Local- and sustainably-produced agriculture products: The role of an agritourism event in informing consumer's intentions and behaviors

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Introduction

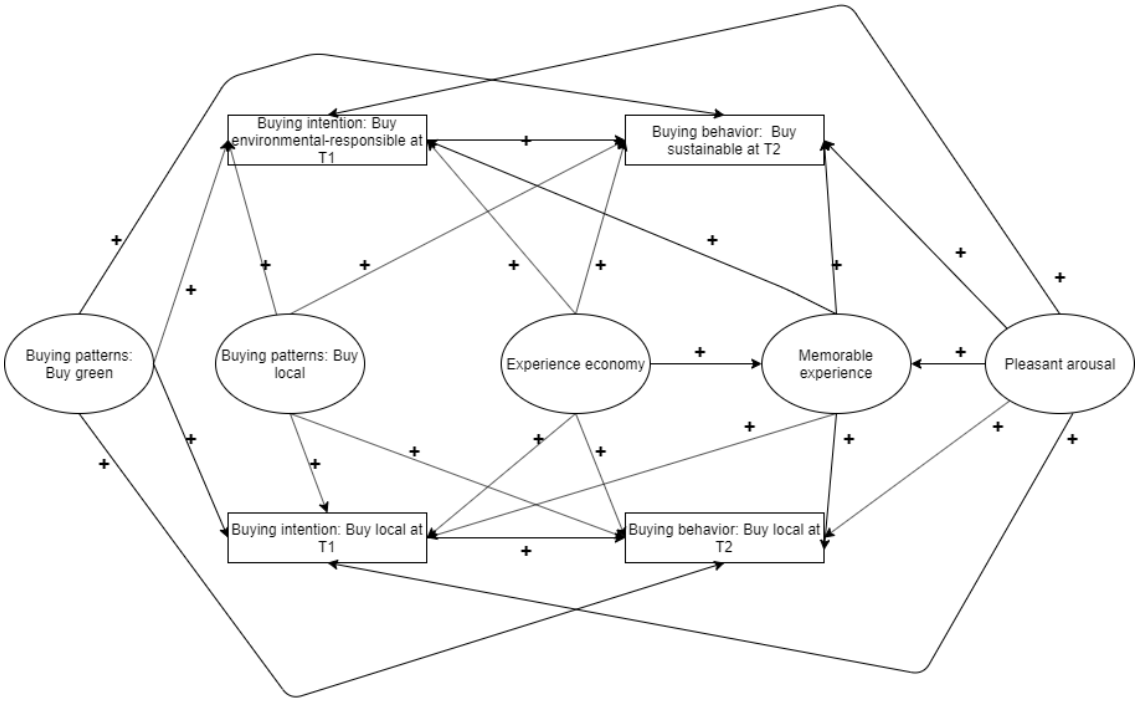
This presentation reports on an investigation of agritourists' experiences on their intention and actual purchase of locally- and sustainably-produced food and beverage products.

Efforts to promote increased sales of regionally produced food and beverage products to local consumers is rooted in an interest in food security, access to healthy food, reduction of food's carbon footprint (associated with transport), and to demonstrate support for local producers. Through reduced transport costs, buying local can also advance sustainability goals by supporting local cultural systems and the preservation of cultural heritage. Agritourism is recommended as a means to promote residents' interest in regional agritourism products (Arroyo, Barbieri, & Rich, 2013; Che, 2006). This study examines the impact of agritourism experiences at an Open Farms event. It contributes to the dialog about how these experiences inspire and fortify consumer loyalty to locally produced goods (Brune et al., 2020).

