

Affective and Cognitive Effects of Information Use Over the Course of a Vacation

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From pre-trip planning through post-trip remembering, vacations unfold over long periods of time. Through the course of a trip the same travel information may be used repeatedly but with different levels of success and satisfaction. These experiential fluctuations over time were examined in a study of trip planners, who collected travel information from a chamber of commerce before leaving home, to understand how information was applied *in situ* during their vacation. Travelers with various lengths of stay were segmented into unique groups and their information use was modeled by prior experience with the destination and day of the trip. Dependent variables were five single-item measures for affective and cognitive reactions to the application of travel information. Results suggest longer trips entail more varied daily responses. Prior experience was relevant on selected days of some of the trip lengths.

KEYWORDS: *Daily on-site experiences, tourist information, trip planning*

Introduction

Vacations and outdoor recreation experiences unfold over time, sometimes a period of hours, days, or even weeks. If the time spent collecting information and planning, packing for, and remembering the trip experience is also considered, vacation experiences can span months and years. Some studies have begun to document the presence and importance of temporal effects on a wide variety of leisure experiences (Clawson & Knetch, 1966; Fridgen, 1984; Hammitt, 1980; Hull, Michael, Walker, & Roggenbuck, 1996; Stewart & Hull, 1996). Furthermore, research has shown that affective and cognitive responses often change throughout the experience (Tinsley & Tinsley, 1986).

Within travel research, the classic five phase model of Clawson & Knetch (1966) is often cited, however, few researchers have attempted to follow travelers through all phases. Even within a stage, understanding is still weak on how individuals feel and think about their vacation experience. Capturing the affective and cognitive responses a person has during a vacation could benefit from a fine grain perspective where experiential fluctuations across time are measured. Hence, this study investigated the dynamic nature of a vacation *across each day* that the visitor spent on-site. The experiences of travelers during a visit to a single destination where the stay could have lasted just one day or longer than four days were modeled. Data on anticipation,

travel to (or enroute), and travel back phases were also collected and are presented in this paper; however, they were not included in all of the statistical analyses presented here.

Literature Review

Consumer behavior research has traditionally focused on the utilitarian aspects of what consumers expect to gain from using a given product. Economic concepts such as benefits and costs, and ideas from behavioral psychology like stimulus-response relationships have been the language of consumer behavior. The idea that consumption may be motivated by the quest for fun is relatively new (Holbrook & Hirschman, 1982). This new perspective, which Holbrook and Hirschman characterize as an experiential perspective on consumption, treats the entire consumption process not as an effort to find the most efficient solution to a problem, but rather as an experience which the consumer tries to make enjoyable. That is, the goal of the buying process, which includes information collection and use, is to maximize positive feelings and thoughts such as being in control and being successful.

Information search is often parallel to or integrated with the activity of consumer buying (Bettman, 1979; Olshavsky & Granbois, 1979; O'Shaughnessy, 1987; Thorelli, Becker, & Engledow, 1975). The information processing model of consumer behavior (Bettman, 1979) has been extensively applied to understanding the tie between seeking, collecting, and applying information to make more rational product choices. Individuals vary greatly on the amount and sources of information they need to make a purchase decision. Product contexts are important for researchers to consider as individuals have many different purchase and information styles, which vary by context. Some individuals rely heavily on internal information (e.g., memory from past reading, prior experiences) in certain product contexts; while others rely on external information sources (e.g., brochures, salespersons) in the same contexts. Often individuals use a combination of both internal and external sources with an assortment of information within each source classification (Thorelli et al., 1975). Murray (1991) found consumers with prior experience with certain products have a greater preference for internal sources of information (for services-related products over tangible goods). In tourism research, Fodness and Murray (1997) recently reported three distinct information search styles—routine, limited, and extensive. These styles were not related to internal or external information sources, as they found that most individuals in their study used multiple sources. The researchers believe that the common practice of limiting information use research to one source is premature given current knowledge, and instead advocate "an emergent approach to measuring information source use behavior, which would incorporate both single- and multiple-source (p. 511)."

Information search which is intended to resolve buying decisions and facilitate product purchases may or may not uncover the necessary or desired

information (Spreng & Olshavsky, 1989). During acquisition of information, an individual who intends to seek information from outside sources (e.g., chamber of commerce), may fail in the attempt to collect the desired information. The information consumption stage may also elicit disappointments. Consumption includes the sensation, perception, and integration of information. Sensation refers to the visual, hearing, touching, and smelling aspect of information. Perception refers to pattern recognition and comprehension. Integration refers to the application of information which yields learning, judgment, reasoning and problem solving. Any aspect of the information consumption experience may fail to meet the consumer's needs and expectations. Spreng and Olshavsky point out that prior knowledge in a product context may affect the success of information acquisition and consumption. Further, they found a lack of comprehensive theory for describing the relationship between prior knowledge and information search in consumption contexts.

Thus, consumers are perceived as information seekers. As Olshavsky and Granbois (1979) point out, not all information search serves decision making (e.g., delayed purchase, entertainment); and not all decision making uses a lot of information (e.g., habitual, routine buying). Moreover, consumers learn from their own experiences (Hoch & Deighton, 1989). Experience can be direct or indirect via other people; experience can be in the distant past or fairly recent. Hoch and Deighton (1989) report the following about learning from experience: first, motivation and involvement tend to be higher when information is drawn from experience; second, individuals take pride in experiential-based learning; third, source credibility is typically higher (because their own experience is the source); fourth, experience stays in memory better than other information sources; and fifth, information learned from experience is likely to have a greater influence on behavior. In travel behavior, tourists can be expected to learn about a destination as they plan a trip or actually spend time there (Urry, 1990). Urry coined the notion of taking note of places other than home as "gazing." People learn where, when, and how to collect information, partly through past experiences with information. Sometimes gazing leads to actual first time or repeat vacations, where other times information gazing satisfies aesthetic curiosities and produces armchair travelers (Vogt & Fesenmaier, 1998; Vogt, Fesenmaier, & MacKay, 1993).

