Positioning Analysis of Atlantic Canadian Provinces as Travel Destinations by Americans

Dongkoo Yun, Melissa James-MacEachern

Abstract—This study analyzes Americans' views of four Atlantic Canadian provinces as travel destinations regarding specific destination attributes for a pleasure trip, awareness (heard) of the destinations, past visit to the destinations during the prior two years, and intention to visit in the next two years. Results indicate that American travellers perceived the four Atlantic Canadian provinces as separate and distinct when rating best-fit destination attributes to each destination. The results suggest that travel destinations, specifically the four selected destinations, must be prepared to differentiate their destination's image and the range of experiences and services to appeal and attract more American travellers.

Keywords—Atlantic Canadian provinces (travel destinations), American perceptions, competitiveness, positioning analysis.

I. INTRODUCTION

GENERALLY, destinations are marketed to be a recognized choice, to be competitive, and to increase visitation market share [1], [2]. However, promoting a destination has never been an easy task and remains a difficult marketing challenge. Tourism marketers need to know more about the nature of in-destination and out-of-destination visitor characteristics and how actual and potential visitors perceive local destinations. Therefore, the analysis of current or potential travellers' perceptions or traits helps identify factors contributing to the success or failure of a marketing strategy. Consequently, this allows a destination's travel planners to improve its product image or attractiveness in the target markets [3]-[5].

This study analyzes American perceptions of four Atlantic Canadian provinces as travel destinations using secondary data from the Atlantic Canada Tourism Partnership (ACTP)'s 2014 US consumer research [6]. Since 1994, ACTP has successfully promoted and marketed the Atlantic Canadian provinces. The ACTP's primary target markets include the Mid-Atlantic and New England regions of the United States as well as the United Kingdom.

The primary purpose of this study is to explore the competitiveness of pleasure travel destinations where potential American travellers consider making a holiday trip in the future. In this study, the four pleasure destinations are the four Atlantic Canadian provinces (New Brunswick, Newfoundland and Labrador, Nova Scotia, and Prince Edward Island) and

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American travellers represent those who reside in New England (Maine, Massachusetts, New Hampshire, Connecticut, Vermont, and Rhode Island) and the Mid-Atlantic (New York, New Jersey, and Pennsylvania).

II. LITERATURE REVIEW

Many factors contribute to the perception of a destination. According to Decrop [7], they are highly interrelated with or influenced by a multitude of variables, which are not only extensive and complex but are also not yet known [8]. The factors that influence destination perceptions can be divided into three categories: travel stimuli, personal and social determinants of travel behavior, and external variables. Selected papers supporting these findings include [9]-[18].

In tourism studies, the perception of a particular destination or multiple destinations has been one of the major research topics in the past few decades because it is a fundamental and critical subject to understand travel behaviour affecting the development of marketing strategies and product delivery.

Tourism scholars have extensively examined how holiday destinations are perceived, evaluated, and chosen. These three aspects are in line with the classical distinction between cognitive, affective, and conative consumer responses in decision-making models [19]-[23]. In measuring perceptions, adaptations have mostly dealt with the attribute perspective, which focuses on the characteristics or features of the destinations that are used to form judgements and decisions.

III. METHODOLOGY

A. Data

The survey of the 2014 ACTP US consumer research was used for this study to identify Americans' perceptions of the four Atlantic Canadian provinces as overnight pleasure travel destinations. The ATCP US consumer study was designed to determine opportunities for enhancing the competitiveness of the four Atlantic Canadian provinces [6].

Before the survey, ACTP was planning to invest in a direct-to-consumer advertising campaign in New England (Maine, Massachusetts, New Hampshire, Connecticut, Vermont, and Rhode Island) and the Mid-Atlantic (New York, New Jersey, and Pennsylvania). Accordingly, these nine states in the two US regions were the target market for the ACTP's advertising and marketing campaigns in 2015.

B. Sampling

The target population in the two US regions of the survey was US residents aged 18 years and older, who had taken an out of state pleasure trip where they had stayed three or more

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nights in the prior two years or who planned to take such a trip in the next two years. Samples were collected through on-line panel surveys, and 1,080 useable samples were collected during the period from November 19 to December 1, 2014 (see Table I).

