USE OF PAIRED MANAGEMENT ACTION GRIDS FOR EASE IN DEPICTING DIFFERENCES BETWEEN USERS' AND MANAGERS' PERCEPTIONS OF PROBLEMS

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This research was to determine whether differences exist between users and managers concerning perceptions of actual and perceived problems in parks and primarily to present a method of graphically depicting the differing perceptions of problems which exist between users and park managers which can be easily employed by area managers and related to the public, upper management and governing bodies.

Introduction

The purpose of this research was to determine whether differences exist between users and managers concerning perceptions of actual and perceived problems in parks. One point of significant interest generated by this study was the graphic depiction of the differing perceptions of problems which exist between users and park managers. A growing body of research findings demonstrates that significant differences exist between users' perceptions and preferences and management's perceptions of users' preferences regarding recreational opportunities and support services (LaPage, 1983; Harris, 1979; Driver, 1974; Peterson, 1974; Moeller et.al., 1974; Clark et.al., 1971; Hendee and Harris, 1970; Lucas, 1964). As shown by Hendee and Harris (1970) and Moeller et. al. (1974) the attitude that the manager is eminently qualified to make decisions concerning users' needs on the basis of the manager's knowledge, without adequate input from the users, is often erroneous. These authors have shown that managers' perceptions concerning users' desires for services are not compatible with the users' actual expressed desires. Without sufficient data sources and input, the managers cannot efficiently allocate resources to address users' service needs.

There are a number of studies which deal with user expectations from a recreational experience and setting (Wagar 1966; Shafer 1969; Hancock 1973) and an abundance of literature on how a manager can provide these services (Lime 1971; Wagar 1966; Fish and Bury 1981; Lime and Stankey 1971; Clark et. al. 1971; and Hendee and Harris 1970). There is also a significant body of literature which describes the manager's perceptions of the recreation setting and how he executes his job of providing recreation services (Lime and Stankey 1971; Wicker and Kirnmeyer 1976; Philly and McCool 1981; and Wadzinski 1983).

A growing body of research demonstrates that significant differences exist between users' perceptions and preferences and managers' perceptions of user preferences regarding recreational opportunities and support services (Lucas 1964; Hendee and Harris 1970; Peterson 1974; Driver 1974; Harris 1979; LaPage 1983). Lime and Stankey (n.d.) proposed that "... what the recreationist perceives as acceptable or desirable may be quite different from what the manager perceives." As LaPage (1983) states: "... there is a growing mountain of evidence of substantial differences between managerial and user perceptions...". The question which plagued Lime and Stankey's research (n.d.) was: "Whose values are to count most - the managing agency's or the public's?" If public values are to be relied upon, which 'public'? - there are so many of them!" There is no such thing as an "average recreationist", so management must make decisions concerning services to be offered and how to manage areas for the greatest range and number of users desired (Wagar 1966; and Shafer 1969).

Hendee and Harris (1970) found in a study of foresters' perceptions and attitudes and of users perceptions and attitudes that managers did not have an accurate perception of users' attitudes and perceptions. This study was limited to how managers felt users would respond to various policy and behavior rules in wilderness areas. It was found that, while foresters responses were similar to users responses in their personal perspective of wilderness, they were found to be significantly different in their perceptions of user attitudes concerning wilderness. The authors suggested that:

> "These misperceptions of user attitudes suggest limited exposure to typical users and bias from excessive contact with organized conservationists and comfort seeking users commanding attention as well as selective perception based on differences between managers and users."

The management sample in this study was restricted to upper level managers, those individuals not directly involved with the day-to-day operations of wilderness areas, who made management decisions based on information passed up to them by their staff or from input from vocal special interest groups. This study did not consider the line manager who was actually dealing with users on a day-to-day basis and was responsible for on-site response to user problems. Thus, these researchers attributed bias in decision making to the upper level managers without considering on - site management.

In 1974 a study was completed on the "Opinions of Campers and Boaters at an Allegheny Reservoir". This study addressed a wide range of considerations including fees, law enforcement, recreational zoning and facility development. The area managers responsible for decision making were surveyed and perceptions of these managers were again, as in the Hendee and Harris study, found to be significantly different from the perceptions of campers and boaters (Moeller, Larson and Morrison 1974). Another apparent phenomenon in this study was that significantly different perceptual responses were elicited from users pursuing different types of recreation activities. This further supports the statement that there is no such thing as an "average recreationist" (Wagar 1966; Shafer 1969; Moeller, Larson and Morrison 1974).