A final consideration for information search and consumer product experiences is the consideration of non-rational, or emotional reactions to information. Within the information processing framework often used in consumer behavior, most assessments of emotions are fairly limited to the study of attitudes toward brands and advertisements (i.e., like/dislike measures) or ranked evaluations of brands. An experiential view of consumer behavior introduced the emotion and feeling construct to capture both the affection for the stimulus information source or brand name, and the holistic feelings and thoughts a consumer has towards the involvement in the entire buying experience (Holbrook & Hirschman, 1982). A recent review of emotions

research by Richins (1997) describes many diverse applications to consumer behavior, noting that emotions have been related to products, services, favorite possessions, and satisfaction. No mention of research on emotions associated with information collection and application are made. Further, she concludes that some of the shortcomings in this line of research have been the misapplication of emotion measures. She concludes by recommending that researchers examine the emotional states associated with the experience under study in a comprehensive manner, and critically assess the usefulness of existing measures of consumption-related emotions. Richins also suggests research topics concerning temporal shifts in emotions including how emotions change during product ownership and what individual, product, or situational factors influence emotions over time.

For leisure experiences, the characterizing of feelings, thoughts, and actions of individuals during the experience has been quite successful. A number of study methods, including experience sampling (Larson & Csikszentmihalyi, 1983), diary studies (Shaw, 1985), on-site placards (Hull, Stewart, & Yi, 1992), site and time cues (Hull et al., 1996), and multiple quantitative and qualitative techniques (Arnould & Price, 1993), have been implemented to capture the dynamic psychological response to activity, environment, and social context. In an article summarizing *in situ* research, Stewart and Hull (1996) argue that these research methods and data collection efforts bring increased saliency and contextual validity to the study of leisure and recreation.

In summary, research shows that individuals have a wide spectrum of styles in consumer and leisure behavior. These styles cut across planning the experience, gathering and applying information to the experience, and the individual's reaction to the actual experience. Research has shown that individuals are continually using and integrating many internal and external information sources throughout decision making and consumption, making it nearly impossible to separate out and evaluate the role of single sources of information. While research has addressed some of the complexities of experience with a product or service, many questions remain unanswered. While research has unveiled that individuals learn as they collect information and experience encounters, little is known about how quickly an inexperienced consumer catches up to an experienced one. Additionally, how does that inexperienced individual feel and think during those first moments (or days) of the experience? Do individuals who plan short experiences feel and think the same as individuals who draw out an experience over a longer period of time, thus allowing a longer, and possibly different, on-site learning experience? In a travel setting, these research opportunities are best considered within the on-site experience phase. Thus, the aim of this paper was to explore how information use affects and interacts with the on-site vacation experience, and how those affects and interaction vary over time and across individuals with different levels of experience during the on-site destination phase of vacations.

Research Questions

To further explore the application of information in a vacation experience, a study was completed that assessed information usage and reactions to the information, during its use for planning and carrying out a vacation. This paper is delimited to better understanding the on-site phase of a vacation by modeling affective and cognitive reactions to information while controlling for time passage, experience levels, and duration of the vacation. In this approach the following research questions were considered:

1. Are daily feelings and thoughts regarding information use constant across multiple days of a vacation?
2. Does trip duration affect daily feelings and thoughts regarding information use? Is the role of trip duration constant over the course of the trip?
3. Does prior experience at a destination affect daily feelings and thoughts regarding information use? Is the role of experience at a destination constant over the course of the trip?
4. Do the joint effects of experience and trip duration affect daily feelings and thoughts regarding information use? Are their joint effects constant over the course of the trip?

Methods

Study Area

Branson, Missouri, located in the southwest corner of the state, was the study site. It was selected because of its recent popularity, which has placed it as one of the fastest growing and top tourism destinations in the United States (Ilium, 1994). Although Branson has been a vacation spot for over a half a century, the past ten years have brought substantial changes in both attractions and visitation. Due to its history, Branson attracts a mix of first-time and repeat visitors. Branson is also a destination that can accommodate a short, one day or less vacation, as well as longer vacations.

Questionnaire and Measurement

This study was aimed at learning more about reactions to information application by information seekers who planned and actuated a vacation. To capture the dynamic nature of vacations, several survey instruments were used to make contact with panel respondents. These instruments included an initial postcard survey which was systematically dropped in tourism information packets mailed by a chamber of commerce; a pretrip survey which was mailed to postcard respondents traveling within our study time frame; and an *in situ* questionnaire which asked respondents to record daily experiences of the vacation. The postcard and pretrip instruments collected data in the anticipation phase, while the *in situ* questionnaire collected data in the enroute, on-site, and travel back phases.

The sample needed for this study was information seekers or vacation planners. The researchers evaluated ways of generating a sample and determined that distributing a direct mail-type of short survey was the most efficient method for finding a large number of information seekers who would be taking a vacation to the study destination in the near future. A survey with a signed letter and a detachable postcard-size response piece was designed for placement in information packets requested from the destination's chamber of commerce. These information packets were mailed first class by the chamber to individuals who called or wrote them seeking travel information. The chamber of commerce was given written instructions on which days to drop the survey in outgoing mailed travel packets, and the quota of surveys to include for each day. In total, 7,000 stamped surveys were distributed. Five thousand surveys were distributed in travel packets between April and June of 1994. An additional 2,000 surveys were distributed in September of the same year. These months were selected to capture the peak vacation seasons of summer and fall. The researchers periodically communicated with the chamber to make sure distribution occurred as scheduled. Because of the large volume of mailing this chamber manages, no list was generated that enabled the researchers to know where the surveys were mailed. The postcard survey asked whether respondents anticipated actually traveling to the destination, and if so, when that trip would occur, as well as their willingness to participate in a research study. Out of the 7,000 postcard surveys distributed, 1,029 postcards were returned.