C. Variables

The survey collected a wide range of information regarding Americans' travel behaviours. The primary variables used for this study were twenty-three items of destination attributes. The respondents were asked to rate how they perceive the four Atlantic Canadian provinces as overnight pleasure travel destinations on these specific attributes or characteristics. Responses to the items were measured on a 10-point Likert-type scale where 1 = does not apply at all to 10 = applies completely.

This study also used variables such as "heard of the four Atlantic Canadian provinces (destinations)," "past visit to the destinations" in the past two years, and "intentions to visit" in the next two years. Intention to visit the destinations was measured on a 5-point Likert-type scale (1 = definitely would not; 5 = definitely would).

D. Analysis

First, descriptive statistics were generated for all items used in this study to provide characteristics of the sample and offer general information regarding the study variables.

Second, Chi-Square analyses were applied to examine if there were statistically significant levels of association between the four Atlantic Canadian provinces and selected categorical variables such as "heard of the provinces" and "destinations visited".

Third, one-way ANOVA (Analysis of Variance) tests were performed to identify the differences in selected continuous variables such as specific destination attributes among the four destinations. Also, when significant differences were found, Duncan's post-hoc multiple comparison tests [24] were used to examine the source of differences across the four overnight pleasure travel destinations.

Fourth, the multidimensional scaling (MDS) method was performed to produce a spatial perceptual map indicating the locations of multiple destinations and American travellers' perceptions of their attributes [25]-[27].

Finally, correspondence analysis (CA) was conducted to correlate specific destination attributes of the four Atlantic Canadian provinces on two-dimensional axes [28], [29].

IV. FINDINGS

A. Demographic Characteristics of Respondents

Table I summarizes the demographic profile of the sample. Of the 1,080 respondents, 692 (64.1%) were the Mid-Atlantic residents and 388 (35.9%) were New England residents. More respondents were female (57.9%) than female (48.2%). Respondents varied widely in age. Over half (57.9%) of the respondents were 45 years old and over; only 2.9% were between ages 18 and 24.

TABLE I
DEMOGRAPHIC PROFILE OF RESPONDENTS (TOTAL *N*=1,080)

Variable	Frequency	%
State Residence		
New York	226	20.93
New Jersey	174	16.15
Pennsylvania	292	26.99
Maine	30	2.82
Massachusetts	173	16.03
New Hampshire	44	4.03
Connecticut	118	10.96
Vermont	18	1.67
Rhode Island	5	0.43
Gender		
Male	455	42.13
Female	625	57.87
Age		
18 to 24	32	2.92
25 to 34	284	26.33
35 to 44	139	12.86
45 to 54	290	26.86
55 to 64	166	15.34
65 and over	169	15.68
Education		
Partial high school	5	0.43
Graduated from high school	120	11.09
Graduated from trade school	27	2.46
Partial university or college	178	16.44
Graduated from college	300	27.79
Graduated from university	161	14.90
Post-graduate work or degree	287	26.61
Other	3	0.29
Employment Status		
Yes: Full-time job	604	55.94
Yes: Part-time job	141	13.04
Not currently employed	93	8.60
Student	21	1.95
Retired	185	17.10
Other	34	3.13
Prefer not to answer	3	0.25
Household Income		
Under $20,000	32	2.95
$20,000-$29,999	25	2.36
$30,000-$39,999	59	5.50
$40,000-$49,999	61	5.63
$50,000-$59,999	90	8.29
$60,000-$74,999	132	12.20
$75,000-$99,999	239	22.10
$100,000-$124,999	152	14.04
$125,000-$149,999	90	8.36
$150,000-$199,999	72	6.67
$200,000-$249,999	23	2.15
$250,000-$299,999	5	0.47
$300,000 or more	17	1.55
Prefer not to answer	84	7.74

Forty-three percent of the respondents indicated that they were college or university graduates. Over half (55.9%) of the respondents worked full-time, and seventeen percent were retired. Respondents varied widely in gross household income,

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but 22.1% of the respondents had an annual household income between $75,000 and $99,999.