Literature Review

Practitioner and researchers suggest that when consumers visit farms and venues that celebrate local agricultural products, they in turn will be more likely to support local agriculture and potentially sustainable production of agriculture goods through their subsequent consumer purchases. Its it suggested that this is encouraged through the direct experience of the product through the sensing and sensual experience of these goods (Brochado et al., 2021; Sthapit, 2017), the on-site observations and education they achieve (Arroyo, Barbieri, & Rich, 2013; Che, 2006; Suhartano et al., 2020), increased sense of trust vis a vis personal contact with producers (Papaoikonomouu & Ginieis, 2017), relationship building (Brune et al., 2020; Choo & Petrick, 2014; Sidali et al., 2015) and gained sense of authenticity (Cubillas et al., 2017; Sims 2009). It can also be inspired by satisfying experiences (Murray & Kline, 2015) that are immersive and/or absorbing – depending on the visitor's desired outcomes (citation), produce pleasant arousal (Loureiro, 2014) and positive memories (Loureiro, 2014). Experience economy sub-dimensions, namely education, aesthetics, escapism and entertainment likely play different roles in this process, however a handful of studies that have examined their impact in the culinary tourist's experiences suggest that aesthetics may be especially important for rural excursions (Bruwer & Rueger-Muck, 2019, Loureiro, 2014; Quadri-Felitti & Fiore, 2012).

Below a theoretical model outlines the proposed relationships between the constructs included in this study. Ultimately experiences at the agritourism venues as well as previous purchasing of food that was sustainably-raise or locally produced were hypothesized as predictors of intentions to purchase (Time 1) and actual (Time 2) purchases of local and sustainable food and beverages.



Methodology

The study collected data from agritourists participating in an annual farm and local food venders weekend event, Open Farm Days. The event was located in western Canada. Visitors were intercepted at 8 distinct venues including a goat dairy, bison farm, u-pick vegetable operation, and distillery. The visitors were asked to provide their email address, which was then used to conduct three rounds of surveys, Time 1 was immediately after their visit, Time 2 was 6 months after, and Time 3 was 12 months after. Data from Time 1 and 2 are reported here. A small gift was provided to each visitor intercepted, thanking them for the time they spent to learn about the study. Two prize draws for a prize (<$250) were also conducted at Time 2 and 3 to incentivize participants to continue participation in the study.

Survey instruments were developed from previous studies including measures for arousal and experience (Loureiro, 2014), memorable experiences (Kim et al., 2012), experience economy (Oh et al., 2007).

SPSS and SMART PLS software were used to conduct data cleaning and analysis. Structural equation modeling that incorporated both formative and reflective variables were used to explore the impact of attending an agritourism event on consumer purchasing.

Results

125 responded completed the survey at Time 2 (6 months after the event). The sample characteristics included:

- 53.6% were aged between 25 and 44, 40% were 45 years' old or above
- 72.8% were female

- 89.6% lived in Canada for 10 or more years
- 64.4% received at least university-level education
- 36% reported household income CND$100,000 or higher
- 77.8% were first-time visitors
- Responses to the question "How would you rate your experience at Open Farm Days?" revealed high satisfaction (M=4.46 (SD=.614) where 1=Very unsatisfactory and 5=Very satisfactory)

The assessment of the reflective models reflected good fit. Aesthetics followed by education appeared to be the highest rated element of visitors' experiences followed by education.

Construct and items	**Mean (SD)**	**Indicator reliability**	**Convergent validity**	**Internal consistency reliability**	
		Loadings	**AVE**	**Composite reliability**	**rhoA**
Entertainment	**3.59 (.95)**		**.74**	**.92**	**.89**
I really enjoyed watching what others were doing	3.66 (1.19)	.86			
Activities were fun to watch	3.73 (1.07)	.88			
Watching others perform was captivating	3.21 (1.05)	.87			
Education	**3.96 (1.02)**		**.87**	**.96**	**.95**
I learnt a lot	3.86 (1.10)	.94			
It stimulated my curiosity to learn new things	3.91 (1.08)	.94			
It was an authentic learning experience	4.12 (1.05)	.92			
The experience made me more knowledgeable	3.95 (1.14)	.93			
Escapism	**3.01 (.99)**		**.71**	**.91**	**.86**
I escaped from reality	3.26 (1.23)	.90			
I felt like I was in a different time or place	2.96 (1.15)	.89			
I totally forgot about my daily routine	3.28 (1.15)	.82			
The experience let be imagine being someone else	2.54 (1.17)	.75			

