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Lacher, R. Geoffrey; Oh, Chi-Ok; Noran, William C.; and Jodice, Laura W., "Tourism and Local Character in South Carolina: A Stated Preference Based Demand Analysis" (2016). *Travel and Tourism Research Association: Advancing Tourism Research Globally*. 31. https://scholarworks.umass.edu/ttra/2010/Oral/31

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# Tourism and Local Character in South Carolina: A Stated Preference Based Demand Analysis

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# ABSTRACT

This study attempts to quantify tourists' demand for regional character on vacations to the South Carolina (SC) coast. Preferences for authentic elements such as the destination's local flair and the local ownership of restaurants were measured using stated-preference choice modeling. This technique forces individuals to make tradeoffs between hypothetical trips based on attributes such as number of activities, amount of locally owned restaurants, degree of local flair, and price. The results of the survey (n=240) indicate a statistically significant demand for local flair and local restaurant ownership, although the demand plateaus after reaching a moderate level.

Keywords: cultural tourism, culinary tourism, stated preference choice modeling.

# **INTRODUCTION**

The significance of coastal-dependent businesses is recognized in United States (U.S.) and South Carolina (SC) coastal policy. State regulations prohibit the building of new nonwater-dependent structures "seaward of the baseline" without a special permit. In addition, the SC Department of Health and Environmental Control, Office of Coastal Resource Management has determined priority needs for 2006-2010 that include identification of traditional use areas and incentives for preservation of traditional uses (SCDHEC, 2007). Sustainability of coastal-dependent businesses is also relevant to National Standard 8 of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) which mandates that fishery management plans consider the social and economic impact of regulations on fishing communities (MSFCMA Section 301 [16 U.S.C. 1851(a)(8)]).

Given the core economic role of tourism and recreation industries on the South Carolina (SC) coast, it is appropriate to examine the sustainability of traditional coastal-dependent businesses from a tourism-focused perspective. The travel and tourism industry is a leading employer in South Carolina. Specifically, the state generated \$9.9 billion domestic travel expenditures in 2008, and 58.2% of these expenditures occurred in the top three counties of Horry, Charleston, and Beaufort, all located on the coast (U.S. Travel Association, 2009). Inclusion of the "full range of tourism, leisure, and recreational activities that take place in coastal areas and in offshore coastal waters" is a legitimate approach to valuation of ocean and coastal resources (Kildow & Colgan, 2005, p. 104). This is because vacation travel spending in coastal areas is coastal or ocean-dependent; i.e., tourists visit because the destination is coastal (Klein, Osleeb & Viola, 2004).

However, the continued survival of traditional water-dependent businesses in coastal communities depends on a complex interaction of variables. These include limited availability of marine resources, increasing competition, marketing capacity, infrastructure costs, coastal development strategies, and coastal real estate demand. For example, South Carolina sweetgrass basket makers have begun obtaining raw materials from out-of-state because coastal development has reduced access to local resources (Hart, Halfacre & Burke, 2004). Also, the SC shrimp fishing capacity has declined dramatically due to competition with low priced imports and rising fuel prices (Barkley, Henry & Gantt, 2004). Similar challenges exist for many U.S. coastal communities. The study reported here specifically examined tourist demand for coastal-dependent businesses (services and products) on the South Carolina coast. Of key interest was the degree to which consumers are interested in authenticity and regional character in the food and activities in which they partake. This study uses stated preference techniques to measure consumers' interest in quality and quantity of vacation choices along with demand for authentic elements in the vacation destination.

#### **CONSUMER DEMAND FOR AUTHENCITY**

Tourists' desire for authentic experiences with unique cultures has been observed and debated for decades, however there is still no concise and universally accepted definition of what it means to be authentic (Sims, 2009). Despite the ambiguous definition of the term, authenticity is undoubtedly important to tourists (MacCannell, 1976; Sedmak & Mihalic, 2008; Taylor 2001; Urry 2000). Scholars such as MacCannell (1976) believe that the search for authentic experience is the primary motive of tourists, while Plog (1974) argues that different individuals have greatly differing demand for authenticity, and Ryan (2002) goes as far as to state that individuals may even change their demand for authenticity on different trips or activities. In the past few decades, a new tourist class that rejects mass tourism and globalized products and instead pursues heritage products and authentic culture may have developed (Poon, 1998). This appears to be a market segment increasing in size (Sedmak & Mihalic, 2008), and destinations must consider how authentic their attractions are to consumers.

