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Winter Wine Tourists in Canada's Niagara Region

Carman W. Cullen*
Eugene Kaciak, Brock University
Linda Bramble, Brock University
Barry Wright, Brock University
Alfred E. Seaman, McMaster University
John J. Williams, Singapore Management University

* Contact Author

Carman W. Cullen
Chair, Marketing International Business and Strategy
Faculty of Business
St. Catharines, Ontario, Canada L2S 3A1
e-mail cwcullen@brocku.ca
Phone 905-688-5550 (ext. 3220)

Abstract

This paper represents the first stage in a multi-seasonal investigation of peak, off-peak and shoulder season winery tourists in Canada's Niagara region. The goal of the study reported here is to better understand the off-peak winery tourist – that strange creature who chooses to visit a winery in the dead of Canadian winter. Who are these people?

Winter Wine Tourists in Canada's Niagara Region

The Niagara region of Canada has long been a destination for tourists. The wonder of the Falls, the quaint villages, and a wealth of artistic and recreational activities have proven to be significant attractions for tourists from around the world. Only recently, primarily in the last decade, has there been a significant *winery* tourism industry in the Niagara. There has been a boom in the number of wineries being developed in the region, many of them with a focus on attracting a share of the tourist trade. In addition to the increasing reputation of the wines, the architecture of some of these new wineries has in itself proven to be a tourist draw. However, Canada's wine tourism industry faces dramatic seasonal climatic variations not found in many other wine producing regions. Tourist industry participants world-wide, and wine tourism specialists as much as any, are familiar with seasonal variations (Getz, 2000), but few must confront such dramatic seasonal climatic changes. Canada's Niagara region is blessed with the perfect weather for making the world's best ice-wine, but the freezing winter temperatures provide significant challenges for the burgeoning wine tourism industry. Most Niagara wineries remain open year-round; a managerial strategy that remains a mystery to many. Yet, there are many hardy souls who venture forth into the winter to experience the novelty of visiting wineries covered in snow and ice.

This paper represents the first stage in a multi-seasonal investigation of peak, off-peak and shoulder season winery tourists in Canada's Niagara region. The goal of the study reported here is to better understand the off-peak winery tourist – that strange creature who chooses to visit a winery in the dead of winter. Who are these people?

There are many possible explanations for the phenomenon of winter winery tourism. We concentrate on geo-demographics and the psychological construct of involvement. Understanding differences in involvement among off-peak and peak tourists, if in fact they exist, would be critical for the development of effective advertising and promotional campaigns. Strategies for changing attitudes through advertising are predicated upon a clear understanding of the involvement levels of the person to whom the advertising is directed (Maheswaran and Meyers-Levy, 1990), and it would seem likely that Canadians trying to promote winter wine tourism may need to change a few attitudes. This paper, however, deals specifically with the winter wine tourist, so cross-seasonal comparisons must wait for the collection of data in the other three seasons. For now, we are reporting on the baseline study that describes both the involvement level and the geo-demographic makeup of the winter winery tourist.

Background

The Wine Council of Ontario (2005) recently concluded a study of winery tourism in Ontario wherein they asked 500 winery visitors to indicate their first choice of season in which to visit Niagara wineries, and then to indicate which season would be their second choice. Not surprisingly, 95% selected summer or fall as their first choice. However, 15% chose the winter season as their second choice. The Wine Council also estimates that there were more than one million visits last year to Ontario wineries. There is therefore at least some support to indicate that there may be a winter winery tourist segment worth investigating. Getz (2000) suggested that among the attractions that would draw tourists to wineries in winter would be vine pruning,

