

WHO PARTICIPATES IN FALL-COLOR TOURING ON PLEASURE TRIPS?

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Abstract

The tourism industry is vulnerable to seasonality. This study is pertinent to an effort to mitigate the variation of the seasonality. Predictor variables that could distinguish between fall-color touring participants and non-participants were identified using discriminant analysis. The results of the study indicated that fall-color touring participants are more likely to regard general touring or driving for pleasure as their trip purpose. They also are eager to participate in outdoor activities. Marketing implications are suggested.

1.0 Introduction

Seasonality in tourism industry has greatly influenced demands of tourist destinations. Because of variations in tourist demands throughout the year, on-season makes tourist destinations greatly congested and their facilities overused, in comparison with times of year when tourist destinations are less visited and their facilities not much used. Spotts and Mahoney (1993) suggested that many efforts are needed to temper seasonal problems during other times of the year in the tourism industry.

Although several studies have identified the seasonality variation in their studies (Bonn et al. 1992; Hui & Yuen 2002; Lim & McAleer 2001), few studies have paid much attention to mitigation of seasonality. What kinds of efforts are necessary for variation of the seasonality? To date, price strategy has been utilized as one of the most popular methods to decrease the variability and to increase tourism in a different season. However, without an existing seasonal tourism market, price strategy would be difficult to optimize. Spotts and Mahoney (1993) suggested finding different seasonal markets and attractions such as fall market with fall-color touring. According to the Mining Journal (2001), for instance, fall-color touring is one of the seasonal markets

in Michigan. AAA Michigan estimated 2.8 million Michiganders traveled to view fall colors in 1997 (Detroit Free Press 1997). Fall-color touring can help moderate variation of seasonality.

This study, therefore, develops a pleasure travel profile based on fall-color touring participation. More specifically, this study investigates the differences between pleasure travelers who participate in fall-color touring and those who do not. The specific research questions include: 1) Do socio-demographic characteristics differ between pleasure travelers who participate in fall-color touring and those who do not?; and 2) Do travelers' behavioral characteristics vary between these two types of travelers?. By understanding these characteristics, destination marketing practitioners can design more effectively, can target their promotional materials to appropriate consumers, and can reduce, mitigate, and/or soften effects of, variation of seasonality.

2.0 Methods

Data was collected in a computer-assisted telephone interviewing (CATI) laboratory maintained by the Michigan Tourism Resource Center at Michigan State University, from January 1996 through December 2002. The survey employed random digit-dial samples of household telephone numbers purchased from Survey Sampling, Inc. in a study region. The study population consists of adults aged 18 or older who permanently reside in Michigan's primary market area, such as Illinois, Indiana, Michigan, Ohio, Wisconsin and Ontario (Canada). The completed interviews averaged 474 each month. The complete rate is 47%, including partial completion. Respondents of the survey were asked: "In the past twelve months, have you taken any day or overnight pleasure trip to any destination?" In the survey 'pleasure trip' was defined as 'any overnight or day trip to a place at least 50 miles from your home that was made for your enjoyment, including vacations, weekend getaways, shopping trips, and trips to visit friends or relatives'.

Moreover, respondents who visited Michigan and participated in fall-color touring during the preceding 12 months were used for the study (N=1,328). Thus all travelers who met the criteria above were classified as either fall-color touring participants or nonparticipants. The survey also contained socio-demographic questions about such variables as income, age, ethnicity, origins of

Table 1.—Classification Results

		Predicted Group Membership		Total
		Yes	No	
Original count	Fall-color touring participation Yes	319	40	359
	No	75	894	969
Percentage	Yes	89%	11%	100
	No	8%	92%	100

Note: 90% of original grouping of cases was correctly classified.

Table 2.—Canonical Discriminant Functions I

Function	Eigenvalue	Percentage of Variance	Cumulative Percentage	Canonical Correlation
1	1.05	100.0	100.0	.52

Note: One (the first) canonical discriminant function was used in the analysis

Table 3.—Canonical Discriminant Functions II

Test of Function	Wilks's Lamda	Chi-Square	Degree of Freedom	Significance
1	.73	105.3	10	.00

travelers, and household types. Travel behavioral questions included number of pleasure trips, type of trip (overnight or day trip), length of stay, type of lodging, primary purpose of trip, season in which trip began, Internet use to gather travel information, number of days since beginning planning of the trip, and travel expenditure per party.

Three procedures of statistical methods were used to investigate research questions. Discriminant analysis, as an initial analysis, was conducted because such analysis is a statistical technique to identify problems that present a collection of variables such as income, age, marital status, when we intend to distinguish from two or more mutually exclusive groups. It is useful when we intend to develop a procedure to predict group membership for new cases whose group membership is not yet determined (Norusis 1988). A backward discriminant analysis was performed using fall color-touring participants and non-participants on pleasure trips as grouping variables, in order to discover which variables are most important to distinguish between mutually exclusive participant and non-participant groups. This procedure is a first step for predicting group membership and subsequent consumer-profile development for new fall-color touring travelers. The chi-square test, the second analysis, was applied to

profile the two segments (fall-color participants vs. non-participants) due to categorical and nominal data identified by the first discriminant analysis (i.e., educational level, income level, pleasure trip plan period, Internet use to gather travel information, travel party etc.). T-test, the third analysis, was employed to analyze continuous variables (i.e., travel expenditure per party, number of pleasure trips, number of days since beginning to plan the trip, number of participated activities during the trip, age etc.).