B. Heard of the Provinces, Past Visit, and Intention to Visit

Table II shows results of Chi-Square analyses regarding the difference in "heard of the provinces" and "destinations visited" and ANOVA test on the difference in "intention to visit" in the next two years" among four Atlantic Canadian provinces (destinations).

Nova Scotia (80.7%) was the top destination of awareness among Americans, compared to other competitive destinations. Prince Edward Island placed second (68.9%), followed by New Brunswick (66.4%) and Newfoundland and Labrador (62.8%). Among the competitive set, Nova Scotia (1.3%) was the top destination visited by Americans in the past two years while Newfoundland and Labrador was the lowest (0.3%). Regarding intention to visit in the next two years, Americans were more likely to visit Nova Scotia and Prince Edward Island than other two remaining competitive destinations.

TABLE II
HEARD OF, PAST VISIT AND INTENTION TO VISIT BY PROVINCES

Destination	Heard of the Province[1]	Destination Visited[1]	Intention to Visit[2]
New Brunswick	66.4	0.6	2.40[b]
Newfoundland and Labrador	62.8	0.3	2.33[b]
Nova Scotia	80.7	1.3	2.58[a]
Prince Edward Island	68.9	0.6	2.51[a]
Total	69.7	0.7	2.45
Statistics (χ^2 value or F-value)	92.78***	8.73*	11.60***

Total N in each destination = 1,080; [1] Based on yes/no answers (%); [2] Based on mean values on a 5-point Likert type scale (1=definitely would not to 5= definitely would).
[a] and [b] and [e] indicate the result from the post-hoc multiple comparison tests ([a] > [b]); * $p < .05$; *** $p < .0001$ based on Pearson χ^2 value in Chi-Square test or F-value in one-way ANOVA (Analysis of Variance) test.

C. Perceived Specific Destination Attributes

The differences in the perceived destination attributes in the four Atlantic Canadian provinces as travel destinations were identified using one-way ANOVA tests and are presented in Table III. The ANOVA tests found that 15 individual destination attributes demonstrated significant differences between each travel destination. When significant differences were found, Duncan's post-hoc multiple comparison tests were performed to examine the source of the differences between the four selected holiday destinations.

With regard to the significant differences in the 15 destination attributes for best fit among the four Atlantic Canadian provinces, New Brunswick was most likely to be perceived by American travellers as the best destination for "easy driving (M=5.58)" and "urban experiences (M=6.66)". Newfoundland and Labrador and Prince Edward Island had weaknesses in these attributes. Nova Scotia was perceived as the most appropriate pleasure travel destination in regard to "beautiful coastline (M=8.63)," "spectacular scenery (M=8.55)," "outstanding seafood (M=8.51)," "rich heritage and culture (M=8.20)," "a place that is fun (M=7.86)," and "a place where it is easy to vacation (M=7.78)" compared to other destinations.