The next step in the study was removing the 92 individuals who were not willing to participate and the 301 individuals who did not indicate travel dates or provided dates over six months away and outside of the study's time frame. The remaining 636 respondents were tracked by the date of their vacation. Three weeks before their departure date (or sometimes less, as some individuals returned the postcard within a few weeks of their departure) individuals were mailed a pretrip survey and *in situ* questionnaire. Individuals were instructed to complete the pretrip before their departure date and return it to the researchers, then to take the *in situ* questionnaire along on the trip and complete according to the three phases (i.e., enroute, on-site, return trip). The mailings were personalized and followed a modified Dillman (1978) mail survey procedure. Two prepaid envelopes were included for return of the pretrip before departure and return of the *in situ* questionnaire after returning home from the vacation. A magnet was provided for each respondent as an incentive, and respondents were also entered into a drawing for a three day trip to the destination being studied. Reminder postcards were used following the pretrip survey, but not the *in situ* questionnaire. Second mailings of pretrip and *in situ* questionnaire were not made because of the scheduling and time constraints associated with *in situ* data collection. Pretrip surveys or *in situ* questionnaires completed after the trip would not have measured actual behavior as intended.

The 12-page pretrip survey included questions about prior experience with the destination, what information source first introduced them to the

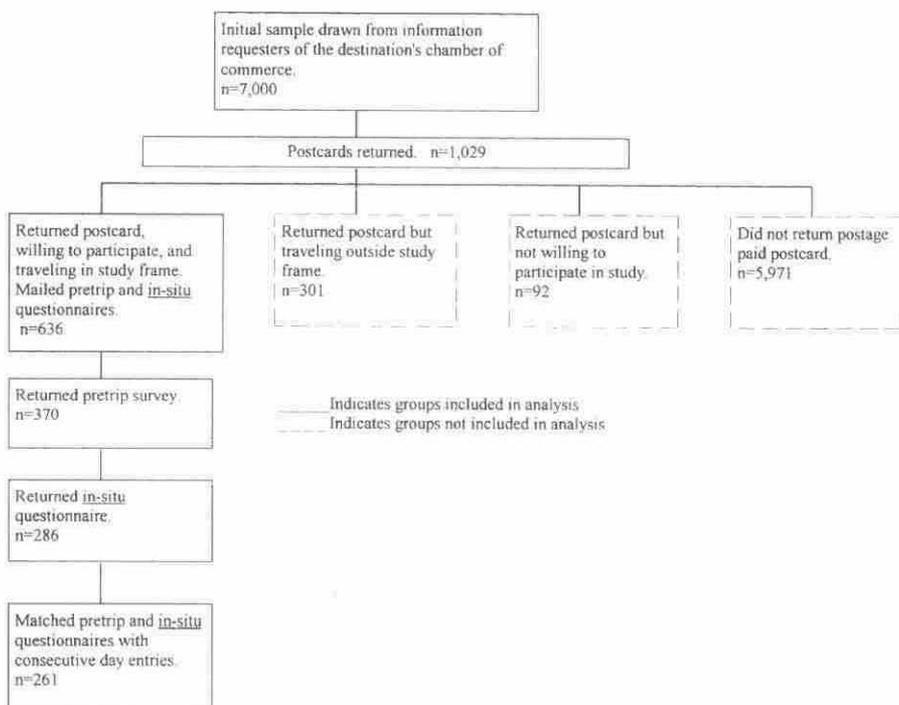


Figure 1. Sampling and response.

destination, their certainty of taking the vacation, the helpfulness of travel information packet in planning vacation, and other vacation-related consumer behavior questions. As shown in Figure 1, three hundred and seventy of these pretrip surveys were returned. The 12-page *in situ* questionnaire was designed for three vacation phases—enroute, on-site, and return trip. Enroute questions asked about helpfulness of information at this phase, departure date, and length of expected stay. On-site entries were provided for up to four days based on proprietary information held by the chamber of commerce regarding the model length of stay. Each day of a stay, respondents were instructed to complete the *in situ* questionnaire at the end of a day or the following morning. Respondents recorded the day of the week and calendar date, things they did that day (open-ended), expenditures for the day, information sources applied that day (open-ended), and responded on five Likert-type scales which measured affect and cognitive reactions to the information sources applied to that day's vacation experiences. The *in situ* questionnaire was constructed in a way to capture each respondent's unique set of information sources and daily experiences.

Of the 636 diaries mailed, 286 completed *in situ* questionnaire were returned. For the purposes of this paper, 261 cases were used where both

pretrip surveys and *in situ* questionnaires were returned and daily entries were made on consecutive days for the variables included in this analysis. Based on the number of daily entries made, respondents were categorized into five length of stay groups (i.e., one day trip, two day trip, etc.). Individuals who completed four consecutive days in the destination were asked whether they stayed longer than four days. About one-quarter of the respondents stayed more than four days in the destination and formed one of the five vacation length groups.

The affective and cognitive measures featured in this study were patterned after Csikszentmihalyi's flow scales (Csikszentmihalyi & Csikszentmihalyi, 1988). These scales gather information about how an individual feels at a certain point in time doing some identified activity, in a given place, and social circumstance, by inquiring about the challenge of the activity, an individual's skill in the activity, importance of the activity, and level of success in the activity. The scales were intended to measure how travel information application affects and interacts with each day's vacation activities. The single item Likert-type measures were worded as such:

- a) In general, how helpful did you find these information sources you listed above for informing you what was available to do, entrance costs, hours of operation, directions on how to get there, etc.? (response scale from 1 "not at all helpful" to 7 "very helpful").
- b) How skillful did you feel in using these travel information sources? (response scale from 1 "not at all skillful" to 7 "very skillful")
- c) How successful were you with using the information sources and getting what you wanted? (response scale from 1 "not at all successful" to 7 "very successful")
- d) Did you feel the information put you in control of your vacation and/or daily activities? (response scale from 1 "not at all" to 7 "very much so")
- e) Did you find Branson to be a challenging place to get around in today? (response scale from 1 "not much of a challenge" to 7 "very much a challenge")

The last section of the *in situ* questionnaire focused on the reactions to the vacation as they traveled home. Vacation satisfaction questions were asked during the return trip phase.