To offer services desired by users, a manager must first be aware of what the users want and be willing and capable of offering those services. According to Driver (1974), managers, when consulted, often respond that they are aware of the data collection techniques required to ascertain user expectations and what constitutes user satisfaction. However, because of time and money constraints, most managers related that they cannot

afford to collect and analyze the data necessary so they often rely on their "gut" feelings when making decisions. As Driver and Knopf (1981) state;

> "... Individuals attracted to the managerial profession tend to be less abstact and more "down-to-earth (than researchers) and like to deal with more tangible things. As a rule, they have less interest in things that are uncertain, unpredictable and abstract. They need an environment that is clearcut and familiar. The solution to problems must be more immediately evident, and they tend to seek immediate results from their efforts."

Managers state that they are "recreation professionals" who deal with users and park problems daily. On the basis of their training and continued exposure to these problems they maintain that they are adequately informed to make decisions about what the users want, and what will satisfy the users within the framework of their individual park situations and budgetary constraints, without expensive, time-consuming research (Driver 1974; Wicker and Kinmeyer 1976).

As shown by Hendee and Harris (1970) and Moeller et. al. (1974) the attitude that the manager is eminently qualified to make decisions concerning users' needs on the basis of the managers' knowledge, without adequate input from the users, is often erroneous. These authors have adequately shown that managers' perceptions concerning users' desires for services are not compatible with the users' actual expressed desires. Without adequate data sources and input, the managers cannot efficiently allocate resources to address users' service needs.

Methodology

Two study populations were considered in this research. The first consisted of a sample of March 1984 "Spring Break" users at Port Aransas City Beach Park on North Padre Island on the Texas Gulf coast. The population of managers included all beach park managers who had responsibility for implementing policy concerning problems at the beach during "Spring Break" 1984.

A total of 187 beach users and 10 managers were interviewed during the one week study period. Only four (4) users (2%) of the 191 persons selected for interviews, declined to be interviewed. Thus, the user response rate for this study was 98%. All ten (10) managers agreed to the interview. Thus the manager response rate for this study was 100%.

To develop an instrument to collect data which would adequately answer the research, data needs were first determined. To provide a field of valid research questions which would provide viable data for analysis, a number of previously completed research studies which addressed similar objectives were reviewed, and a set of possible questions were assembled for inclusion into the survey instrument.

The questionnaire was designed to evaluate: (1) the importance of beach services & facilities, and (2) the perceived performance of the managing agency in providing those services & facilities. The seven response choices for the importance rating were presented in a Likert-type scale and ranged from "extremely important" to "not important at all". Respondents were also asked to "grade" or rate the performance of the beach managing agency in providing each service & facility. Response choices for performance ranged from a grade of "A" (outstanding) to "F" (totally unacceptable).

Treatment of the Data

A one-way analysis of variance (ANOVA) was performed on the response data which was gathered on the surveys. Data for all questions included in the survey were analysed using a contrast of responses to each individual question between the user sample and the manager population. The ANOVA determined whether there were statistically significant differences in response means for each question between groups. Statistically significant differences were tested in this study at the .05 alpha level (Ott 1980; Weisberg and Bowen 1977).

Findings

Beach users' and managers' perceptions were compared to identify statistically significant differences in responses. "Perceived Importance and Performance of Services Provided", the paired service delivery items, showed that users and managers at Port Aransas City Beach Park had statistically significant differences in perceptions on fifteen (15) items. For each of the items the managers' responses were higher than the users (See Table 1, next page).

The use of paired Management Action Grids can graphically reproduce the statistical findings (Figure 1). This method uses a three-step process to evaluate an existing marketing strategy or to develop a new strategy. First, a set of attributes or features is identified through a literature review, focused group interviews, and the use of managerial judgement (Martilla and James 1977).

Second, consumers or users are asked two questions about each attribute or feature: (1) "How important is it" (2) "How well did the provided product or service perform in satisfying their expectations?" The third step involves calculating importance and performance scores for each attribute or feature.

The importance and performance scores are calculated by assigning a numerical code to each response (i.e., a five point scale with "5" being a high score and "1" low), summing the numbers and dividing by the "n" (total number of responses). These resultant scores are the statistical mean responses for importance and performance.

