *Energy Research & Social Science, 6*, 121-127. <https://doi.org/10.1016/j.erss.2015.01.004>
- Giampietri, E., Koemle, D., Yu, X., & Finco, A. (2016). Consumers' sense of farmers' markets: Tasting sustainability or just purchasing food? *Sustainability, 8*(11), 1157. <https://doi.org/10.3390/su8111157>
- Karlson, K. B., Holm, A., & Breen, R. (2012). Comparing regression coefficients between same-sample nested models using logit and probit: A new method. *Sociological Methodology, 42*(1), 286-313. <https://doi.org/10.1177/0081175012444861>
- Kohler, U., & Karlson, K. (2019). KHB: Stata module to decompose total effects into direct and indirect via KHB-method (Version 2.1). Boston: Statistical Software Components, Boston College Department of Economics <https://EconPapers.repec.org/RePEc:boc:bocode:s457215>
- Kurz, T., Linden, M., & Sheehy, N. (2007). Attitudinal and community influences on participation in New Curbside Recycling Initiatives in Northern Ireland. *Environment and Behavior, 39*(3), 367-391. <https://doi.org/10.1177/0013916506294152>

-
- Matzek, V., & Wilson, K. A. (2021). Public support for restoration: Does including ecosystem services as a goal engage a different set of values and attitudes than biodiversity protection alone? *PLoS ONE*, *16*(1), e0245074. <https://doi.org/10.1371/journal.pone.0245074>
- McMillan, D. W., & Chavis, D. M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, *14*(1), 6-23. [https://doi.org/10.1002/1520-6629\(198601\)14:1<6::AID-JCOP2290140103>3.0.CO;2-I](https://doi.org/10.1002/1520-6629(198601)14:1<6::AID-JCOP2290140103>3.0.CO;2-I)
- Miller, N. J. (2001). Contributions of social capital theory in predicting rural community inshopping behavior. *The Journal of Socio-Economics*, *30*(6), 475-493. [https://doi.org/10.1016/S1053-5357\(01\)00122-6](https://doi.org/10.1016/S1053-5357(01)00122-6)
- Muniz Jr, A. M., & O'Guinn, T. C. (2001). Brand community. *Journal of Consumer Research*, *27*(4), 412-432. <https://doi.org/10.1086/319618>
- Nowell, B., & Boyd, N. M. (2014). Sense of community responsibility in community collaboratives: Advancing a theory of community as resource and responsibility. *American Journal of Community Psychology*, *54*(3-4), 229-242. <https://doi.org/10.1007/s10464-014-9667-x>
- Obach, B. K., & Tobin, K. (2014). Civic agriculture and community engagement. *Agriculture and Human Values*, *31*(2), 307-322. <https://doi.org/10.1007/s10460-013-9477-z>
- Omoto, A. M., & Packard, C. D. (2016). The power of connections: Psychological sense of community as a predictor of volunteerism. *The Journal of Social Psychology*, *156*(3), 272-290. <https://doi.org/10.1080/00224545.2015.1105777>
- Patton, M. Q. (2002). *Qualitative research & evaluation methods: Integrating theory and practice* (4 ed.). Sage Publications.
- Pearson, D., Henryks, J., Trott, A., Jones, P., Parker, G., Dumaresq, D., & Dyball, R. (2011). Local food: Understanding consumer motivations in innovative retail formats. *British Food Journal*, *113*(7), 886-899. <https://doi.org/10.1108/00070701111148414>
- Prati, G., Procentese, F., Albanesi, C., Cicognani, E., Fedi, A., Gatti, F., . . . Gattino, S. (2020). Psychometric properties of the Italian version of the sense of community responsibility scale. *Journal of Community Psychology*, *48*(6), 1770-1790. <https://doi.org/10.1002/jcop.22366>
- Putnam, R. D., Leonardi, R., & Nanetti, R. Y. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton: Princeton University Press.
- Ruscio, J., & Roche, B. (2012). Determining the number of factors to retain in an exploratory factor analysis using comparison data of known factorial structure. *Psychological Assessment*, *24*(2), 282-292. <https://doi.org/10.1037/a0025697>
- Schnell, S. M. (2013). Food miles, local eating, and community supported agriculture: Putting local food in its place. *Agriculture and Human Values*, *30*(4), 615-628. <https://doi.org/10.1007/s10460-013-9436-8>
- Shin, Y. H., Im, J., Jung, S. E., & Severt, K. (2018). Locally sourced restaurant: Consumers willingness to pay. *Journal of Foodservice Business Research*, *21*(1), 68-82. <https://doi.org/10.1080/15378020.2016.1276319>
- Smith, E. K., Lacy, M. G., & Mayer, A. (2019). Performance simulations for categorical mediation: Analyzing khb estimates of mediation in ordinal regression models. *The Stata Journal*, *19*(4), 913-930. <https://doi.org/10.1177/1536867X19893638>
- Stroebe, W., Gadenne, V., & Nijstad, B. A. (2018). Do our psychological laws apply only to college students?: External validity revisited. *Basic and Applied Social Psychology*, *40*(6), 384-395. <https://doi.org/10.1080/01973533.2018.1513362>

Talò, C. (2018). Community-based determinants of community engagement: A meta-analysis research. *Social Indicators Research*, 140(2), 571-596. <https://doi.org/10.1007/s11205-017-1778-y>

Talò, C., Mannarini, T., & Rochira, A. (2014). Sense of community and community participation: A meta-analytic review. *Social Indicators Research*, 117(1), 1-28. <https://doi.org/10.1007/s11205-013-0347-2>