To identify whether nonresponse was a potential threat to validity of the data, a nonresponse follow-up study was completed. A randomly selected sample of 106 individuals from a group of nonrespondents were telephoned by trained phone surveyors. Nonrespondents were considered those individuals who returned a postcard survey and were not willing to participate in the study ($n = 92$) and those individuals who returned a postcard survey, were willing to participate, had an upcoming trip; but did not return all survey instruments. Analyses of these nonresponse data showed that nonrespondents fell into one of two groups: visitors and nonvisitors. Visitors in this nonresponse study were similar to the main study sample on travel charac-

teristics and demographics compared to the sample in the main study. Non-visitors in the nonresponse study were different on travel characteristics, in that they were much less certain of taking a vacation, and at the time of the nonresponse survey, they had not traveled to the destination of study. Reasons for not returning the pretrip and/or *in situ* questionnaire instruments included: didn't take the trip because of illness; lack of money; lack of time; postponed the trip; selected another destination; had no time on the trip to complete the *in situ* questionnaire; left the *in situ* questionnaire at home; misplaced the *in situ* questionnaire on the trip; and was not interested in completing the *in situ* questionnaire.

Data Analysis

The five affective or cognitive measures were considered dependent variables. Trip length, represented as a five group variable, was an independent variable. So was experience a two group variable representing first-time visitors to Branson and experienced Branson visitors. Data were arranged by day for each of the five dependent measures, providing doubly multivariate repeated measures where both within-subjects and multiple dependent variables were analyzed using multivariate techniques. The interaction of experience and time spent at the destination across the dependent measures was also evaluated. Experience was specified as a between-subjects factor and this between-subject effect was singly multivariate. This type of analyses was used for trips lasting three or more days. For one day trips, independent sample t-tests were used to evaluate experience effects; and for two day trips, paired sample and independent sample t-tests were used to evaluate time and experience effects.

Doubly multivariate, also known as profile analysis, requires many basic assumptions to be met (Girden, 1992; Tabachnick & Fidell, 1989). First, the number of cases for between-subject groupings must exceed the number of dependent variables, times the number of measures. In the three, four day, and more than four day trip analyses, this sample size requirement was met. Next, independence or noncorrelation across the affect and cognition measures should be observed. In repeated measures, however, this assumption is violated by the design of the research (Hays, 1988, p. 52). The compound symmetry assumption authorizes the use of an F test for repeated measures; but this test is very stringent and unlikely to be satisfied in practice, especially for repeated measures (Hays, 1988, p. 523). To work around these problems, Mauchly's circularity test is available as a substitute for a compound symmetry test and indicates the use of adjustment diagnostics (i.e., Box adjustments to degrees of freedom, Greenhouse-Geisser, Huynh-Feldt) if the test fails ($p < .05$). If both the regular F test and the Greenhouse-Geisser statistic produce significant results, then there is no doubt the outcome is truly significant, regardless of the circularity assumption (Hays, 1988, p. 525). In the three, four day, and more than four day trip analyses, the Mauchly's W circularity test was rejected, so an adjusted F test was used. Pillai's trace criterion was

used to evaluate the significance of main effects and interactions for the multivariate tests. If the homogeneity of variance-covariance matrices is violated, Pillai's test is more robust than similar tests (Tabacknick & Fidell, 1989, p. 398). SPSS8.0 was used to perform the analyses. Alpha levels were set at less than .10, since this study was considered exploratory.

Description of Sample

The sample included people visiting Branson for stays ranging from one day to more than four days. Each respondent should be considered an information seeker, given that the sample was garnered from those who requested information from the convention and visitors bureau. The sample was divided into five groups representing various trip lengths based on actual length of stay in Branson. Table 1 provides information on respondents in these five groups who completed both a pretrip and *in situ* questionnaire. Some travel respondents and trip characteristics are similar across the trip-length subsamples. For example, all five trip length groups are predominately female. The average one-way distance to Branson was between 634 and 787 miles with no statistically significant differences. Time spent reading the chamber travel information packet were also similar across the five groups. At least one-and-a-half hours were spent reading the destination's information packet during the at-home planning effort, as measured in the pretrip survey.

Some characteristics differed significantly between these five trip-length segments. Those staying at the destination for the longest time were much more likely to be well-traveled, to plan a trip well in advance of a departure, and were extremely certain that they would actually take this trip as recorded in the anticipation phase. This group of longer-stayers were also more satisfied with their trip, as were those who stayed only three days. Planned length of stay in the destination as measured in two phases, anticipation (several weeks before departure) and enroute, differed from the actual length of stay for all travelers, suggesting that travel plans change.

Results

Information sources were considered a causal agent in this study, however, the type and amount of information varies across respondents because this study was carried out in a natural setting. The origin of the sample of information requestors provides a common information source all the respondents shared. The 1994 vacation guide produced by the chamber is over 200 pages long and provides extensive information to plan and take a vacation. The next most commonly shared information source was past experience. Overall, 64 percent of the respondents considered in this analyses had previously been to Branson. As shown in Table 2, additional information sources were used during different phases. In two measures during the anticipation or pretrip phase, word-of-mouth (i.e., friends or family member)