TABLE III
DIFFERENCES IN SPECIFIC DESTINATION ATTRIBUTES AMONG PROVINCES

Attribute	NB 717 (23.8%)	NL 678 (22.5%)	NS 872 (29.0%)	PE 744 (24.7%)	Total 3,011 (100%)	F-value
Warm saltwater beaches	4.94	4.55	4.97	5.11	4.90	2.055
Outstanding seafood	7.99b	8.10b	8.51a	8.55a	8.31	9.212***
Spectacular scenery	8.07c	8.33b	8.55a	8.57a	8.40	9.191***
Peaceful scenery	8.28c	8.34bc	8.53ab	8.62a	8.46	4.609***
Unique culture	7.79b	7.95ab	8.02ab	8.17a	7.99	3.117*
Unique natural environment	8.00c	8.17bc	8.35ab	8.48a	8.27	6.213***
A place where you can experience natural wonders	8.05b	8.23ab	8.31ab	8.46a	8.27	3.871**
Authentic maritime experience	8.06c	8.21bc	8.41ab	8.54a	8.32	5.414***
Family experiences	7.79ab	7.62b	7.97a	8.09a	7.89	4.605**
Easy driving distance	5.58a	4.63c	5.08b	4.90bc	5.06	7.707***
Value for money	7.46	7.32	7.35	7.47	7.40	0.573
Friendly people	8.15	8.18	8.31	8.36	8.26	1.350
Outdoor activities	8.00	8.11	8.22	8.27	8.16	2.082
Restful experiences	7.97	7.99	8.10	8.27	8.09	2.499
Rejuvenating experiences	7.64	7.78	7.90	8.02	7.84	3.048*
Urban experiences	6.66a	5.82c	6.35b	6.02bc	6.23	6.565***
Wildlife viewing	7.96	8.10	7.95	8.01	8.00	0.487
A place that is safe	8.39	8.44	8.57	8.62	8.51	1.853
A place that is fun	7.53b	7.53b	7.86a	7.84a	7.71	3.574*
Rich heritage and culture	7.81b	7.96b	8.20a	8.34a	8.10	7.243***
A place where it is easy to vacation	7.65ab	7.45b	7.78a	7.87a	7.70	2.940*
Beautiful coastlines	8.15b	8.39ab	8.63a	8.78a	8.51	9.789***
Great local cuisine	7.84	7.73	7.94	8.03	7.89	1.804

Results were based on those who heard of each of Atlantic Canadian provinces (Total N = 3,011) and mean values on a 10-point Likert type scale (1=does not apply at all to 10=applies completely).
Four Atlantic Canadian provinces are as follows: NB (New Brunswick), NL (Newfoundland and Labrador), NS (Nova Scotia), and PE (Prince Edward Island).
a, b, and c and e indicate the result from the post-hoc multiple comparison tests (a > b > c); * $p < .05$; ** $p < .01$; *** $p < .001$ based on F-value in one-way ANOVA (Analysis of Variance) tests.

American travellers were most likely to perceive Prince Edward Island as the most favourable destination for "beautiful coastlines (M=8.78)," "peaceful scenery (M=8.62)," "spectacular scenery (M=8.57)," "outstanding seafood (M=8.55)," "authentic maritime experience (M=8.54)," "unique natural environment (M=8.48)," "a place where you can experience natural wonders (M=8.46)," "rich heritage and culture (M=8.34)," "unique culture (M=8.17)," "family experiences (M=8.09)," "a place where it is easy to vacation (M=7.87)," "a place that is fun (M=7.84)." At the other end of the spectrum, Newfoundland and Labrador ranked quite a bit lower for all destination attributes and was perceived as the least favorable destinations in terms of these destination attributes.

D. Positioning of Atlantic Canadian Provinces

The multidimensional scaling (MDS) method began by calculating the mean values of 23 specific destination

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attributes (23 pairs: all combinations of the four Atlantic Canadian provinces) and then proximity matrix (four destinations' dissimilarity scores by Euclidean distance) was calculated to obtain a two-dimensional configuration for the four pleasure holiday destinations. A measure of fit widely used in MDS is *stress*, which is the square root of a normalized residual sum of squares [30]. A stress value of zero or near zero indicates that the goodness of fit is acceptable. As presented in Fig. 1, the final stress value was .021. By Kruskal's criterion [31], a stress value of .02 shows "very good" goodness of fit.