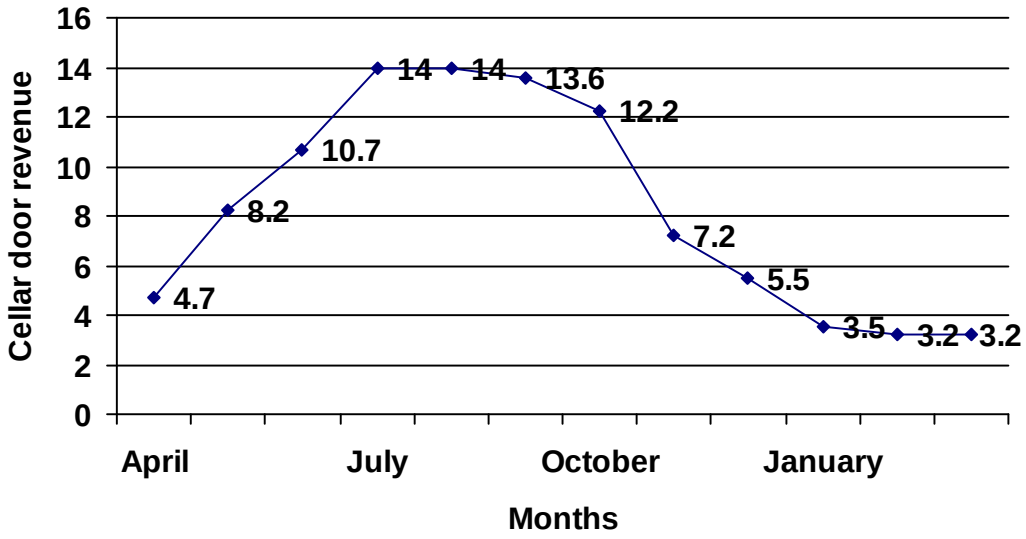
icewine production, wines prepared for blending or bottling and barreling for maturation. This is an interesting, supply-side solution (Baum and Lundtorp, 2001) to what Butler (2001) refers to as natural seasonality. Some wineries in the Niagara region have taken this even further by attempting to entice "wuppies" (wine loving yuppies) from major urban centers, always eager for an adventure, to pick grapes in the middle of a Canadian winter, often at night, and to assist with the pressing. They seldom do this twice.

The total retail sales value of Ontario wines sold in Ontario, 2004-2005, was approximately $450 million (KPMG 2005). The same study suggested that every bottle of Ontario wine sold in the province adds $4.25 in value to the Ontario economy. This value includes tourism as there are more than one million visitors to Ontario wineries each year (WCO 2005).

The issue for Ontario wine tourism is seasonality, defined by Butler (2001, p.5) as, "temporal imbalance in the phenomenon of tourism, which may be expressed in terms of dimensions of such elements as numbers of visitors, expenditure of visitors, traffic . . . and employment." This is the definition employed in our study.

The impact of seasonality on cellar door sales can best be observed in Chart 1. The shape of the curve is familiar to anyone in the tourism industry in Canada; it is not unique to wine tourism. Hinch et al., (2001, p. 173), in a study of Fort Edmonton Park in Canada, suggest that, "in Canada, tourism activity peaks in July and August, bottoms out in January, and is generally in transition between these extremes for the balance of the year." The chart below shows the composite, average of retail sales out of the cellar door for the three largest wineries in Ontario: Inniskillin, Hillebrand and Peller estates. This study was conducted in the tasting rooms, or cellar doors, of these three wineries. The months of January, February and March combined account for roughly 10% of annual cellar door sales. July through October is the peak season for Niagara winery tourism. This study was conducted in January.

Composite Percentage Cellar Door Sales, by Month, of the Three Wineries



The peak season brings with it the problems of traffic and staffing, and the off-peak brings the problem of lack of demand and what to do with the staff that is no longer necessary. Managing these peaks and troughs associated with seasonality is not specific to the Niagara wine industry (Commons and Page 2001; Bull 1995; Allcock 1994). It has been suggested by Baum and Hagen (1997) that reducing seasonality can be addressed through launching new seasons, diversifying markets, reducing prices and providing off-season activities. These are similar to the approaches suggested earlier by Witt et al., (1991) cited in Commons and Page (2001). Niagara wineries have attempted several of these approaches in recent years with mixed success. Some efforts, such as the Niagara Ice-wine Festival and the Cuvee Gala have been spectacularly successful; however, there have been numerous other efforts that have failed miserably. It may be, in fact, that the climatic severity is too intractable an issue to worry about (Butler 2001) and that no amount of effort is going to smooth the wine tourism demand curve for Niagara. Lundtorp et al, (1999) described the situation in the Danish Island of Bornholm, and made the suggestion that, "If Bornholm can be used as a typical example of a tourist destination in a peripheral region in northern Europe all evidence is against any serious attempt to promote a resort as an off-season destination." Our focus is on the current Niagara winter wine tourist. Ultimately, following data collection in all seasons, we hope to be able to make some tourism policy recommendations. For now we will be content with attempting to draw a portrait of the people that come to our wineries in the off-peak season.