TABLE 1
Traveler and Trip Characteristics by Length of Trip

Characteristics	One Day Trip	Two Day Trip	Three Day Trip	Four Day Trip	Longer than Four Day Trip
Number of respondents	39	32	69	60	61
Gender of respondent	74% women	78% women	77% women	73% women	66% women
Income	19% < \$30k	27% < \$30k	16% < \$30k	18% < \$30k	19% < \$30k
	39% \$30-50k	37% \$30-50k	48% \$30-50k	47% \$30-50k	36% \$30-50k
	42% > \$50k	36% > \$50k	37% > \$50k	35% > \$50k	45% > \$50k
Driving distance from home to Branson	727 miles one-way	767 miles	634 miles	671 miles	787 miles
Well-traveled ^a (in general) 1 = strongly agree, 7 = strongly disagree	3.6	3.4	3.6	3.9	2.9
Plan entire trips well in advance ^b (in general) 1 = strongly agree, 7 = strongly disagree	2.5	2.4	2.6	2.3	1.8
Certainty of Branson trip ^a (4-6 weeks before departure) 1 = not at all certain, 7 = extremely certain	6.9	6.8	6.9	6.7	7.0 (everyone)
Time spent reading chamber vacation guide (4-6 weeks before departure)	94 minutes	88 minutes	103 minutes	103 minutes	111 minutes
Expected length of Branson visit (4-6 weeks before departure) ^c	5% 1 day	3% 1 day	1% 1 day	2% 1 day	8% 3-4 days
	15% 2 days	32% 2 days	9% 2 days	2% 2 days	79% 5-7 days
	56% 3-4 days	59% 3-4 days	80% 3-4 days	67% 3-4 days	13% 7+ days
	21% 5-7 days	6% 5-7 days	10% 5-7 days	28% 5-7 days	
	3% 7+ days		2% 7+ days		
Expected length of Branson visit (en-route) ^c	8% 1 day	48% 2 days	10% 2 days	3% 2 days	3% 2 days
	8% 2 days	45% 3-4 days	79% 3-4 days	73% 3-4 days	5% 3-4 days
	60% 3-4 days	7% 5-7 days	11% 5-7 days	22% 5-7 days	74% 5-7 days
	22% 5-7 days				18% 7+ days
	3% 7+ days				
Overall satisfaction with Branson visit (return trip) ^d 1 = not at all satisfied, 7 = extremely satisfied	5.4	5.9	6.5	5.7	6.5

^aAnova test $p < .05$

^cKendall's tau-c significant $p < .001$

^bAnova test $p < .10$

^dAnova test $p < .01$

TABLE 2
Information Sources Used at Three Times During a Vacation

Early planning stage (Postcard survey) Top sources of information creating initial awareness of Branson ^a	60% ^b	Within weeks of departure (Pretrip survey) Top sources of information creating initial awareness of Branson ^a	60% ^c	On-site vacation (<i>In situ</i> questionnaire) Top sources of information used during a daily episode	72% ^b
Word of mouth		Friend or family member		Brochures	
Television (ads and shows)	17	Television program or newscast	11	Branson/Lakes area vacation guide	57
Print ads	11	Newspaper or magazine article	8	Cable TV/Branson travel channel	35
Past vacations in the area	5	Missouri travel information or map	6	Maps	34
				Billboards	32
				Advice from service staff	16

^aThe Branson/Lakes area vacation guide was not mentioned or included in the response sets because to receive the guide travelers would already need to be aware of the destination.

^bOpen-ended question summarized with open-coding.

^cClosed-ended question selecting only one response.

were most frequently referenced when respondents were asked how they first learned about Branson. During the on-site phase, brochures were the most widely used information source, followed by the Branson vacation guide.

Tables 3, 4, and 5 indicate the role of time (passage of each day of the vacation) and prior experience on affective and cognitive reactions to information application during the on-site vacation phase. Time, or each day of the experience, as well as prior experience at the destination are shown as main effects and as an interaction effect in doubly multivariate analysis. Prior experience, on its own, was not a significant effect for three day, $F(5,53) = 1.75$, $p > .10$, four day $F(5,43) = 1.55$, $p > .10$, or longer than 4 day trips $F(5,47) = 1.55$, $p > .10$. However in some instances, time or each day of the trip combined with prior experience at the destination did influence affective and cognitive responses, particularly for three day trips $F(10,222) = 1.90$, $p < .05$. Time was found to be a significant main effect for trips of four days

TABLE 3
Test of Time and Experience on Affective and Cognitive Information-related Responses on a Three Day Trip^a

Overall F with Significance Degrees of Freedom	Each Dependent Variable Univariate F Test ^b with Significance Degrees of Freedom					
		Helpfulness	Skill	Success	Control	Challenge
<i>Within subjects</i>						
<i>only</i>						
Time (main effect)	.61 10, 222	.93 1.4	1.46 1.9	.49 1.4	.52 1.7	.52 1.6
Experience by Time	1.90** 10, 222	1.03 1.4	1.63 1.9	.91 1.4	.68 1.7	4.56** 1.6
<i>Within subjects</i>						
Time (main effect) ^a	.77 10, 48					
Experience by Time (interaction)	1.85* 10, 48					
<i>Between subjects</i>						
Experience	1.75 5, 53					

^aDoubly Multivariate Repeated Measures ANOVA including five dependent variables: (1) helpfulness of information, (2) skill with information, (3) success with information, (4) control information gave, and (5) challenge of destination. Pillai's F test used.

^bGreenhouse-Geisser adjusted F test used.

*** $p < .01$

** $p < .05$

* $p < .10$

TABLE 4
Test of Time and Experience on Affective and Cognitive Information-related Responses on a Four Day Trip^a

	Overall F with	Each Dependent Variable Univariate F Test ^b with				
	Significance Degrees of Freedom	Significance Degrees of Freedom				
<i>Within subjects only</i>						
Time (main effect)	2.27*** 15, 417	<i>Helpfulness</i> 1.21 2.5	<i>Skill</i> 2.79* 2.4	<i>Success</i> 3.49** 2.8	<i>Control</i> 1.19 2.5	<i>Challenge</i> 6.2*** 2.3
Experience by Time	1.04 15, 417	.27 2.5	.14 2.4	.60 2.8	.48 2.5	2.61* 2.2
<i>Within subjects</i>						
Time (main effect) ^a	1.94* 15, 33					
Experience by Time (interaction)	1.42 15, 33					
<i>Between subjects</i>						
Experience	1.55 5, 43					

^aDoubly Multivariate Repeated Measures ANOVA including five dependent variables: (1) helpfulness of information, (2) skill with information, (3) success with information, (4) control information gave, and (5) challenge of destination. Pillai's F test used.