The distances between the destinations in the two-dimensional configurations reflect the levels of similarity or dissimilarity in Americans' perceptions of each destination. Overall, three similar destination groups were clustered among the four destinations perceived by American travellers: (1) Newfoundland and Labrador, (2) New Brunswick, and (3) Prince Edward Island and Nova Scotia.
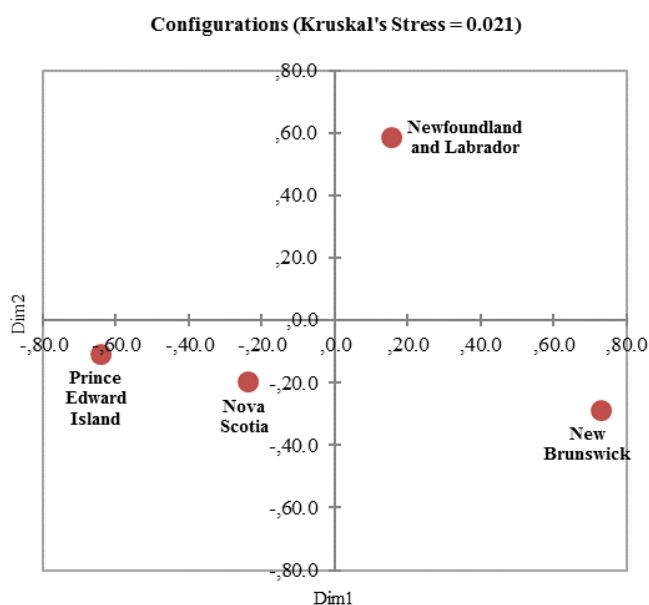

Fig. 1 Two-dimensional configuration for four travel destinations

As Table IV shows "distance" and "dissimilarity" between the paired destinations", one pair, "Nova Scotia and Prince Edward Island was perceived as being quite similar, suggesting that it was difficult for American travellers to differentiate between the destinations within the same pair. Conversely, five pairs including "New Brunswick and Prince Edward Island," "Newfoundland & Labrador and Prince Edward Island," "New Brunswick and Newfoundland &

Labrador," "New Brunswick and Nova Scotia," and "Newfoundland & Labrador and Nova Scotia" were perceived as being very dissimilar by American travellers.

TABLE IV
DISTANCE AND DISSIMILARITY MEASURE BETWEEN THE PARRIED DESTINATIONS

Destination Pairs	Distance	Rank	Dissimilarity	Rank
NS - PE	0.411	1	0.623	6
NL - NS	0.876	2	1.256	5
NB - NS	0.972	3	1.422	4
NB - NL	1.043	4	1.475	3
NL - PE	1.058	5	1.484	2
NB - PE	1.381	6	1.921	1

Destinations: NB = New Brunswick, NL = Newfoundland and Labrador, NS = Nova Scotia, and PE = Prince Edward Island

E. Positioning of the Destinations and Their Best Attributes

The result of the correspondence analysis (CA) provides graphic information concerning relationships between the four Atlantic Canadian provinces as pleasure travel destinations (indicated as column variables) and the 23 destination attributes (indicated as row variables). The perceptual positioning map (Fig. 2) highlights the relative similarities and differences in the joint space among these destinations and attributes of best-fit destination attributes for each one. The proximity between a pair of points of column and row variables was used to interpret the strength of the underlying relationship between them: the closer together the points, the stronger the relationship [29].

With regard to the explained proportion of inertia of CA between the four destinations and their best destination attributes perceived by American travellers, the first two principal components accounted for 91.2% of the variance, with 72.0% of the variance (singular value=0.361) accounted for by the first dimension and 19.2% of the variance (singular value=0.119) accounted for by the second dimension, which is a very acceptable result.

