

# **The Effects of Trip Characteristics on New Product Development: An Application in South Carolina of New Shrimp-Related Tourism Products**

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## **ABSTRACT**

*The purpose of this study was to examine the relationship between trip characteristics and preferences for new tourist activities. In this study, the effects of trip characteristics on new product development are specifically addressed for South Carolina coastal visitors in relation to their preferences for new shrimp-related products, services, and experiences along the South Carolina coast. By examining this relationship, both the tourism and shrimp industry representatives can better understand the contribution that characteristics such as trip length, purpose, travel decisions, and previous destination experience has to a coastal visitors' experience. Findings from this research will provide commercial shrimpers, coastal communities, local tourism entrepreneurs and destination marketers with information that may lead to the creation of products, settings and experiences attractive to target groups of coastal visitors and that enhance coastal tourism experiences.*

## **INTRODUCTION**

Trip characteristics have been commonly used throughout the tourism literature to examine a variety of travel behaviors, motivations, and preferences of tourist regarding their travels (Uysal & Jurowski, 1994). This research includes characteristics such as trip length (Vogt & Andreck, 2003; Lee, O'Leary, Lee, & Morrison, 2002), previous experience at the destination (Vogt & Andreck, 2003), trip purpose (Taylor, 1986; Fessenmaier & Johnson, 1989), and travel decision making (Fessenmaier & Jeng, 2000; Lee et al, 2002; Jeng & Fesemaier, 2002). Roehl, Ditton, Holland, & Perdue (1993) argue the importance of understanding how travelers make decisions related to efficient new product development. Additionally, prior experience has been examined related to a

consumer's perception of products (Vogt & Andereck, 2003; Smith and Swinyard, 1988; Hoch and Deighton, 1989; Braun, 1999). Vogt and Andereck (2003) suggest in their research that while trip characteristics such as experience are being examined currently in the literature, other trip characteristics such as trip length are still "relatively untested (p.353)" and should be explored more along with other variables such as psychological states. Furthermore, Bieger & Laesser (2004) suggest that descriptors such as type of trip "showed significant explanatory power, while sociodemographic variables proved to be less valuable (p.357)."

In tourism, understanding the consumer and actively reassessing tourist activities and preferences in order to develop new products is essential (Goeldner, Ritchie, & McIntosh, 2000; Godfrey and Clarke, 2000). According to Hodgson (1990), "Tourism organizations (whether in the public or private sector) which ignore the need for a continuing stream of successful new products risk being overtaken by more market-oriented competitors (p.2)." Numerous studies have examined the factors affecting new product success (Rothwell, 1977; Porter, 1985; Cooper and Kleinschmidt, 1987). Tidd, Bessant, & Pavitt (2001) summarize these factors into eight areas that are essential to the new product development process. These include product advantage, market knowledge, clear product definition, risk assessment, project organization, project resources, proficiency of execution, and top management support. In addition, McKercher and Robbins (1998) found four major themes and additional minor themes regarding the types of knowledge and skills needed by prospective new entrants to the nature-based tourism sector. These competencies include business planning, marketing, operational skills, and personal attributes.

Recently, the literature suggests that our economy is moving beyond the product and services of the past to include a focus on experiences (Pine & Gilmore, 2004; Amin & Thrift, 2002; Richards & Wilson, 2005). This is a key aspect of new product development in tourism because experiences of the tourist are crucial to the success of the tourism industry. Experiences are private events that occur in response to some triggered stimulation to the senses, the heart, and the mind (Pine & Gilmore, 1999). By considering experience-oriented products in addition to traditional products (goods and services), the tourism industry attempts to create market offerings that are more relevant to the needs and wants of the visitors and that enhance their overall experience.

In this study, the effects of trip characteristics on new product development are specifically addressed for South Carolina coastal visitors in relation to their preferences for new shrimp-related products, services, and experiences along the South Carolina coast. Two research questions are addressed in this study. First, what are the preferred types of new shrimp-related tourism products, services, and experiences for visitors to the South Carolina coast? Then to better target-market to tourist, how do the shrimp-related new product, services, and experiences differ based on each of the four trip characteristics (trip length, trip purpose, travel decisions, and previous destination experience)?