The classic work of Bar-On (1975) is cited by Baum and Lundtorp (2001) as one of the very few longitudinal investigations of seasonality in the literature. The research reported in our paper is the very first step in what is anticipated to be a rigorous, longitudinal investigation of seasonality in wine tourism in a cool climate.

There is a reasonably good chance that a winter winery tourist would be highly involved in wine. Involvement is the degree of personal relevance of an object, product, or service to a customer (Sheth and Mittal, 2004). Involvement has been explored as an explanatory construct in the purchase of wine, and as a basis for wine consumer segmentation (Berti, 2003; Lockshin, 2001; Zaichkowsky, 1985). Many studies originally treated involvement as a uni-dimensional construct, whereas more recent involvement research has demonstrated that involvement consists of more than one dimension (Cullen and Edgett, 1991). One study (Edgett and Cullen, 1993) demonstrated that the degree (high vs. low) and the type of involvement (cognitive vs. affective) influences the type of information utilized by consumers in making purchases. In addition, Cullen (1990) demonstrated that consumers could be involved with an activity (he studied shopping as an activity) beyond being involved with a product. It would seem reasonable to suggest that wine tourists could be involved with the product itself as well as with the experience of visiting the wineries.

Method

A one-page questionnaire, with questions printed on both sides, was distributed to winery visitors by winery staff at the tasting bars of four Niagara wineries in the winter of 2004/05. The wineries participating in the study were the four largest winery operations in the region. There was no prescreening of respondents, and no quota. Every customer approaching the tasting bar in the winery was to have been offered a free taste of wine for a completed questionnaire. Informal mystery shopping by confederates of the researchers, however, suggested that many

potential respondents were not approached. No data were collected on the numbers who refused to participate. Ultimately, 164 usable questionnaires resulted from the brief data collection period (three days in each of the four wineries over a three week period). The instrument used for data collection included items from the involvement scale utilized by Berti (2003) and Lockshin (2001) and items adapted from Cullen's (1990) Shopping Involvement scale, as well as items generated through interviews with managers of Niagara wineries.

Data Analysis

The data were examined for the presence of outliers both from a univariate and multivariate perspective (e.g., Tufte, 1983, p. 14), resulting in the deletion of four of the original 164 questionnaires.

Geo-demographics

The primary purpose of this baseline study was to generate a profile of the Niagara winter winery visitor. The data from Table 1 indicate the number of visitors from each of four geographic categories of interest to Niagara winery managers: Niagara, Toronto, Rest of Canada and Other. The "Other" group was primarily American.

Table 1: Region of residence of respondents

Region	**Number of respondents (% of total)**
Niagara	26 (17.1)
Toronto	42 (30.0)
Rest of Canada	32 (22.9)
Other	40 (28.6)
Total	140 (100.0)

The first observation is that there was a significant non-response to this item with only 140 of the 164 participants answering the question about their city/country of residence. This may be attributable to this item being the only item in the questionnaire requiring the respondent to write a response. All other questions were answered by placing an "X" in an appropriate box. A second observation that was of interest to winery managers is that only 17% of respondents were from the Niagara region. There is clearly a non-local constituency to be served, even in the middle of January.

Table 2: Reason for visiting the region

Reason	Number of respondents (% of total)
To visit the Falls	29 (19.1)
To visit wineries	48 (31.6)
To attend a special event	16 (10.5)
To visit a historic city	22 (14.5)
Other reason	37 (24.3)
Total	152 (100.0)

Table 2 indicates that there were several reasons given for visiting the wineries. Roughly one-third of the respondents stated that they had gone to the region specifically to visit wineries. Two-thirds of the respondents had other primary reasons for visiting the area. There are significant opportunities for joint promotional efforts.

Table 3: Source of information that attracted the respondents to the winery

Information source	Number of respondents (% of total)
Info from a website	17 (11.3)
Info from road signs	26 (17.3)
Info from friends	55 (36.7)
Info from wine publications	17 (11.3)
Info from other sources	35 (23.3)
Total	150 (100.0)

It is interesting to note that friends are the primary source of information for attracting people to these wineries. Word of mouth has consistently proven to be a strong determinant of winery patronage in most studies of the Niagara wine region. Road signs are an important source of information, but websites and wine publications also are useful sources for the winter wine tourist. Signage is of course critically important for the accidental tourist; the tourists driving around the region having visited the Falls, now searching for entertainment.