^bGreenhouse-Geisser adjusted F test used.

*** $p < .01$

** $p < .05$

* $p < .10$

$F(15,417) = 2.27$, $p < .01$ or more than four days $F(15,453) = 1.86$, $p < .05$.

Mean scores according to each of the five information-related responses are displayed in Figure 2. A majority of the observed changes in these scores are relatively slight and fall along the positive end of the scale. Similar to the Hull et al. (1996) findings, while changes do not span across the seven points of the Likert ratings, statistically significant changes were observed.

Prior experience at the destination does not appear to affect cognitive and affective responses for those who stayed one or two days in Branson. Further, for those visitors who stayed two days at the destination, their reactions to information usage on day one and day two are very similar except for perceived challenge of the destination with use of travel information. As shown in Table 6, only on the cognitive measure of challenge are experienced visitors significantly less challenged navigating the destination than

TABLE 5
Test of Time and Experience on Affective and Cognitive Information-related Responses on a Trip Lasting Longer than Four Days^a

	Overall F with Significance Degrees of Freedom	Each Dependent Variable Univariate F Test ^b with Significance Degrees of Freedom				
<i>Within subjects</i>						
<i>only</i>						
Time (main effect)	1.86** 15, 453	<i>Helpfulness</i> .96	<i>Skill</i> 3.33**	<i>Success</i> 1.88	<i>Control</i> 3.51**	<i>Challenge</i> 5.11***
Experience by Time	1.55* 15, 453	1.30 2.2	1.97 2.5	3.49** 2.4	.76 2.4	1.58 2.2
<i>Within subjects</i>						
Time (main effect) ^a	1.77* 15, 37					
Experience by Time (Interaction)	1.67 15, 37					
<i>Between subjects</i>						
Experience	1.55 5, 47					

^aDoubly Multivariate Repeated Measures ANOVA including five dependent variables: (1) helpfulness of information, (2) skill with information, (3) success with information, (4) control information gave, and (5) challenge of destination. Pillai's F test used.

^bGreenhouse-Geisser adjusted F test used.

*** $p < .01$

** $p < .05$

* $p < .10$

first time visitors for both the first and second day of their trip. All other affective and cognitive measures were shown to be the same regardless of experience level or length of stay.

Different patterns were observed for those who took longer trips. Univariate F tests show how time and experience influenced each of the five affective and cognitive measures. Over the entire length of a three day stay at the destination, the challenge of the destination changed significantly (see Table 3) when both experience and time are considered. Further, this effect occurred between the first and second day at the destination (see Table 6). On four day visits, skill, success, and challenge changed greatly during the visit (see Table 4). Skill and success appear to be achieved in the early days of the trip, while feelings of challenge were reduced only in the final days of the trip (see Table 6). Challenge was the only measure which captured significant interaction effects between time or passage of each day of the trip

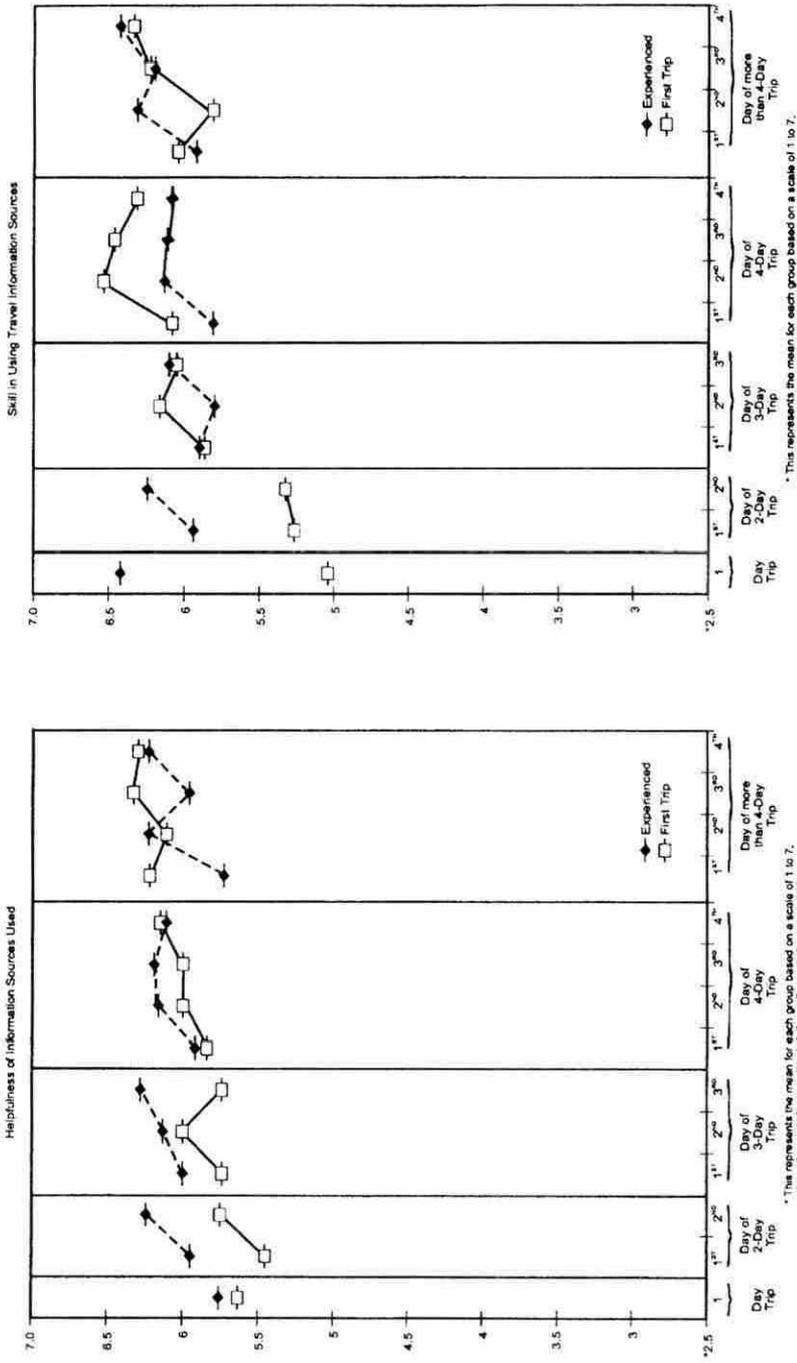


Figure 2. Changes in Affective and Cognitive Responses to Travel Information. Five measures used, with groupings for experience and length of trip.