## **RESEARCH METHODS**

The South Carolina shrimp and tourism survey consisted of conducting systematic on-site intercepts of visitors to South Carolina's coast during the 2004 shrimp season

followed by a mail survey of participants. The survey instruments were pilot tested between April and June 2004 followed by on-site field research during the months of July through October 2004. Names and addresses were collected at 21 sites across four of the six coastal counties using a stratified sampling strategy based on visitor spending in each of the counties (SCPRT, 2004). A total of 830 individuals agreed to participate in the study. Using a modified Dillman technique (2000) consisting of an initial mailing of a questionnaire, postcard reminder and follow-up questionnaire, 356 individuals (42.8% response rate) completed the nine page survey instrument.

## FINDINGS

To address the first research question, coastal visitors who eat shrimp (n= 308) were asked to rate on a scale of 1 (strongly disagree) to 5 (strongly agree) 14 new products, services, and experiences in which they were willing to participate. The 14 items were based on the tourism and coastal agritourism literature as well as shrimp industry interviews along the coast. The mean scores were ranked with the most preferred items first, including: Eat shrimp cooked in traditional southern recipes (mean=3.86), Eat fresh shrimp at local festivals or events (mean=3.48), Bring home freshly caught shrimp (mean=3.14), Like to see shrimp boats when I am visiting (mean=3.12), Learn from a chef how to cook traditional southern recipes (mean=3.06), Have a travel guide with info on where to purchase local shrimp (mean=2.92), Learn more about local shrimp heritage (mean=2.88), Use a travel guide with info on where to see local shrimp boats (mean=2.84), Tour a shrimp trawler that's docked (mean= 2.81), Visit when locally harvested shrimp is available (mean=2.67), Learn about shrimp fishing from a shrimp fisherman (mean=2.72), Go out on a commercial trawler (mean=2.59), Go on a charter boat to catch shrimp (mean=2.55), and Order shrimp to be mailed to me (mean=2.18).

**Table 1. Mean scores ranked by preferred item.**

Item	Mean	Std. Deviation
Eat shrimp cooked in traditional southern recipes	3.86	.875
Eat fresh shrimp at a local festival or event	3.48	1.01
Bring home freshly caught shrimp	3.14	1.27
Like to see shrimp boats when I'm visiting	3.12	1.13
Learn from a chef how to cook traditional southern recipes	3.06	1.12
Have a travel guide with information on where to purchase local shrimp	2.92	1.14
Learn more about shrimp heritage	2.88	1.06
Use a guide with information on where to see local shrimp boats	2.84	1.11
Visit a shrimp trawler that is docked	2.81	1.13
Visit when fresh locally harvested shrimp is available	2.78	1.11
Learn about shrimp fishing for a commercial shrimp fishermen	2.67	1.11
Go on a commercial shrimp trawler	2.59	1.18
Go out on a charter boat to catch shrimp	2.55	1.16
Order shrimp to be mailed to me	2.18	.993

To better target-market coastal visitors, the second research question examined how the shrimp-related new product, services, and experiences differed based on each of the four trip characteristics (trip length, trip purpose, travel decisions, and previous destination experience). A series of one-way ANOVAs were conducted. The following findings are for each of the four trip characteristics as they relate to the fourteen items for new product development

For trip length, respondents who reported visiting but did not spend the night were labeled “day trippers” (5.9%), two to three days were labeled “weekenders” (36.1%), four to seven days were labeled “vacationers” (42.6%), and eight to fourteen days were labeled “extended vacationers” (15.4%). Significant findings were related to differences in length of stay for preference to tour a docked trawler ( $p=.001$ ), to visit when shrimp is available ( $p=.016$ ), and learn about shrimp heritage ( $p=.05$ ). Post hoc comparisons revealed that day trip visitors were more likely than weekend visitors to visit when fresh locally harvested shrimp was available and to want to learn more about shrimp heritage. Day trip visitors were also more likely than extended vacationers to visit when fresh locally harvested shrimp was available; however, vacationers were more likely than weekend visitors to want to learn more about shrimp heritage. Table 2 shows results from the ANOVAs for trip length and the fourteen items for new product development.

Table 2. ANOVA results for trip length and new product development items.