It is found that Prince Edward Island was most likely to be perceived by American travellers as the best destination for "peaceful scenery," "beautiful coastline," "authentic maritime," "a place that is fun," and "great local cuisine". American travellers were most likely to perceive Nova Scotia as the most important destination for "outdoor activities," "rich heritage and culture," "family experience," "restful experiences," and "rejuvenating experiences". Meanwhile, New Brunswick was most likely to be viewed by American travellers as the most preferable destination for "urban experiences" and "friendly people" whereas Newfoundland and Labrador was perceived as the most favourable destination for "wildlife viewing," and "a place that is safe."
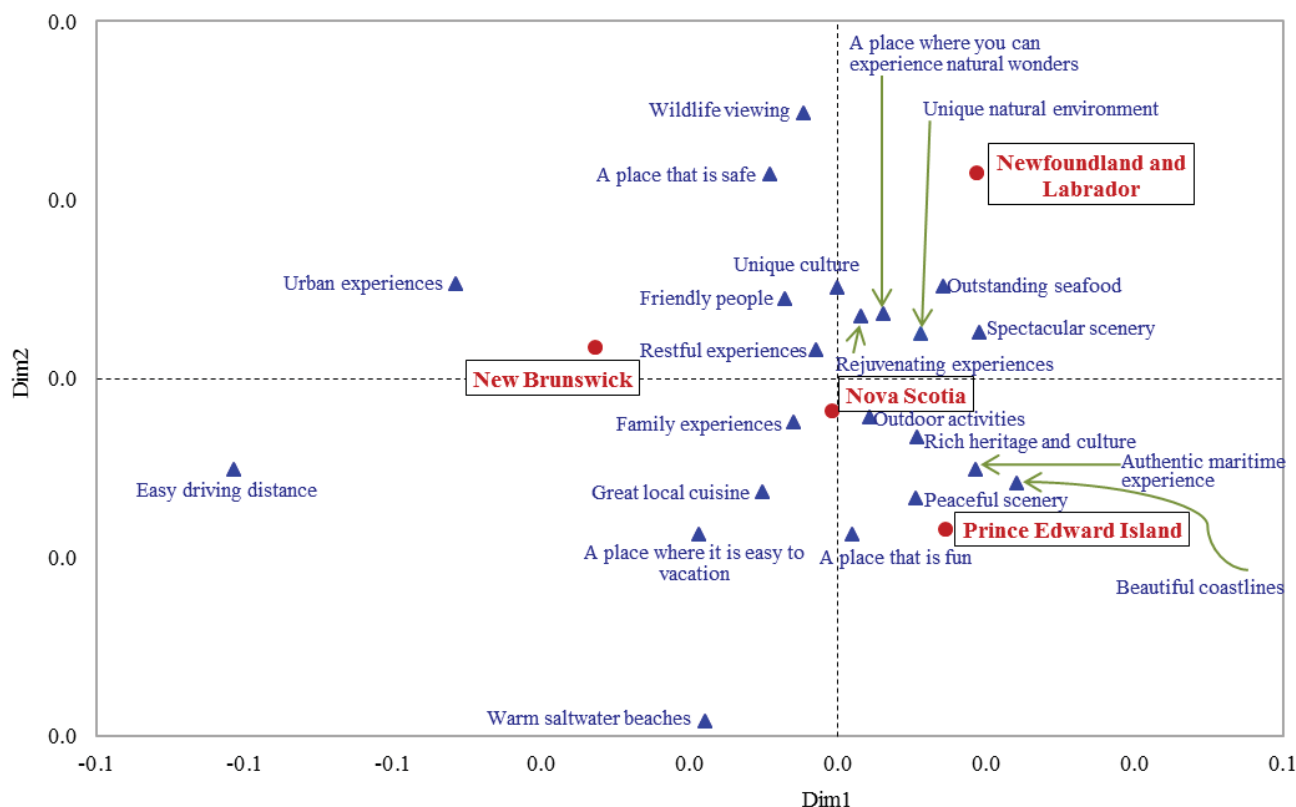
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Fig. 2 Perceptual map of four Atlantic Canadian provinces and their best destination attributes perceived by American travelers

V. CONCLUSION

This study demonstrated the competitiveness of the destinations perceived by American travellers using Chi-Square analyses, ANOVA tests, multidimensional scaling (MDS) analysis, and correspondence analysis (CA). In this study, American travellers perceived the four Atlantic Canadian provinces as pleasure travel destinations as separate and distinct when rating best-fit specific attributes to each of the destinations.

The findings indicate that there are significant differences amongst potential American travellers' perceptions toward the Atlantic Canadian provinces as overnight pleasure travel destinations. By incorporating the findings of the study, Canadian destinations where potential American travellers consider making a holiday trip in the future should better position themselves so that increased demand for visitation may be generated to their respective destinations. Furthermore, the findings have significant implications for destination competitiveness and the type of product development and marketing that should be undertaken. This is an important observation and reaffirms that travel destinations, specifically the four selected Atlantic Canadian provinces as holiday destinations, must be prepared to differentiate their image of destinations and their range of experiences and services to appeal and attract more specific markets like New England and the Mid-Atlantic of the two US regions.

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