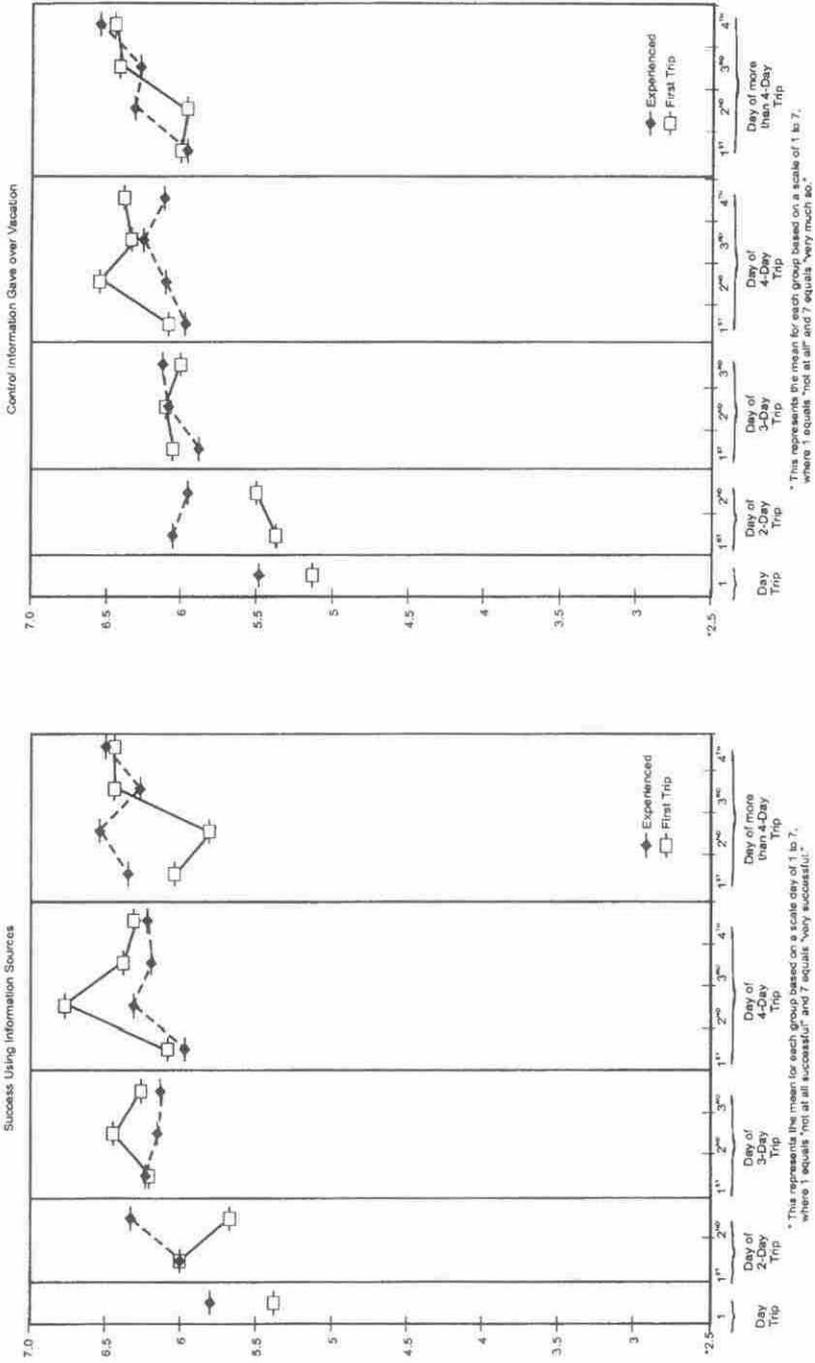


Figure 2. (Continued)

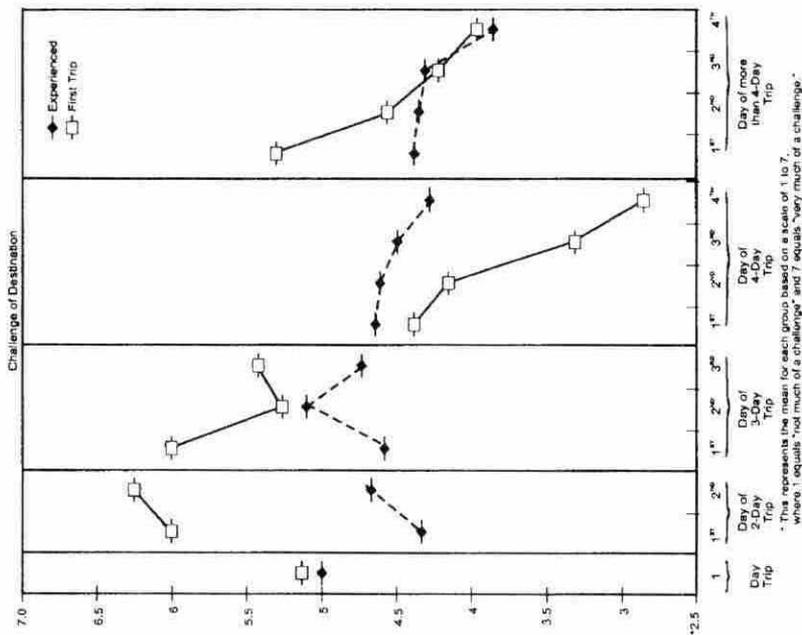


Figure 2. (Continued)

and experience (see Tables 4 and 6). On trips of longer than four days, skill, control, and challenge scores changed significantly (see Table 4). Skill and control scores significantly improved between the third and fourth day of the trip, while the challenge or difficulty of getting around the destination was reduced each day over the first four days of an extended stay. Success from information usage changed over the course of the first four days of the trip which was attributed to time and experience effects (see Table 5), but these effects were not evident in the analysis of any single day's responses (as shown with no significant effects on Table 6).