3.0 Results

After the first step of discriminant analysis, 10 predictor variables were identified; overnight trip, visit a state or national park, dine at unique restaurants, number of activities participated in, general touring or driving for pleasure, attend a festival or event, visit farmer market, outdoor recreation, age, state in which respondent resides. The results of discriminant analysis revealed that 90% of the original group was correctly classified (see Table 1). The result of Canonical Correlation is high (.52) (see Table 2). According to Table 3, a Wilks' lamda (.73) indicated that there was a high level of variability between fall-color touring participant and non-participant groups. In addition, standardized

Table 4.—Standardized Canonical Discriminant Function

Predictor Variables	Function 1
Overnight trip	.10
Visit a state or national park	.23
Dine at unique restaurants	.32
Number of activities participated in on the trip	.78
General touring or driving for pleasure	1.29
Attend a festival or event	-.39
Visit farmer market	.03
Outdoor recreation	.01
Age	.18
States of residence	.10

Table 5.—Chi-Square Analysis of Segments by Fall color-touring participants and non-participants

Variable	Fall-color touring participation on the Trip		χ^2	df	p
	Yes (%)	No (%)			
Overnight trip (n=1,323)					
Yes	87.1	78.8			
No	12.9	21.2	9.8	1	.00
A state or national park (n=1,291)					
Yes	41.9	21.4			
No	58.1	78.6	44.8	1	.00
Unique restaurants (n=1,306)					
Yes	61.8	42.9			
No	38.2	57.1	29.3	1	.00
General touring/driving for pleasure (n=1,329)					
Yes	81.0	42.8			
No	19.0	57.2	131.2	1	.00
Attend a festival or event (n=1,318)					
Yes	17.9	23.2			
No	82.1	66.8	3.4	1	.02
Visit farmer market (n=1,299)					
Yes	29.0	11.0			
No	71.0	89.0	40.5	1	.00
Outdoor recreation (n=1,322)					
Yes	61.6	38.3			
No	71.0	89.0	49.3	1	.00
State of residence (n=1,328)					
Michigan	66.0	59.0			
Non-Michigan	34.0	41.0	4.7	1	.03

coefficients for canonical discriminant function determined independent variables to distinguish between fall-color touring participants and nonparticipants. The relative order and function values of predictor variables suggest that “general touring or driving for pleasure” and “number of activities participated in” are the best discriminatory predictors available to researchers for this study (see Table 4).

Chi-square analyses were conducted to develop a profile of fall-color touring participants on the pleasure trips. The results of the chi-square analyses indicated that overnight trip, $\chi^2 (1, N=1,323) = 9.8, p < .001$, visit a state or national park, $\chi^2 (1, N=1,291) = 44.8, p < .001$, dine at unique restaurants, $\chi^2 (1, N=1,306) = 29.3, p < .001$, general touring or driving for pleasure, $\chi^2 (1,$

Table 6.—T-test of Segments by Fall color-touring participants vs. Non-participants

Variable	Fall-color touring participation on the Trip		t	df	p
	Yes	No			
	Mean	Mean			
Number of activities participated (n=1,321)	7 activities	4 activities	305.7	1,001	.00
Age (n=1,327)	46	42	10.5	1,024	.00

1,329) = 131.2, $p < .001$), attend a festival or event, χ^2 (1, N=1,318) = 3.4, $p < .05$), visit farmer markets, χ^2 (1, N=1,299) = 40.5, $p < .001$, outdoor recreation, χ^2 (1, 1,322) = 49.3, $p < .001$, and state of residence, χ^2 (1, 1,328) = 4.7, $p < .05$, were statistically significant (see Table 5). The significant test of number of activities participated in, and age between fall color-touring participants and non-participants was conducted and revealed that they were statistically significant, t (1,001) = 305.7, $p < .001$ (two-tailed), t (1,024) = 10.5, $p < .001$ (two-tailed) (see Table 6).

A profile of fall-color touring participants was built as follows: the majority of fall-color touring participants (66%) were from Michigan, compared to non-participants (59%). Fall color-touring participants have older age grouping than nonparticipants (average: 46 vs. 42 years). Moreover, fall-color touring participants, in comparison to non-participants, were: (a) more likely to take overnight (87% vs. 79%); (b) more likely to participate in many activities (average: 7 vs. 4 activities); (c) more likely to visit a state or national park (42% vs. 21%); (d) more likely to dine at unique restaurants (62% vs. 43%); (e) more likely to take general touring or driving for pleasure (81% vs. 43%); (f) more likely to participate in outdoor recreation (62% vs. 38%); and (g) more likely to visit farmer markets (29% vs. 11%). However, fall-color touring participants are: (h) less likely to attend a festival or event (18% vs. 23%).

4.0 Conclusion

The study explored fall market with a fall-color touring in an effort to find a way of diminishing the variation of tourism demand throughout the year. Overall, the findings of this study indicated that fall-color touring participants have different travel behavioral characteristics and socio-demographics comparing to non-participants. In details, fall-color participants are more active and willing to participate in outdoor recreations than

nonparticipants. Their purpose of trip seems to take general touring or driving for pleasure and to be middle-aged group. The results suggest that practitioners need to develop fall-color touring drive routes as well as destination marketers need to advertise fall-color touring to those who visit “state or national park” and “farm market” in summer. In conclusion, fall-color touring as a fall destination attraction can be believed to help reduce or soften the variation of seasonality.

5.0 Citations

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