These scores provide "x" and "y" coordinates which are then plotted on a two dimensional scale termed the "Action Grid" (Blake et al. 1978). When plotted, the two axes ("x" & "y") divide the grid into four quadrants (Figure 1). The upper right quadrant contains responses to those services or features which are perceived to be important to the respondent and which the respondent believes are being adequately provided by management. Items which fall into this area require little or no attention by management. The upper left quadrant includes responses to those services which are perceived to be important to the respondent but which are not being adequately addressed by management. Items which fall into this area require attention by management so improvement can be made to better satisfy the users. The lower right quadrant includes responses to those services which are perceived to be unimportant to the respondent and which are being well provided by management. Services which fall into this quadrant require less attention and resources. These resources may be re-assigned to improve services in the upper left quadrant. Finally, the lower left quadrant includes those services which are perceived to be unimportant to the respondents and which are poorly provided by management. Items which fall into this quadrant do not require much attention from management due to the low priority in the opinion of respondents. Attention and resources should only be allocated to services which fall into this quadrant after much more important services are adequately provided. A second grid containing managers responses was prepared by the

Table 1. Differences in perceptions between beach park managers and users at Port Aransas City Beach Park to questionnaire items related to perceived importance and performance of services at the beach

Type of Service	Mean	2 - Tail Probability
1. Lifeguards	*Importance*	
Users	3.31	0.010
Managers	4.44	
	Performance	
Users	1.54	0.006
Managers	3.50	
2. Enforcement patrols	*Importance*	
Users	4.24	0.004
Managers	5.20	
	Performance	
Users	3.78	0.000
Managers	4.67	
4. Public telephones	*Importance*	
Users	4.01	0.049
Managers	4.78	
	Performance	
Users	2.39	0.031
Managers	3.63	
6. Emergency first aid	*Performance*	
Users	2.66	0.002
Managers	4.33	
7. Traffic control	*Performance*	
Users	3.14	0.022
Managers	3.89	
8. Camping sites	*Importance*	
Users	4.04	0.033
Managers	4.78	
9. Crowding	*Importance*	
Users	2.72	0.010
Managers	3.89	
13. Hotels/motels	*Performance*	
Users	3.84	0.025
Managers	4.38	
14. Restroom/showers	*Performance*	
Users	2.70	0.029
Managers	4.13	
15. Staff friendlyness	*Performance*	
Users	3.70	0.001
Managers	4.63	
16. Facilities well maintained	*Performance*	
Users	3.14	0.002
Managers	4.38	
19. Clean swimming area	*Performance*	
Users	3.45	0.009
Managers	4.38	

above mentioned methods for comparison with the users' grid and placed with the users' grid.

The Management Action Grid was easily adapted for the purpose of this research since it graphically presents to management the preferences and perceptions of users. Figure 2 graphically reproduces the statistical findings of Table 1. These graphics further identify and exemplify the dramatic gulf which exists between managers and users perceptions and suggest management responses to remedy these shifts. When responses between perceptions of management and users are compared, management can determine the degree to which differences exist, whether managerial action is warranted, and what specific concerns should be addressed. By using the grids as a guide for reassigning resources, management can better address the problems important to their respective user clientele.

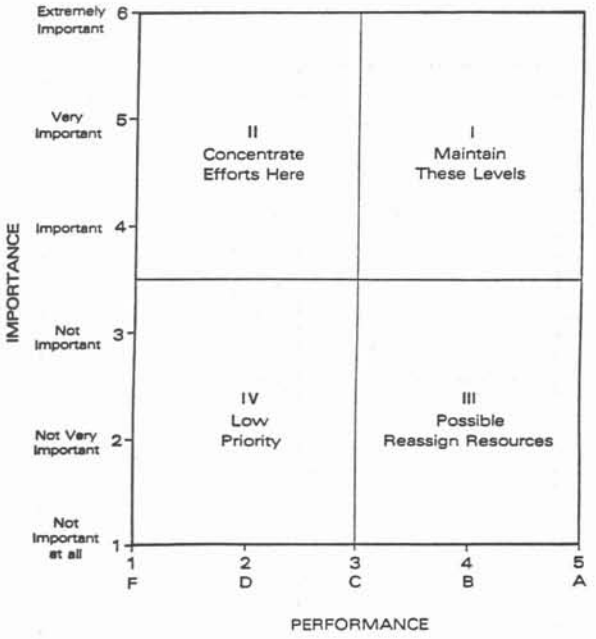

Figure 1. Importance Performance "Management Action Grid."