Despite the debate over authenticity, there is little doubt that some form of experience with regional character or culture is an important element in tourism. In addition to this somewhat intangible idea of regional authenticity and character, there is a more specific literature on tourists' demand for locally produced food. A number of destinations rely heavily on their association with upscale regionally produced food and beverages, perhaps most notably Napa Valley (Porter, 1990). Previous studies have found that there is demand for locally produced food (Woosnam et al., 2004), and that this demand may in turn be able to stimulate the local economy (Deale, Norman, & Jodice, 2008).

This emphasis on the consumer demand for authenticity has led researchers to evaluate the marketability of authenticity from a tourism development standpoint. Walton (2000) argued that destinations should work to determine the correct amount of authenticity to project in order to meet their tourists' specific expectations. Destinations may also attempt to create "staged authenticity" in which the local culture is simulated, exaggerated, or caricatured to attract tourists (Cohen, 1988; MacCannell, 1976). The constant struggle of tourists to find authentic experiences in the face of a world of increasing inauthenticity and staged authenticity is one of the foremost dialectics in tourism, and this struggle is part of what shapes the expansion of tourism (Taylor, 2001).

Previous studies with South Carolina coastal tourists indicate an interest in authenticity in food and food related experiences (Jodice & Norman, 2007). This paper attempts to quantify the tourists' consumer demand for regional character and authenticity by measuring their preferences for authentic elements such as the extent to which the destination's activities embody the local culture and flair, and the degree of local ownership of the restaurants. Understanding and quantifying this demand is important as it can help determine whether it is desirable to invest in these features through small business loans or facilitation of linkages between tourism enterprises and traditional businesses in a travel destination.

While following similar research questions and methodological approach to that of Sedmak and Mihalic (2008), this study adds significant improvements to the literature by both calculating the willingness-to-pay (WTP) for authentic attributes and by comparing the demand for authenticity to the demand for quality and quantity of other important destination attributes.

## METHODOLOGY

To understand tourists preferences for sustainable tourism development and management strategies, the stated preference choice method (SPCM) was applied. The SPCM is drawn from the reality that complex decisions are often based not on one factor or criterion but on several factors considered jointly (Louviere, Hensher & Swait, 2000). During a tourist' decision-making about trip participation, an individual ought to choose a destination with preferred features over other destinations with less preferred ones, given a limited time and budget constraint. In other words, to maximize their satisfaction, every trip decision that individuals make involves tradeoffs. The SPCM makes use of hypothetical scenarios to elicit public responses regarding the examination of the relative importance of decision attributes and the trade-offs that tourists are willing to make between/among these attributes (Bennett & Adamowicz, 2001). The SPCM enables researchers to examine how tourists are likely to change their behavior in response to various development changes to maximize their satisfaction.

Important management and planning attributes and levels for SPCM were identified from two of focus groups and the literature. One focus group was conducted with previous SC coastal tourists (residing in the Clemson University region) to develop a comprehensive listing of common coastal-dependent activities and preferred destination attributes. During the first half of the session the research team gathered input from participants about positive aspects of coastal tourism (relevant to traditional natural resource-based activities and products) in a free flowing discussion. The goal was to gain insight into what tourists saw as important and positive about their coastal experience and assure that survey development was not biased towards the researchers' perspectives. Topics included what they did on their last vacation, what made them choose their vacation destination, and what they liked about the South Carolina coast. In the second half of the session participants were asked to discuss specific aspects of coastal tourism (activities available, crowding, cost, etc.), for comparison to what the research team thought were important attributes and to enable the development of a list of attributes and levels that were important and clearly stated. Based on the first focus group information, the first survey draft was completed.

A second focus groups was conducted with the owners of coastal businesses to determine if there were any important attributes left out or if the included attributes seemed important. Based on participant recommendations the attributes and levels, were slightly modified and the choice set design was completed. A list of attributes and subsequent levels is provided in Table 1. These attributes represent the destination characteristics relevant to the appropriate degree of recreation and tourism experiences, amenity features, type and extent of infrastructure, and level and type of recreation use.

To reduce the cognitive burden and generate an economical number of paired choice sets, fractional factorial designs with main effects only were employed, resulting in thirty paired choice sets (see more about fractional factorial designs from Kuhfeld, 2005). In order to further simulate real market choice behavior, each paired choice set included the option to not take either trip (Bennett & Adamowicz, 2001). Thus, each respondent was requested to answer six randomly assigned paired choice sets in which there were three options: Trip A, Trip B or No trip option.

