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# **A COMPARISON OF TRADITIONAL AND REFINED CONVERSION STUDY PROCEDURES**

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## **ABSTRACT**

A critical issue in hospitality marketing is determining the effectiveness of advertising campaigns conducted by state and local tourism offices. Conversion studies are the most common method of evaluating tourism advertising programs. This article focuses on the traditional methods of tourism conversion studies and suggests procedures for more accurate research and improved interpretation. These refined procedures were used in a conversion study for a convention and visitors bureau located in the southwest of the United States. Findings further illustrate the inaccuracies of traditional conversion study principles while demonstrating the enhanced validity of the recommended methodology.

## **INTRODUCTION**

Conversion studies are often used by state and local tourism associations to determine

the rate at which a destination inquirer actually becomes a visitor. This method relies upon the direct action of inquirers who must return reader service cards, call a toll-free telephone number or take similar action to obtain tourism information. Several months after their inquiries are received, a survey of a sample of inquirers is typically conducted to determine whether they visited the destination from which they received information. Unfortunately, it is common to find conversion rates that are inaccurate, with results leading to inflated estimates of advertising effectiveness and invalid conclusions about tourism marketing campaigns.

Numerous research issues associated with conversion study research have been previously discussed, contributing to a refined methodology (1, 2, 5, 6). However, relatively few studies have been done to compare results from the recommended procedures with those generated from

traditional methods. This article briefly reviews the methodological issues and problems associated with conversion study research. Results of a conversion study conducted for a ski resort in northern New Mexico using recommended research procedures are presented and compared with traditional methods to illustrate the differences in results.

## **METHODOLOGICAL ISSUES**

### **Nonresponse Bias**

Ellerbrock (4) logically points out that people who visit a destination are more likely to respond to a survey than those who did not visit. Generalizing the higher rate to the entire population of inquirers may overestimate the conversion rate. Hunt and Dalton (5) attempted to determine whether failure to correct for nonresponse bias in conversion studies leads to inflated conversion estimates. Hunt and Dalton calculated a conversion rate of 33.2 percent without correcting for nonresponse bias. Correcting for nonresponse bias by telephoning a sample of nonrespondents produced an overall conversion rate of 23.1 percent; a 44 percent overestimation. They and others (Woodside & Ronkainen, 1984) conclude that mail-back questionnaire return rates above 60 or 70 percent are necessary to minimize nonresponse bias and suggest using multiple attempts to reach subjects from the original sample through follow-up post-cards, telephone reminders or a second survey to reduce the number of nonrespondents.

Dolesen and Machlis (3) examined four similar, but separate, national park visitor surveys which used on-site interviews, mail-back questionnaires and follow-ups. The results at four different response rates (35,

50, 65 percent; and the final total response) were analyzed and compared. No substantive reason was found to reject results with a response rate of 65 percent compared to the final response rate of, on average, 86 percent. Dolesen and Machlis concluded that rejecting survey results with response rates in the range of 35 to 50 percent may be justifiable.

### **Gross and Net Conversion Rates**

The difficulty in measuring effectiveness of tourism advertising campaigns is the tenuous causal link between promotions and tourist behavior. Many persons requesting information from state and local tourism associations have already made up their minds to visit the area before receiving its promotional materials. Therefore, conversion rates which take credit for those inquirers who are already "converted," are inflated (1). A more useful analysis would be to determine the extent to which the information received influenced their choices in accommodations, recreation participation and length of stay. Such information, demonstrating the impact of advertising, could be used by local tourism associations to sell advertising in promotional materials (i.e., brochures, travel guides, etc.) to various businesses.

### **APPLICATION OF REFINED METHODOLOGY**

Following the 1990-1991 winter ski season, a stratified (by state of residency) sample of 550 persons was drawn at random from approximately 5,000 inquirers to the Angel Fire, New Mexico Convention and Visitors Bureau (AFCVB) who had requested information about the resort community. The sample was selected from lists maintained by the AFCVB and stratified by

state. The lists were compiled from mail and telephone inquiries between September 1, 1990 and February 28, 1991.

A mail-back questionnaire was developed by the researchers and AFCVB personnel and sent to the sample 30 days after the ski season ended. Care was taken to avoid directly identifying the sponsor of the conversion study, Angel Fire, on the instrument, cover letter or envelopes, as recommended by Woodside (1990). Rather, a major southwest university was listed on the questionnaire to avoid introducing unmeasured response bias into the survey. Questions about travel to Angel Fire and other southwest ski resorts were included in the survey to learn about competing destinations and their ability to influence Angel Fire inquirers.