Summation

This study revealed that the perceptions of users, concerning actual and perceived problems, were significantly different from managers perceptions, thus supporting previous research findings. This importance-performance analysis has become increasingly popular for measuring consumer acceptance of product attributes in a variety of fields (Duray and Crompton 1983). From the standpoint of managers, this system is very easy to use as it requires a fairly simple questionnaire format which employs paired responses. The questionnaires employed can be very simple and may be easily administered in on-site personal interviews, on-site individual self-administered surveys or by mail returns. The need for computer and/or statistical expertise is minimal and the final presentation of the data in graphic form is easily understandable, which enables the user to present the data to groups of their superiors, local politicians, and/or consumers, with ease and without confusion (Guadagnola 1983).

The projected end result of this research was to assist managers in other park settings to realize that differences exist between managers' perceptions and their users' perceptions of problems and to provide a tool which can be easily adopted by today's managers to identify, communicate and correct problems. By better understanding the concerns of a park's users, managers can more effectively assign priorities, manage limited resources and achieve a more positive rapport with the public. The method employed by this research should be easily replicable by managers in other park settings to identify similar problems with the ultimate goal of reducing the differences in the actual and perceived concerns of managers and their area users.

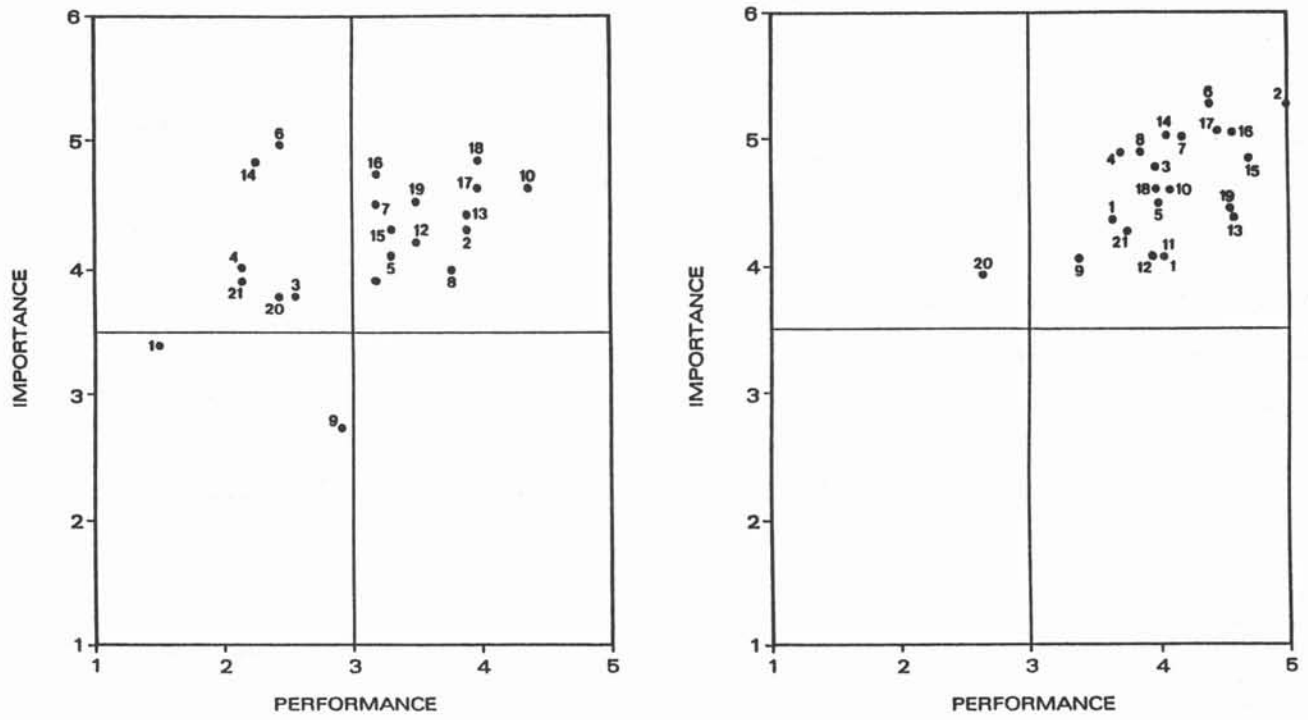

Figure 2. Paired management action grids: Importance vs. performance of services at Port Aransas City Beach Park.

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