Table 4: Wine consumption

Wine consumption	Number of respondents (% of total)
Drink wine once a day	32 (21.5)
Drink wine three times a week	56 (37.6)
Drink wine once a week	29 (19.5)
Drink wine twice a month	32 (21.5)
Total	149 (100.0)

Several of the winery visitors do not drink all that much wine. More than one-fifth of the respondents report drinking wine only twice a week. Coincidentally, precisely the same number of respondents claims to drink wine every day. The largest single category was the group stating that they drink wine three times a week. It would appear likely, given the range of consumption, that not all of the respondents were highly involved in wine.

Table 5: Household Income levels in Canadian Dollars

Income level	**Number of respondents (% of total)**
Lower income (< $37K)	27 (18.8)
Medium income ($37-65K)	35 (24.3)
Upper medium income ($65-80K)	32 (22.2)
High Income (>$80K)	50 (34.7)
Total	144 (100.0)

Winter winery tourists tend to be of higher income with more than a third of the respondents reporting family income of over $80,000 per year. There is, however, a fairly general spread of income levels among the respondents.

Table 6: Age of respondents

Respondent's age	**Number of respondents (% of total)**
19-24 years	22 (15.0)
25-34 years	46 (31.3)
35-44 years	38 (25.9)
45-54 years	31 (21.1)
55 + years	10 (6.8)
Total	147 (100.0)

The majority of the respondents were between the ages of 25 and 44. There was, however, a fairly even dispersion of respondents among the age categories with perhaps fewer older respondents than might have been anticipated.

Table 7: Education of respondents

Respondent's education	**Number of respondents (% of total)**
High school diploma	17 (11.7)
University/college degree	95 (65.5)
Postgraduate degree	33 (22.8)
Total	145 (100.0)

Winter wine tourists appear to be quite well educated. Shopping for wine in January in Canada may be definitive proof that there is no necessary correlation between education and intelligence.

Table 8: Gender of respondents

Respondents' gender	**Number of respondents (% of total)**
Male	73 (50.3)
Female	72 (49.7)
Total	145 (100.0)

Half the sample was male. Winter wine tourism does not appear to have a gender bias.

Involvement

Winery managers are interested in learning more about the winery tourist than mere geo-demographic descriptors. The psychological construct, involvement, is conceivably significant in understanding the patronage behavior of winter winery tourists. The items selected to measure wine and wine tourism involvement were culled from the work of Berti (2003), Lockshin (2001), and Cullen (1990). Each of the involvement items was measured on a seven point Likert-type scale from "1" Strongly Disagree to "7" Strongly Agree. These items are listed in Table 9.

Table 9: Involvement Items

Item	N	Mean	Skew ness	Std. Err.	Kurto-sis	Std. Err.
v1_Drinking wine gives me pleasure	164	6.08	-1.821	.190	4.221	.377
v2_I feel competent about the subject of wine	163	4.52	-.227	.190	.004	.378
v3_I have a strong interest in wine	164	5.33	-.542	.190	-.215	.377
v4_I don't know much about wine compared to other people	162	3.67	.345	.191	-.430	.379
v5_I like to take my time when I purchase a bottle of wine	164	4.84	-.652	.190	.803	.377
v6_I am perceived as somewhat of a wine expert among my friends	162	3.68	-.028	.191	-.879	.379
v7_I don't understand very much about wine	164	3.15	.619	.190	-.127	.377
v8_Wine is something important for me	162	4.92	-.534	.191	.566	.379
v9_Shopping for wine is fun	163	5.61	-.876	.190	.777	.378
v10_Where I buy wine is irrelevant to me	163	3.79	.118	.190	-.768	.378
v11_Wineries are a great vacation destination	164	5.42	-.872	.190	.692	.377
v12_The appear. of a winery is a good indic. of the quality of wine	163	4.56	-.428	.190	-.612	.378
v13_I prefer to buy wine dir. from wineries than from other source	164	4.88	-.259	.190	-.118	.377
v14_The décor of a winery is of no concern to me	161	3.39	.424	.191	-.379	.380
v15_I often plan my vacations around wine and wineries	163	3.43	.157	.190	-.578	.378
v16_Wineries are a great place to take guests or visitors	164	5.85	-1.029	.190	1.511	.377
v17_I seldom go to wineries	164	3.14	.515	.190	-.608	.377
v18_Visiting wineries is less about the wine than the experience	164	3.79	.097	.190	-.190	.377
v19_Wine is an excellent gift to give and receive	164	6.26	-2.077	.190	5.352	.377
v20_Wineries should stay open all year	164	6.29	-2.165	.190	5.094	.377

A casual glance at the means of the items suggests that the respondents, overall, enjoy going to wineries and buying wine. We provide a more detailed investigation of the winter wine tourist by factor analyzing the data from Table 9 and then using the resulting factor scores as input for a cluster analysis to develop segments of the wine and winery involved tourist.