Within two weeks of distribution, 226 or 48.4 percent of the questionnaires had been returned. One week after the questionnaire mail back deadline, attempts were made to interview the nonrespondents by telephone.

This study does not pretend to fully explain the causal relationship assumed between promotion and travel behavior, if full explanation is possible at all. The requested information was assumed to have affected the rational decision-making process of inquirers.

## RESULTS

Table 1 reveals the response and conversion rates to the mail-back questionnaire. Mail back response and conversion rates of 48.4 percent and 48.9 percent, respectively, were achieved.

Based on results of the telephone interviews, nonrespondents to the mail survey converted at a much lower rate than respondents

(22.2% to 48.9%) Table 2 illustrates that a conversion rate of 22.2 percent was achieved through telephone interviews. The telephone conversion rate for this study was consistent with that assessed by Hunt and Dalton (5) in a snow ski advertising evaluation.

Utilizing the conversion rate from the mail survey would have resulted in a gross overestimation of visitors and expenditures. If the mail conversion rate of 48.9 percent was applied to the 5,000 inquirers, AFCVB would have estimated that 2,445 parties who requested promotional materials actually visited Angel Fire.

When combined, the data from the mail and telephone data collection methods resulted in a 66.4 percent response rate and a 41.6 percent conversion rate (Table 3). A 17.4 percent difference exists between conversion rates estimated from the mail survey with a response rate of 48.4 percent and the combined mail and telephone response rate of 66.4 percent.

### Net and Gross Conversion Rates

The percentage of total inquirers who visited Angel Fire (gross conversion rate) was adjusted to produce a "net" conversion rate which reflects the number of inquirers who were actually influenced by the promotional campaign to visit the resort area. To determine those inquirers in this category, the following was asked, "Had you decided to visit Angel Fire before requesting the promotional information?" Failure to adjust for the number of "pre-converted" inquirers would lead to a 47.1 percent overestimation of the net conversion rate (See Table 3).

Approximately 71.5 percent of all inquirers had already decided to visit Angel Fire prior

to requesting promotional materials. Promotional materials influenced 59.5 percent of the visitors in their choice of accommodations and 49.3 percent in their choice of recreation activity participation. Eight percent of visitors indicated they were influenced by promotional materials to lengthen their stay in Angel Fire another night. This "influence factor" may be useful to tourism associations or agencies when soliciting local advertising in destination promotional materials.

Average travel party daily expenditure total (\$120), when applied to the average number of additional nights stayed in the destination area by visitors influenced by promotional materials (1.2 nights), provides a dollar value to the influence factor, further illustrating the tourism agency's economic impact. The State of Illinois Bureau of Tourism uses the influence factor to justify budget requests from the state legislature.

## DISCUSSION

This article discusses the validity of traditional tourism conversion studies and the limited credibility of their results. Also described were improvements in data collection and analysis and how they greatly

reduce inflated conversion rates. This research applied recommended conversion study methods and found that inflated conversion rates occur if respondents who decided to visit a destination before exposure to promotional materials are factored out, supporting the work of Ballman, et al. (1). In the case of the Angel Fire study, failure to adjust for the number of "pre-converted" inquirers would have led to a gross overestimation of the true conversion rate.

A particular concern among some tourism professionals is the growing misuse and abuse of research to justify financial resource allocation for tourism marketing programs, using misleading or inflated statistics. In the midsts of a recession, state and local budget decision-makers will require justification of marketing budgets and further scrutinize research methodologies, seeking higher standards of rigor and validity. Rather than continue using gross conversion rates, we suggest that the net conversion statistic be used by travel and tourism agencies. The net conversion rate includes only those people who visited the destination as a result of receiving promotional materials and excludes those who had already decided to visit the destination before inquiring.

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**TABLE 1**  
**ANGEL FIRE MAIL-BACK QUESTIONNAIRE CONVERSION**

	Number	Percent
Sample	550	
Return	266	48.4
Conversion	130	
Conversion Rate		48.9

**TABLE 2**  
**ANGEL FIRE TELEPHONE INTERVIEW CONVERSION**

	Number	Percent
Sample	184	
Final Contact	99	
Conversion	22	
Conversion Rate		22.2

TABLE 3  
COMPARISON OF GROSS AND NET CONVERSION RATES

Gross Conversion (GC) Rate and Sample Size		Net Conversion (NC) Rate and Precision Level		Amount GC Overstates NC	
		<u>Points</u>	<u>%</u>	<u>Points</u>	<u>%</u>
41.9%	365	28.5%	±4%	13.4	47.1

\*Net conversion is the estimated conversion adjusting for inquirers who decided to visit Angel Fire before receiving promotional materials.