Discussion

This study showed that, among information seekers, the use of travel information is part of the travel experience, but individuals have different reactions to the successes and failures of negotiating a familiar or less familiar place. Affective and cognitive reactions can vary across the days of a trip, the length of a trip, and the experience with the destination. The *in situ* affective and cognitive measures proved useful for gaining insights regarding the application of experience with travel information during the vacation experience, while travelers were actively consuming both vacation and information. Feelings of success in applying the travel information that each individual collected remained relatively high throughout the on-site phase of the vacation, even on days that were perceived as a challenge.

The results of this research also suggest that feelings and thoughts about information use during a vacation are relatively stable for short trips and more changeable for longer trips. There were almost no significant changes in feelings and thoughts during one or two day trips, and whether or not a person had visited the destination previously influenced only the perceived challenge measures for these short trips. On both day one and day two of a two day trip, first time visitors found the destination more challenging than experienced Branson visitors.

Three day stays should be considered the popular "short vacation." Those who stayed three days in Branson had relatively stable or unchanging feelings and thoughts, with the exception of those individuals who had previously been to Branson, who significantly changed their rating of the challenge of getting around Branson during the trip. It appears those who had been to Branson before underestimated the challenge of the destination on the first day. They may have expected Branson to be as it was on their past trip. However, Branson continues to grow and change dramatically. Roads have been redirected and commercial building has taken over much of the landscape. So it is easy to see how someone who had been to Branson before found the destination more challenging than they thought it might be.

On trips of four days, or more than four days, most individual's feelings and thoughts were constantly changing, generally toward an improved state of feeling more skillful, successful, or less challenged. Particularly for first time visitors, the challenge of getting around was rated very difficult in the

first day and then improved over the next three days. Branson visitors who stayed four or more days fit a profile of a well-traveled person who plans trips well in advance and spends significant amounts of time reading travel information. The travelers who stayed more than four days also gave the trip near perfect scores on overall trip satisfaction. These results suggest that the well-traveled person who visits a destination for an extended time period may let time take its course and sees the feelings and thoughts of each day of the vacation changing. After the trip ends, the overall reflection back on the trip is very positive, even though the trip may have had its difficult moments.

It could be speculated that individuals who stayed in Branson a long time (i.e., 4 days or longer) may have spread activities and sightseeing over a longer period of time, allowing for more free time and possibly seeing behind the scenes and meeting locals. It may be on longer stays in a destination that there are exciting packed days and other days that are less eventful, thus causing fluctuations in affective and cognitive measures. Extended stay travelers may also be pacing themselves, unlike someone who stays one to three days and tries to fit everything into their itinerary.

Of the five affective and cognitive measures, four yielded some significant variance. Helpfulness of the information that each respondent had used that day was not found to be a significant measure for the on-site phase of a vacation. In the larger study, helpfulness was also measured as a single-item in the postcard survey and as a multiple-item scale in the pretrip survey (i.e., enroute). Regarding the helpfulness of information to create an itinerary and make a budget, 47 percent of the respondents rated helpfulness the same over these three occasions. Eighteen percent of the respondents gave scores that showed information was more helpful over time, and 34 percent of the respondents gave scores that showed information was less helpful over time. These results suggest that helpfulness may be a more appropriate measure for the planning of a vacation experience, and not as appropriate in identifying changes in information utility during the vacation experience.

Some limitations need to be considered to aid future use of *in situ* research methods. Obtaining sample sizes that allowed the necessary statistical simulations was challenging. A direct mail campaign was used to study individuals while they were still at home. Some other approaches could be intercepting individuals enroute or on-site at an information center. Attrition is also a limitation of repeated measures research (Girden, 1992). For our study, attrition could have impacted the categorization of diaries into shorter trip stays if questions such as "day of the week", "calendar date", and "a place to indicate stays over four days" were not asked as a validation of trip length and consecutive days. There were some incomplete diaries, or skipped days, which resulted in respondents being omitted from the analyses.

Implications

There is much yet to learn about the use of information in planning and undertaking vacations. Rather than thinking of information collection

and application as a necessary part of pretrip planning, *in situ* research methods demonstrated that travel information use is an ongoing activity which occurs throughout the vacation, and generates a range of affective and cognitive responses.

The experience a visitor has with information during a vacation appears to be different depending on the length of stay. Travelers who stayed three days or more than four days had the highest level of overall trip satisfaction. However, those who stayed the longest also recorded daily variations in cognitive and affective responses to information use, unlike those individuals who stayed just three days. Vacations involving lengthy stays appear to be related to some of the highest levels of personal satisfaction and skill (e.g., managing logistics in the destination) near the end of a vacation. This is good news for individuals and destinations. Most businesses and tourism marketers would much rather attract the five to seven day vacationer, than the individual who stays a day or two. The results of this study suggest that short length vacations or stays in a specific destination do not maximize positive feelings or thoughts.

Future research should continue this investigation into the application of the wide variety of information sources used in vacation experiences. In consumer behavior research, much research has focused just on advertisements as the information stimuli, however, in tourism and leisure many more sources of information are used and in different ways throughout the phases of the experience. Travel is clearly an educational experience with skills being obtained and refined by travelers. This study sheds light on one aspect of the learning process (i.e., the application of information to a task) and shows how individuals differ. Further exploration and use of *in situ* methods will reveal even more about the vacation experience.

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