Following Bartlett's Test of Sphericity and the Kaiser-Meyer-Olkin measure of sampling adequacy we removed two variables from the data set: v12, with MSA = 0.458, and v14, with MSA = 0.453. Factor analysis of the remaining 18 variables resulted in four (based on the scree test and the cumulative variance) interpretable factors. All items loaded on a single factor, with the exception of two items, v1 and v3. These two items were, therefore, removed from the data set, and the factor analysis repeated. Factor scores for each factor were calculated using the regression approach and saved for further analysis. The full scales, factor loadings, and the final reliabilities are provided in Table 10.

Table 10: Rotated Component Matrix

Item\Component	1	2	3	4
V2_I feel competent about the subject of wine	.754			
V4_I don't know much about wine compared to other people	-.750			
V6_I am perceived as somewhat of a wine expert among my friends	.716			
V7_I don't understand very much about wine	-.686			
V8_Wine is something important for me	.597			
V19_Wine is an excellent gift to give and receive		.858		
V20_Wineries should stay open all year		.797		
V16_Wineries are a great place to take guests or visitors		.618		
V9_Shopping for wine is fun		.579		
V15_I often plan my vacations around wine and wineries			.788	
V11_Wineries are a great vacation destination			.629	
V13_I prefer to buy wine directly from wineries than from other sources			.627	
V5_I like to take my time when I purchase a bottle of wine			.549	
V17_I seldom go to wineries			-.486	
V10_Where I buy wine is irrelevant to me				.781
V18_Visiting wineries is less about the wine than the experience				.640
Eigenvalue	4.787	2.120	1.302	1.211
Percentage of variation	29.9%	13.2%	8.2%	7.6%
Coefficient alpha	.784	.760	.694	.324

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.
Loadings less than .400 have been suppressed.

The first factor, labeled Wine Knowledge, accounted for 29.9% of the variance. Cronbach's alpha for its five items was 0.784. This factor appears to represent the self-proclaimed wine knowledge of the respondents. The second factor, labeled Winery Affect, accounted for 13.2% of the variance. Its four items, with a Cronbach's alpha of 0.760, seem to reflect the participants' level of enjoyment with respect to visiting and shopping for wine at wineries. The third factor, Winery Behavior, accounted for 8.2% of the variance. Cronbach's alpha for its five items was 0.694. This factor gives the impression of being related to behavioral intention with respect to wineries. Together, these three factors appear to tap into the dimensions of the classic Tri-partite Theory of Attitudes: Cognition – Affect – Behavior (Solomon et al., 2002). The fourth factor has a very low Cronbach's alpha (0.324), but seems to be related to those consumers who are indifferent to the way in which they buy wine.

Hinch et al., (2001, p. 185) state that the study of seasonality requires, ". . . more sophisticated types of analysis such as factor and cluster analysis should also be applied in the context of larger data sets." We concur. Despite our limited data set, only slightly larger than

that of Hinch et al., we have started the investigation of the winter wine tourist through factor and cluster analysis.

Cluster analysis, using the saved factor scores, was then used to develop consumer segments. These factor scores estimated from the factor solution to the four involvement scales were used as the input to hierarchical cluster analysis with Ward's method. Following the procedures recommended by Punj and Stewart (1983), the initial Ward's hierarchical cluster analysis suggested between three and six clusters, based on the agglomeration coefficients and the dendograms. Then, the sample was randomly divided into two parts (app. 50% each) – the analysis sample and the holdout sample. Ward's hierarchical cluster analysis was performed on the analysis sample, and cluster centroid vectors were obtained for the number of clusters ranging from three to six. K-means cluster analysis was then performed twice for each number of clusters, the first time using the centroids from the analysis sample (a constrained approach), and the second time using the centroids obtained from the holdout sample with Ward's procedure (an unconstrained approach). The degree of agreement between the assignments of objects to clusters based on the constrained and unconstrained approach is an indication of the stability of the solution (Punj and Stewart, 1983). A coefficient of agreement, kappa, may be used as an objective measure of stability. The three, four, five, and six cluster solutions produced a kappa of 0.216, 0.644, 0.500, and 0.543, respectively. Since the decision criterion is to maximize kappa, the four cluster solution was chosen.