The survey was conducted during fall 2008. Tourists (i.e., not a resident of destination county) were intercepted in the three major coastal tourism destinations, Myrtle Beach, Charleston and Beaufort/Hilton Head, in a variety of venues (e.g., beaches, visitor centers, state parks, downtown areas). If they agreed to participate in the study, tourists were asked for their name and mailing address. Based a modified Dillman (2000) survey method, the first mailing occurred one week after the intercepts and was followed by a reminder postcard. A second and third questionnaire was mailed to non-respondents.

Attributes and Levels' Included in the Survey				
Attribute	Description	Levels		
		Urban setting		
Destination	Degree of destination development	Rural setting		
		Resort setting		
		State Park/Natural Setting		
Availability of activities	Activities available at or near the destination chosen	Low		
		Medium		
		High		
Activities' local flair/personality	Degree to which the activities posses a flair/personality unique to the SC coasts	None		
		Some flair		
		High flair		
Restaurant quality	Quality of the food at the restaurants you eat at	Two stars		
		Three stars		
		Four stars		
Restaurant		Local		
Ownership	Types of Restaurant ownership	Mix		
		National		
Trip Cost	Total cost of a coastal trip	20% less than your last trip's cost		
		The same as your last trip's cost		
		20% more than your last trip's cost		

Table 1Attributes and Levels1 Included in the Survey

<sup>1</sup>In the survey these levels were further described and/or defined for the respondents.

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#### MODEL

Individuals make trip choices that maximize their satisfaction (i.e., utility) in consideration of the relative importance of the various attributes. According to random utility theory (see McFadden, 1974), utility consists of a deterministic component and a random error component due to uncertainty factors not observed by a researcher. Researchers can only assess utility using the quantifiable section of utility (i.e., the observed deterministic component (i.e., the effect of unobserved influences) indicates that utility can only be inferred from individuals' observed choices. This random error leads to the use of the indirect utility function,

$$U_{j} = \mu \beta X + \varepsilon_{j}$$

where  $U_j$  is the utility of an alternative beach trip j,  $\mu$  is a scale parameter which is typically assumed to be 1, X is the vector of the attributes presented in paired choice sets,  $\beta$  is the coefficient vector (or parameter estimates) to be estimated, and  $\varepsilon_j$  is unobservable error component of utility. Assuming the error component is independently and identically distributed with a type I extreme-value distribution (i.e., Gumbel-distributed); the model specification can result in a conditional logit model (Ben-Akiva & Lerman, 1985).

#### **RESULTS AND DISCUSSION**

Researchers collected 504 valid addresses and 290 completed survey responses for a 58% raw response rate. A majority of respondents were female (62%). The average age of respondents was 54. and respondents had an average of 20.7 paid vacation days per year. Over one-quarter (28%) of respondents had a household income more than \$100,000, and over half had a college education (56%). 94% of the respondents were Caucasian.

The results of the conditional logit model are presented in Table 2. The explanatory power of the model was equal to 0.139 with McFadden's likelihood ratio index, which is analogous to the  $R^2$  in OLS regression.

Table 2					
Results of Conditional Logit Model					
Attribute	Coefficient	Standard Error	WTP (\$)		
ASC	0.6431*	0.338			
Destination – Rural	0.0784	0.080	7.09		
Destination – Resort	0.0746	0.081	6.75		
Destination – State Park	0.0287	0.076	2.59		
Activities – Medium	-0.0409	0.063	-3.70		
Activities - High	0.1992**	0.067	18.02		
Local flair – Medium	0.1109*	0.063	10.03		
Local flair – High	0.1105*	0.064	9.99		
Restaurants – Three Star	0.2958**	0.061	26.76		
Restaurants – Four Star	0.2870**	0.061	25.97		
Ownership - Mix	0.2009**	0.063	18.17		
Ownership - National	-0.2569**	0.060	-23.24		
Trip cost	-0.0111**	0.003			
Age*ASC	-0.0116**	0.006			
Income*ASC	0.1708	0.125			
Edu*ASC	0.2802**	0.129			
Sex*ASC	0.0654	0.133			

\* indicates  $p \le 0.10$ .

\*\* indicates  $p \le 0.05$ .

An alternative specific constant (ASC) was added to measure the utility shift from "no trip" to a trip alternative of "Trip A" or "Trip B". For the qualitative attributes such as Destination and Ownership, effective coding was used. To reflect heterogeneous preferences

among respondents, the individual specific attributes (e.g., age and income) were further included by interacting with the ASC in the model. The positive coefficient of an alternative specific constant (ASC) indicates that tourists were more favorable toward taking trips to coastal destinations under current conditions. Two interaction variables of Age\*ASC and Edu\*ASC show that younger tourists and those with more education were more likely to take trips to the coastal destinations.

