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Recreation Research—So What?

Perry J. Brown, Allen Dyer, and Ross S. Whaley

The authors contend that most recreation research cannot stand the question, "So what?" From that point the article proceeds to a prescription for a meaningful approach to recreation research, which links recreation research to planning within a systems context. Researchable questions are posed dealing with preferences and behavior, resource capabilities and environmental impacts, and the nature and dynamics of institutions for the original state, process, and desired state segments of a planning system.

KEYWORDS: *Outdoor recreation, theory, management, planning recreational needs, environment, facilities, behavior, social goals.*

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The basic contention of this article is that very little has been accomplished in terms of application of past research efforts to the practical problems of recreation management and planning. That is, most recreation research to date cannot stand the question, "So what?" Our paper starts from this point and proceeds to a prescription for a meaningful approach to recreation research.

The question, "What is recreation research all about?" seems trivial at first glance, but it also seems fair to say that the answer to this question by "recreation researchers" is, at best, elusive. What does one say when asked, "What body of knowledge or theory are you trying to expand or develop and what methodology is common to recreation research?" The answer usually given goes something like, "Recreation is a multi-disciplinary problem area requiring inputs from many bodies of knowledge." This is at first glance meaningful, but even superficial analysis finds little meat on the bones. If this line of explanation is followed, it turns out to be little more than a multi-disciplinary cop-out, because a review of recreation research literature produced over the past decade clearly indicates that the research, in fact, has not been multi-disciplinary in approach.

Research on the recreation phenomenon has many homes. Studies have been conducted by workers in many disciplines and applied fields and motives for conducting this research vary considerably. Probably most common among the motives are a mission orientation as exemplified by the U.S. Forest Service experiment stations and curiosity and opportunism which characterize university involvement. The scattering of research across many disciplines and organizations and the varying motives behind research participation have, as one might expect, contributed significantly to many of the substantive problems addressed here.

Among criticisms that can be leveled at recreation research are:

1. It has not been addressed to solving real problems. It is important to have an answer when someone says, "So what?"
2. It has been reductionist in dealing with only small segments of comprehensive problems and with its fragmentation into discipline specific, non-integrative projects.
3. The modeling done in recreation has dealt solely with prediction and not been addressed to understanding.
4. It has not dealt with the recreation phenomenon in the broader context of man's total life style.
5. There has been no development of a theoretical orientation to guide it.
6. It has often been undertaken by researchers poorly prepared to deal with the problems of a multi-disciplinary phenomenon.

Exceptions existing to the above list are principally exceptions to the first point. For example, research by Beardsley and Herrington (1971), Brown and Hunt (1969), Cieslinski and Wagar (1970), Cordell and Talhelm (1969), Jubenville (1971), and LaPage (1967) has addressed real problems, albeit of a highly reductionist nature. But the field in general has largely ignored the broader social context of the role of recreation in satisfying man's needs or solving problems of the appropriate role of recreation in competing among alternative uses of resources. The significant contributions thus far have not been multi-disciplinary nor have they been other than fairly traditional research in biology, management, or research methods. Significantly, most attempts by "recreation researchers" to venture into the area of social behavior have been burdened with many of the criticisms listed above. Hende (1971) appears to have recognized this in his analysis of sociology and leisure research even though he did not criticize existing efforts. He argued for a program of research by sociologists

eliminating criticisms four and five and which has implications for the others. Additionally, while not criticizing recreation research, the National Academy of Sciences report on outdoor recreation research (1969) contained a program which would overcome many of these criticisms.

To solve the problems suggested by these criticisms, recreation researchers must identify the specific problems to which their research will be related. Once a problem has been identified, *i.e.*, the goal has been selected, the paths to it should be identifiable and research needs obvious.