Table 11: Final Cluster Centers*

	Cluster			
Factors	1 (n=33)	2 (n=31)	3 (n=58)	4 (n=28)
Wine Knowledge	-1.10386	.38084	.39298	-.13144
Winery Affect	.30786	.42576	.33099	-1.46946
Winery Behavior	-.64568	.03724	.28657	.28923
Wine Shopping Indifference	-.14761	1.35597	-.73576	.20093

** Note: the cluster descriptors are based on factor scores that have a mean of zero and standard deviation of one.*

We label and describe these clusters as follows:

Cluster 1 (22%): Wine Neophytes. This cluster represents consumers who absolutely do not consider themselves wine experts (Cognition = -1.10386). Although they have a positive attitude toward wine and wineries (Affect = .30786), these consumers will not make any planned effort in order to visit a winery and/or buy wine there (Behavior = -.64568).

Cluster 2 (21%): Wine Connoisseurs. Describes consumers who consider themselves wine experts (Cognition = .38084) and think very highly of wine and wineries (Affect = .42576). This knowledge and love of wine does not, however, translate to behavior that would make wineries happy. These wine lovers are only average on visits /plans involving wineries (Behavior = .03724). They really do not care from where they get their wine. (Indifference = 1.35597).

Cluster 3 (39%): *Winery Connoisseurs.* Depicts consumers about whom wineries dream. They are highly knowledgeable wine/winery aficionados (Cognition = .39298, Affect = .33099) who tend to organize their leisure time around wine and wineries (Behavior = .28657) and absolutely positively care where they buy their wine (Indifference = -.73576).

Cluster 4 (18%): Hangers on. That's who they seem to be. They are low on wine knowledge (Cognition = -.13144) and extremely detached from wine or wineries (Affect = -1.46946; Indifference = .20093). Despite all this they do visit wineries (Behavior = .28923), probably accompanying Cluster 3 members.

A useful means of testing external validity of the clusters is to examine the differences across clusters on the other measures collected, such as demographics, wine consumption frequency, etc. Results from Pearson's goodness-of-fit tests across the clusters are provided in Table 12. It can be seen that variation across the four clusters is significant ($p<.05$) for demographics (gender, age categories 18_24, 35_44 and 45_54, postgraduate education, medium income), wine consumption (consumption of wine 3 times per week, white wine), city of residence (tourists from the Niagara Region, from the USA), purpose of visit to Niagara (visit wineries, other unspecified reasons), source of info about the winery (other unspecified sources).

The results suggest that at least one or two categories from each group of variables vary significantly across the four clusters thus providing an additional external validity check for the four-cluster solution. This paper concludes with a more detailed depiction of each of the clusters.

Cluster 1 (22%): Wine Neophytes. This cluster is comprised primarily of females (72%), and consumers with medium or upper medium income (63%) and the lowest proportion among all the clusters of high-income earners (27%). This group has the second largest proportion (18%) of young (18-24 years of age) people. A substantial majority of the group (69%) drinks wine rarely (once a week or twice a month). They appear to be indifferent to the color of wine (mostly red – 41%, mostly white – 35%). However, this proportion of white wine drinkers is the largest for a single cluster among all the clusters. In other words, if any group is biased in any way towards the white wine, this is Cluster 1. These consumers are also the least undecided as to the color of wine – only 24% of them declare drinking both red and white. These consumers are not locals (only 10% of the cluster). They arrive mainly from the USA (34%) and the Greater Toronto Area (31%) with the purpose other than visit wineries (they represent only 15% of those in the total sample who declared wineries as their destination choice). They also represent the largest percentage (38%) of the total sample who found the winery by chance, thanks to the road signs, and the lowest (6%) of those who learned about the winery from a website. They appear to be accidental tourists who had other unspecified reasons (31%) for visiting the Niagara Region.

Cluster 2 (21%): Wine Connoisseurs. This group includes mainly males (69%) with the largest proportion of people above 45 years (45%) old and high-income earners (41%). It has also the lowest proportion (10%) of low-income consumers. This cluster has the largest proportion among all the clusters of those who drink wine every day (33%). Only 13% of the group drinks mostly white wine (the worst result for white wine across all the clusters). They arrive mainly from Ontario (37%) and the Greater Toronto Area (30%). The percentage structure of the purpose of their visit to the Niagara Region is very similar to that of Clusters 3 and 4, i.e., they emphasize sightseeing the wineries (35%). The source of information about the winery is, however, different from the other clusters. This group is proportionally the highest (23%) on the use of the Internet in the search for their winery, although almost every fifth of them (19%) got to the winery by following the road signs.