Esthetics	**4.22 (.80)**		**.77**	**.94**	**.93**
Just being at the Open Farms Days site was very pleasant	4.51 (.84)	.86			
The setting was very attractive	4.36 (.78)	.86			
The setting provided pleasure to my senses	4.11 (.99)	.88			
I felt a sense of harmony	3.93 (1.06)	.88			
Pleasant arousal	**3.98 (.89)**		**.82**	**.95**	**.93**
Was very stimulating	3.77 (1.08)	.91			
Was very exciting	3.61 (1.00)	.87			
Was very interesting	4.23 (.95)	.92			
Was very enjoyable	4.35 (.88)	.92			
Memorable experiences	**4.14 (.93)**		**.85**	**.96**	**.94**
Produced many positive memories of the rural destination	4.06 (1.03)	.90			
Produced many positive impressions of local agricultural producers	4.19 (1.01)	.94			
Produced many positive impressions of the Open Farm Days Venue	4.25 (.96)	.94			
Provided wonderful memories of rural Alberta	4.08 (1.03)	.91			

Note. 1= strongly disagree, 5=strongly agree

Formative models measuring pro-environmental and pro-social purchasing behaviors, and purchasing of local food and beverage products prior to attending Open Farm Days also demonstrated good fit. Buying "green" had a relatively neutral value of 2.91 out of 5 were as reports of buying local prior to attending the Open Farm Days event were slightly more elevated (3.35/5).

Construct and items	**Mean (SD)**	**Outer weights**	**Collinearity**
			Variance inflation factor (VIF)

Buy Green	**2.91 (.95)**		
I buy certified-organic food and beverage products regularly	2.40 (1.30)	.23	**1.43**
I buy sustainably-produced food and beverage products regularly	3.01 (1.18)	.23	1.96
I buy humanly-raised food and beverage products regularly	3.21 (1.14)	.45	2.11
I buy fair trade-certified food and beverage products regularly	3.02 (1.08)	.30	1.93
Buy local	**3.35 (1.09)**		
I try hard to buy food and beverage products from [local] producers whenever possible	3.69 (1.20)	.26	**1.79**
I buy food and beverage products from [local] producers regardless of price	3.02 (1.20)	.80	1.79

Note. 1= strongly disagree, 5=strongly agree

Assessment of the second order formative model, which featured the four "experience economy" sub-dimensions are listed next along with the means and standard deviations for each of these aggregate sub-dimensions.

Experience economy constructs	**Outer weights**	**T-test**
Education → Experience economy	.32	16.60***
Esthetics → Experience economy	.26	11.32***
Escapism → Experience economy	.20	18.05***
Entertainment → Experience economy	.26	14.84***

Note. 1= strongly disagree, 5=strongly agree; ***p<.001, **p<.01, *p<.05

Single measures of intentions to purchase and actual purchase of locally produced food and beverage products as well as intentions to purchase and actual purchase of sustainably-produced food and beverage products at Time 1 and Time 2 were collected and inserted into the structural equation model and the previously described constructs were examined for their predictive ability on these intentions at Time 1 and behaviors at Time 2.

Construct	**Mean (SD)**
Directly after agritourism venue visit (Time 1)	
In the future, I will purchase more [locally]-produced food and beverage products (T1 buy local intention)	4.02 (.91)
When making food and beverage purchase decisions, I intend to prioritize the purchase of environmentally-responsible products (T1 buy environmentally-responsible intention)	3.92 (.91)
6 months later (Time 2)	

Due to my 2018 Open Farm Days visit, I now purchase more [locally]-produced food and beverage products (T2 buy local behavior)	3.42 (1.28)
Due to my 2018 Open Farm Days visit, I now purchase more sustainably-produced food and beverage products (T2 buy sustainable behavior)	3.42 (1.22)