Item	Trip Length			
	Mean	SD	F	P
<i>While visiting the coast, I would like to...</i>				
Visit a shrimp trawler that is docked	2.81	1.13	5.88	.001
Go on a commercial shrimp trawler	2.59	1.18	2.53	.057
Go out on a charter boat to catch shrimp	2.55	1.16	1.13	.337
Learn about shrimp fishing from a commercial shrimp fisherman	2.67	1.12	2.32	.076
Bring home freshly caught shrimp	3.14	1.27	2.39	.069
Eat fresh shrimp at local festivals or events	3.48	1.01	1.40	.246
Eat shrimp cooked in traditional southern recipes	3.86	.875	2.07	.105
Learn from a chef how to cook shrimp in traditional southern	3.06	1.12	1.41	.240
Visit when fresh locally harvested shrimp is available	2.78	1.11	3.48	.016
See shrimp boats when I am visiting	3.12	1.13	1.71	.165
Have a travel guide with information on locations to purchase	2.92	1.14	2.32	.075
Learn more about shrimp heritage	2.88	1.06	2.64	.050
Use a guide with information on where to see local shrimp boats	2.84	1.11	2.44	.064
Order shrimp to be mailed to me	2.18	.993	2.10	.101

In terms of trip experience, coastal visitors were labeled as “first trip” (27.5%), “2-5 trips” (51.1%), “6-10 trips” (12.8%), and “More than 10 trips” (7.9%). A significant finding for trip experience was bringing home freshly caught shrimp ( $p=.003$ ). Respondents who have gone on more than 10 trips to the coast are more likely to want to bring home freshly caught shrimp than those who are on their first or 2-5<sup>th</sup> trip to the coast. Table 3 shows results from the ANOVAs for trip experience and the fourteen items for new product development.

Table 3. ANOVA results for trip experience and new product development items.

Item	Trip Experience			
	Mean	SD	F	P
<i>While visiting the coast, I would like to...</i>				
Visit a shrimp trawler that is docked	2.80	1.14	.153	.928
Go on a commercial shrimp trawler	2.58	1.18	.930	.427
Go out on a charter boat to catch shrimp	2.55	1.16	.631	.596
Learn about shrimp fishing from a commercial shrimp fisherman	2.67	1.12	.309	.819
Bring home freshly caught shrimp	3.13	1.27	4.72	.003
Eat fresh shrimp at local festivals or events	3.47	1.01	.567	.637
Eat shrimp cooked in traditional southern recipes	3.85	.873	.507	.678
Learn from a chef how to cook shrimp in traditional southern	3.06	1.11	1.80	.148
Visit when fresh locally harvested shrimp is available	2.77	1.11	.755	.521
See shrimp boats when I am visiting	3.11	1.13	.614	.607
Have a travel guide with information on locations to purchase	2.91	1.13	.251	.861
Learn more about shrimp heritage	2.87	1.06	.472	.702
Use a guide with information on where to see local shrimp boats	2.83	1.11	.581	.628
Order shrimp to be mailed to me	2.16	.981	1.73	.160

For purpose of the trip, respondents were categorized as “Vacation” (54.8%), “Visiting friends & relatives” (8.5%), “Other” (10%), “Special event” (3.9%), “Second home” (3.0%), “Business related” (3.3%), and “Going to the beach” (10.8%). Significant findings for trip purpose included learning about shrimping from a local fisherman ( $p=.014$ ) and using a travel guide with information on where to see shrimp boats ( $p=.042$ ). Coastal visitors whose trip purpose was a special event differed significantly in their preference for using a local travel guide to see shrimp boats as compared to all other groups with the exception of those who reported their primary trip purpose as “going to the beach.” Table 4 shows results from the ANOVAs for trip purpose and the fourteen items for new product development.

Table 4. ANOVA results for trip experience and new product development items.

Item	Trip Purpose			
	Mean	SD	F	P
<i>While visiting the coast, I would like to...</i>				
Visit a shrimp trawler that is docked	2.82	1.15	1.76	.109
Go on a commercial shrimp trawler	2.60	1.20	1.42	.206
Go out on a charter boat to catch shrimp	2.56	1.17	1.44	.198
Learn about shrimp fishing from a commercial shrimp fisherman	2.69	1.13	2.72	.014
Bring home freshly caught shrimp	3.12	1.27	1.33	.245
Eat fresh shrimp at local festivals or events	3.46	1.02	.580	.746
Eat shrimp cooked in traditional southern recipes	3.86	.883	.313	.930
Learn from a chef how to cook shrimp in traditional southern	3.02	1.11	.673	.672
Visit when fresh locally harvested shrimp is available	2.75	1.12	.500	.808
See shrimp boats when I am visiting	3.13	1.15	1.33	.244
Have a travel guide with information on locations to purchase	2.92	1.15	1.13	.345
Learn more about shrimp heritage	2.88	1.07	1.59	.150
Use a guide with information on where to see local shrimp boats	2.83	1.13	2.21	.042
Order shrimp to be mailed to me	2.18	1.01	1.29	.262