Table 12: Pearson's Goodness-of-Fit Test

Count (% within) (% across)	Cluster1	Cluster 2	Cluster 3	Cluster 4	Chi-square (p-value)
Male	9 (28%) (12%)	20 (69%) (27%)	26 (45%) (36%)	18 (69%) (25%)	8.151 (.043)
Female	23 (72%) (32%)	9 (31%) (13%)	32 (55%) (44%)	8 (31%) (11%)	22.333 (.0)
Age18_24	6 (18%) (27%)	3 (10%) (14%)	11 (19%) (50%)	2 (8%) (9%)	8.909 (.031)
Age25_34	10 (30%) (22%)	8 (28%) (17%)	15 (25%) (33%)	13 (50%) (28%)	2.522 (.471)
Age35_44	9 (27%) (24%)	5 (17%) (13%)	17 (29%) (45%)	7 (27%) (18%)	8.737 (.033)
Age45_54	5 (15%) (16%)	11 (38%) (35%)	13 (22%) (42%)	2 (8%) (6%)	10.161 (.017)
Age55up	3 (9%) (30%)	2 (7%) (20%)	3 (5%) (30%)	2 (8%) (20%)	0.4 (.527)
High school diploma	3 (9%) (18%)	5 (17%) (29%)	7 (13%) (41%)	2 (7%) (12%)	3.471 (.325)
University degree	22 (67%) (23%)	20 (69%) (21%)	32 (59%) (34%)	21 (72%) (22%)	3.905 (.272)
Postgraduate degree	8 (24%) (24%)	4 (14%) (12%)	15 (28%) (45%)	6 (21%) (18%)	8.333 (.04)
Income_Low	3 (10%) (11%)	7 (24%) (26%)	9 (16%) (33%)	8 (28%) (30%)	3.074 (.38)
Income_Medium	9 (30%) (26%)	4 (14%) (11%)	16 (29%) (46%)	6 (21%) (17%)	9.457 (.024)
Income_Upper Medium	10 (33%) (31%)	6 (21%) (19%)	12 (21%) (38%)	4 (14%) (13%)	5 (.172)
Income_High	8 (27%) (16%)	12 (41%) (24%)	19 (34%) (38%)	11 (38%) (22%)	5.2 (.158)
Consumption_1xday	4 (12%) (13%)	10 (33%) (31%)	11 (19%) (34%)	7 (25%) (22%)	3.75 (.29)
Consumption_3xwk	6 (18%) (11%)	9 (30%) (16%)	33 (57%) (59%)	8 (29%) (14%)	34.714 (.0)
Consumption_1xwk	11 (33%) (38%)	5 (17%) (17%)	9 (16%) (31%)	4 (14%) (14%)	4.517 (.211)
Consumption_2xmonth	12 (36%) (38%)	6 (20%) (19%)	5 (9%) (16%)	9 (32%) (28%)	3.75 (.29)
Mostly white wine	12 (35%) (33%)	4 (13%) (11%)	15 (25%) (42%)	5 (18%) (14%)	9.556 (.023)
Mostly red wine	14 (41%) (23%)	13 (42%) (21%)	23 (39%) (38%)	11 (39%) (18%)	5.567 (.135)
Both white and red wine	8 (24%) (15%)	14 (45%) (25%)	21 (36%) (38%)	12 (43%) (22%)	6.455 (.091)
From the Niagara Region	3 (10%) (12%)	5 (19%) (19%)	16 (27%) (62%)	2 (8%) (8%)	19.231 (.0)
From Greater Toronto Area	9 (31%) (21%)	8 (30%) (19%)	14 (24%) (33%)	11 (44%) (26%)	2 (.572)
From the Ontario Province	7 (24%) (22%)	10 (37%) (31%)	12 (20%) (38%)	3 (12%) (9%)	5.75 (.124)
From the USA	10 (34%) (25%)	4 (15%) (10%)	17 (29%) (43%)	9 (36%) (23%)	8.6 (.035)
To visit Falls	6 (19%) (21%)	4 (13%) (14%)	12 (20%) (41%)	7 (24%) (24%)	4.793 (.188)
To visit wineries	7 (22%) (15%)	11 (35%) (23%)	20 (33%) (42%)	10 (34%) (21%)	7.833 (.05)
To attend a special event	4 (13%) (25%)	3 (10%) (19%)	4 (7%) (25%)	5 (17%) (31%)	2.375 (.305)
To visit a historic city	5 (16%) (23%)	4 (13%) (18%)	9 (15%) (41%)	4 (14%) (18%)	1.182 (.554)
Other reason	10 (31%) (27%)	9 (29%) (24%)	15 (25%) (41%)	3 (10%) (8%)	7.865 (.049)
Info from a website	1 (3%) (6%)	7 (23%) (41%)	8 (14%) (47%)	1 (3%) (6%)	3.647 (.161)
Info from road signs	10 (32%) (38%)	6 (19%) (23%)	7 (12%) (27%)	3 (10%) (12%)	3.846 (.279)
Info from friends	13 (42%) (24%)	10 (32%) (18%)	18 (31%) (33%)	14 (48%) (25%)	2.382 (.497)
Info from wine publications	3 (10%) (18%)	3 (10%) (18%)	9 (15%) (53%)	2 (7%) (12%)	4.353 (.113)
Info from other sources	4 (13%) (11%)	5 (16%) (14%)	17 (29%) (49%)	9 (31%) (26%)	11.971 (.007)