Note. 1= strongly disagree, 5=strongly agree

The amount of variance explained for each construct (R^2) are detailed below. Values of 0.75, 0.50 and 0.25 are considered substantial, moderate and weak. The Q^2 values indicate predictive accuracy of SEM model; values higher than 0, 0.25 and 0.50 depict small, medium and large predictive relevance of the PLS-path model

Construct	**R^2**	**Q^2**
Memorable experience	.72	.57
Pleasant arousal	.79	.59
Buy local intention at T1	.41	.34
Buy environmental-responsible intention at T1	.43	.37
Buy local behavior at T2	.40	.32
Buy sustainable at T2	.36	.28

Structural modeling of relationships between the study's variables produced reports of direct and indirect effects between variables. Only significant direct effects are reported here and discuss below. In short, previous green buying patterns did not appear to play a role in supporting intentions to buy local food and beverages 6 months after the agritourism venue visit. Previous local food purchasing patters as well as strong, positive experience outcomes were predictive of consumer purchase of locally produced goods at time 2 (6 months after the event).

Hypotheses	**Direct effect**	**T-test**	**F^2**	**Results**
Experience economy -> Buy local behavior at T2	.29	3.62***	.05	Supported
Experience economy-> Buy local intention at T1	.31	4.26***	.02	Supported
Experience economy -> Memorable experience	.80	19.32***	.06	Supported
Pleasant arousal -> Memorable experience	.60	5.46***	.28	Supported
Memorable experience-> Buy local behavior at T2	.29	2.25*	.02	Supported
Memorable experience-> Buy local intention at T1	.37	2.74*	.07	Supported
Memorable experience-> Buy environmental-responsible intention at T1	.39	3.24**	.08	Supported

Buy Green -> Buy environmental-responsible intention at T1	.46	5.06***	.23	Supported
Buy Green -> Buy sustainable behavior at T2	.23	2.38*	.02	Supported
Buy local -> Buy local behavior at T2	.41	4.04***	.11	Supported
Buy local -> Buy local intention at T1	.44	3.66***	.22	Supported
Buy local -> Buy environmentally sustainable intention at T1	.19	2.05*	.04	Supported
Buy local -> Buy sustainable behavior at T2	.26	2.88**	.06	Supported
Buy Green -> Buy environmental-responsible intention at T1	.46	5.06***	.23	Supported

Note. F^2 indicates the strength of relations between variables; values of 0.02, 0.15, and 0.35 represent small, medium, and large effect sizes, respectively (Cohen, 1988). T-test significance = ***p<.001, **p<.01, *p<.05

Conclusion and Discussion

Four core observations will be expanded on during the conference presentation of this study. These are:

- Buying local and sustainable products were weakly to moderately explained by experience economy construct, memorable experience, and (indirectly) pleasurable arousal at Time 1 (directly after the visit) and Time 2 (6 months after the visit).
- Visiting farms inspired buying local much more than inspiring sustainable purchasing practices
- Past green purchasing before their attendance at Open Farm Days had no impact on buying local (T1 or T2), and intension to buy sustainable products had a very small impact on buying local
- Aesthetics was the most highly rated of the four experience sub-dimensions; escapism was least important. This parallels findings by Loureiro, 2014.

Practical recommendations arising from this study include investment in messaging around sustainable farm and food production practices (Barbieri, 2013), refinement of experience provision through operator training, expansion of year-round access to local food products (e.g., offer a Winter Open Farm Days), and increased better access (e.g., vending hubs and farmers markets) for local producers to connect with consumers (Garner & Ayala, 2019; Lang, Stanton, & Qu, 2014)

Limitations of this study including three issues: First there were 8 study sites: 6 farms and 2 distilleries. The quality of the experiences, in terms of immersive and engaging activities, as well as fundamental visitor experience provision (e.g., wayfinding) varied a great deal. This likely reduced our ability to link high quality experience provision with subsequent purchasing behaviors. Second, the data collection at Time 2 was in winter, and this likely impacts the availability of some local food purchase. Finally, the data was based on self-reported intentions and behaviours. It would be ideal to track purchase through direct observation or other methods.

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