All of the main attributes were statistically significant besides Destination. There was no significant difference between the low and medium levels, but the high level had a significantly higher coefficient. This indicates that while tourists have a demand for destinations with a high number of activities, there is no increase in demand associated with moving from a low to medium level. The positive signs of the two authenticity related variables (local ownership of restaurants and local flair of activities) show a strong preference for tourism activities that posses a local flair unique to the SC coasts. Though there was no significant difference between the medium and high local flair levels, indicating that the demand for local flair plateaus after reaching a medium level (see figure 1). The positive coefficients of the restaurants quality variable suggest a high quality of dining experience were likely to yield considerable increases in vacations to that destination. Though again there is no significant difference between the medium and high levels, indicating that the demand for restaurant quality also plateaus after reaching a medium level. The positive coefficient of "Ownership - Mixed" indicates that tourists prefer a mix of locally owned restaurants and national chains to only locally owned restaurants. The negative coefficient of "Ownership - National" (i.e., predominantly national chains in the destination) shows that tourist prefer either predominantly locally owner restraints or mixed ownership to predominately national chains. The destination attribute indicates that the degree of destination development was not significant in determining trip preference.



Figure 1: Results of SPCM Analysis

Willingness-to-pay for a change in a single attribute is the marginal rate of substitution between the attribute in question and trip cost and can be obtained by implicit differentiation of the conditional logit function with respect to trip cost (Roe, Boyle, & Teisl, 1996). This marginal WTP between a coefficient of a non-marketed attribute ( $\beta_{\nu}$ ) and the coefficient of trip cost was

obtained with  $\frac{\beta_k}{\beta_{trip \cos t}}$ . A comparison of the implicit prices of attributes is important in that there

are further planning and policy implications by examining different components of alternative resource allocations (Bennett & Adamowicz, 2001). Tourists were willing to pay substantially more to experience a variety of tourism activities available in the destination compared to the base option of basic activities available. Also, tourists' marginal WTPs of local flair and restaurants variables were relatively large when compared to the other variables.

#### CONCLUSION

The coastal tourists interested in the trips offered through the choice sets tended to be younger and more educated. While it is generally thought that older tourists are more interested in heritage tourism, these results indicate that older tourists were less interested in local flair and local food. Additionally income had no effect on the ASC, indicating that the target market is neither particularly rich nor poor. Interestingly, the destination attribute (degree of development) was the only attribute without a significant coefficient. This indicates that the other specific features of the destination (availability of activities, local flair of activities, restaurant quality and local ownership) are more important than level of development of the destination and the tourism background elements. Further analysis of this data will seek to determine whether this result it stable amongst different consumer groups.

Both the quality and ownership of restaurants have high WTPs, indicating that food could be an extremely important part of the South Carolina vacation experience. Additionally, the results indicate that tourists were interested in local character and local food and are willing to pay for it, although the demand appears to plateau. For "local flair" the medium and high levels have a significantly higher WTP than the low level; however, there seems to be is no considerable difference between the medium and high levels, indicating that tourists are not likely to pay for more than medium local flair. Additionally, for "restaurant ownership" tourists did not favor predominately nationally owned chains in a tourism destination; however, a mix of locally and nationally owned restaurants is highly preferred. Combined, these results indicate that while local character and authenticity are important to tourists, increasing these attributes past a moderate level is not important to the average South Carolina coastal tourist. As coastal tourism industry continues to develop and compete with traditional coastal businesses, developers and managers must remember that these businesses and the character they impart to the region are important to tourists and add value to the region as a coastal destination.

Sedmak and Mihalic (2008) argue that "[a]uthenticity has turned out to be an important factor of seaside resort choice" (p. 1025), however in their research design they do not compare the demand for authenticity to the demand for other destination attributes. This research has shown that having a mix of local and national restaurants ownership has more of an impact on destination choice than restaurant quality, indicating that authenticity may be more important than quality in destination choice. However, having high quantity of activities was more important than having high local flair in those activities, indicating that in activities authenticity may not be as important. Future analysis of this data will include: and analysis of segmentation

of different consumers by preferred activities, desire future development strategies, and demographic groups, as well as a destination by destination analysis of the SPCM data (i.e. Myrtle Beach tourists vs. Charleston tourists vs. Hilton Head tourists).

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## ACKNOWLEDGMENT

This paper was prepared by Clemson University under NA06OAR4170015, Am. 9. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of the South Carolina Sea Grant Consortium or the National Oceanic Atmospheric Administration.