Cluster 3 (39%): Winery Connoisseurs. This is the largest among the four clusters, which should be good news to wineries. Males (55%) and females (45%) are almost evenly distributed in it, with the largest proportion (19%) of very young people (18-24 years) – another bit of good news. They are even larger wine drinkers than Cluster 2. An amazing 76% of the group drinks wine at least three times per week (19% every day). They are more into red (39%) than white

wine (25%) and come rather evenly distributed from the four regions, although this cluster includes the largest proportion of locals (27%). They (similarly to Cluster 4) show the largest proportion of other than the web, road signs, friends, or wine publications, sources of information about the winery.

Cluster 4 (18%): Hangers on. They are mostly males (69%) with the largest proportion of those in their younger-middle age (77% between 25 and 44 year old). They drink red (39%) rather than white wine (18%). A majority of them arrived from the Greater Toronto Area (44%) and the USA (36%) – the largest percentages among the four clusters. They learned about the winery from their friends (48%) – the largest percentage across the four clusters.

Discussion

There are four types of winter winery tourist in Canada's Niagara region: the Neophytes, the Wine Connoisseurs, the Winery Connoisseurs and the Hangers On. These four segments differ along managerially relevant dimensions such as demographics, wine consumption, purpose of trip, and information source utilized for selection of winery destination. These segments can now be used for prioritizing winery communication strategy and expenditures. It is clear that signage, for example, is critical for generating winery patronage behavior. Some signage is the responsibility of the individual wineries, but it is also imperative that government agencies responsible for the tourist industry pay careful attention to the need for clear and comprehensive signage in the Niagara region of Canada.

There are some limitations to this study, and several directions for additional research. Foremost among the limitations is that the data were collected during one season, and from only three wineries. Research is currently planned to collect data in each of the three remaining seasons, and from more wineries, to examine whether the segments will change. The sample size in the study is limited. As was the case with Hinch et al., (2001) we encourage similar analyses to be conducted with larger data bases; and, as with bar-On (1975) there should be an effort to make the study longitudinal. There was a narrow period of time for the study to be conducted and additional responses could not be gathered for this baseline study. These restrictions will not be in place when the next phases of the research take place. Conducting research at the location that is the subject of the research introduces biases. In addition, this methodology does not address the factors that would keep tourists away as it addresses only the issues that attracted the visitors to the wineries. Finally, most winter winery tourists are likely to be highly involved in wine. Low and high involvement in this context are relative terms indeed.

It is clear that there are segments of winter winery tourists. We have identified that differences among these four segments exist – both in terms of geo-demographics and degree of involvement with wine and wineries. Further research, with larger sample sizes and improvements to the research instrument and methodology, is currently underway. The focus of this second phase of research is to replicate the study of winter wine tourism, but also to make the study longitudinal. At a minimum, data will be collected over the next four seasons to determine whether there are seasonal variations in wine and winery tourists. Is the Canadian winter wine tourist the same as the summer wine tourist, or is the winter wine tourist a unique and special breed of tourist?

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