Finally, for travel decisions, respondents were categorized based on who planned the trip including: “Myself” (40.7%), “Spouse” (13.1%), “Joint decision” (22.6%), “Family” (12.5%), and “Other” (2.6%). Significant findings for travel decisions include touring a shrimp trawler that’s docked (p=.001), go on a commercial trawler (p=.011), go out on a charter boar to catch shrimp (p=.008), learning about shrimp fishing from a commercial shrimpers (p=.001), see boats while visiting (p=.022), learn more about shrimp heritage (p=.004), and use a guide with information on where to see local shrimp boats (p=.019) . Post hoc comparisons revealed that individual planners were less likely than families who planner together would be less likely to want to visit a shrimp trawler, go on a commercial shrimp trawler, go out on charter boat, see shrimp boats while visiting, learn more about shrimp heritage, or use a guide with information to see local shrimp boats; likewise, spouses who planned the trip together were less likely than families who planned the trip together to want to visit a shrimp trawler, go on a commercial shrimp trawler, go out on charter boat, see shrimp boats while visiting, learn more about shrimp heritage, or use a guide with information to see local shrimp boats. Table 5 shows results from the ANOVAs for trip planner and the fourteen items for new product development.

Table 5. ANOVA results for trip planner and new product development items.

Item	Trip Planner			
	Mean	SD	F	P
<i>While visiting the coast, I would like to...</i>				
Visit a shrimp trawler that is docked	2.81	1.14	5.96	.000
Go on a commercial shrimp trawler	2.59	1.78	3.06	.011
Go out on a charter boat to catch shrimp	2.56	1.17	3.22	.008
Learn about shrimp fishing from a commercial shrimp fisherman	2.68	1.13	4.43	.001
Bring home freshly caught shrimp	3.14	1.28	.987	.426
Eat fresh shrimp at local festivals or events	3.48	1.02	.583	.713
Eat shrimp cooked in traditional southern recipes	3.86	.881	.379	.863
Learn from a chef how to cook shrimp in traditional southern	3.05	1.13	.754	.584
Visit when fresh locally harvested shrimp is available	2.77	1.11	.722	.608
See shrimp boats when I am visiting	3.12	1.14	2.67	.022
Have a travel guide with information on locations to purchase	2.92	1.14	1.95	.086
Learn more about shrimp heritage	2.88	1.06	3.51	.004
Use a guide with information on where to see local shrimp boats	2.83	1.13	2.76	.019
Order shrimp to be mailed to me	2.18	.999	1.42	.217

## APPLICATION OF RESULTS

Both the mean rankings and the findings from the ANOVA will be useful to both the shrimp industry and the tourism industry as they develop new products for the tourism experience. Ultimately, it will provide commercial shrimpers, coastal communities, local tourism entrepreneurs and destination marketers with information that may lead to the creation of products, settings and experiences attractive to target groups of coastal visitors. For example, the availability of fresh, locally caught shrimp during the peak tourism season and the physical presence of a viable shrimp industry creates a unique

type of coastal experience that may increase the attractiveness of South Carolina as a tourist destination.

## **DISCUSSION**

By examining the relationship between trip characteristics and preference for new tourist activities, the tourism industry representatives as well as shrimp industry representatives can better understand the contribution that characteristics such as trip length, purpose, travel decisions, and previous destination experience has to a coastal visitors' experience. Additionally, the results of this study provide information that could lead to strategic planning, marketing, & development of tourism opportunities by the South Carolina shrimp businesses and organizations in partnership with the state's travel and tourism industry. These new partnership opportunities related to tourism may aid in the sustainability of the struggling South Atlantic shrimp industry by assisting in the promotion of local shrimp consumption and by supporting the shrimp industry in reaching their goal of increasing the price per pound sold to a level that provides a fair return on the shrimpers' investment. At the same time, the research provides insights that can be used in the development of new products, services, and experiences to enhance coastal tourism.

Future research should address similar opportunities with other tourism areas such as rural tourism development, wine and culinary tourism, and agritourism. Beyond the trip planning decision examined in this study, more research is needed to determine the role of three levels of travel decision making (Fesenmaier & Jeng, 2000) with regard to new products, services, and experiences in tourism. Additionally, more research is needed to address the relationship between trip characteristics and the successful implementation of new products in the tourism field.

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