A popular technique of visualizing the means to reach a goal is systems modeling. In essence, the researcher designs a conceptual framework describing the linkages between variables acting and interacting in the decision process under investigation. Component parts of and constraints on the process are identified and cause and effect relationships hypothesized. This approach, correctly conceived and rigorously implemented, at least tends toward solving the first five criticisms outlined. By definition, a systems problem is identified taking care of criticism number one. The reductionist problem is negated because: (1) you know where a sub-problem fits in the total scheme and (2) the sub-problem is investigated in a manner in which potential solutions are compatible with other sub-problem solutions. The "prediction only" criticism is reduced because the thrust of the total research effort is toward cause and effect relationships. Whether or not this approach solves criticism four, placing the recreation phenomenon in the broader context of man's total life style, depends on the definition of system's boundaries. The process of defining boundaries at least forces the researcher to locate his particular problem in perspective to the more holistic view of the real world. Finally, the logically consistent set of assumptions required of a rigorous systems approach can only be formulated within the framework of a sound theoretical base.

The criticism of researchers being poorly prepared to deal with multi-disciplinary problems can be only partially handled in the research context. Successful multi-disciplinary research requires leadership which recognizes the need for disciplinary expertise, has commitment to problem solutions, and ability as an integrator. It would appear that in the past serious error has been made on one of two fronts. Either the researcher saw himself as a research "jack of all trades" and lost sight of disciplinary integrity or he failed in his ability as an integrator. In the latter case he did not see his role primarily as one of gluing the disciplinary pieces into a comprehensive model. If the expertise and a committed leader are not available, the research cannot succeed and all problems listed above are likely to be operative.

Now, having briefly discussed the "so what" question, what follows is the description of a way research can fit into recreation planning and the identification of researchable areas previously wholly or partially neglected.

Research as an Input to Recreation Planning

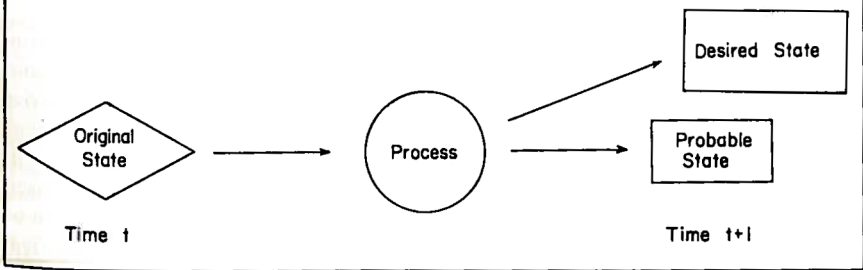
It is convenient to organize the discussion of research needs in terms of the planning problem schematic of Figure 1. The system is in some "original state" in time period t . Through a "process" which occurs over some time period, the "probable state" of the system at time $t+1$ can be predicted. Rather than accepting this probable state, the object of planning is to illustrate how to reach some "desired state" by $t+1$. Table 1 is a simplified matrix of recreation

TABLE 1
CATEGORIES OF RESEARCH NEEDS FOR RECREATION PLANNING

SYSTEM CHARACTERISTICS	ORIGINAL STATE	PROCESS	DESIRED STATE
Preferences and behavior	Recreation as a phenomenon for meeting individual needs	Behavioral explanations of activities and changes in behavior	Individual aspirations
Resource capabilities or environmental impacts	Relationship of environment to facilities	Resource capabilities	Environmental impacts
Institutions	Existing institutions and their characteristics	Institutions as a way gov't. can intervene and redirect activity toward desirable state	Social goals

Cont.

FIGURE 1
AN ABSTRACTION OF A PLANNING PROBLEM



research needs based on a systems state organization.

The following discussion follows a format designed to show the system characteristics in each of the planning components (original state, process, desired state).

Original State

Individual Needs

The approach to recreation planning offered here suggests that recreation is a phenomenon in which people engage to fulfill needs rather than considering recreation a resource. But, what is meant by saying, "Recreation is a phenomenon in which people engage to fulfill their needs?" The statement implies that people have needs that are expressed in recreation activity and environment preferences.

Focusing on the individual, one might propose the following motivational relationship between the individual and his recreation activity, facility, and environment preferences (Atkinson, 1957). Given the innate and learned characteristics of the individual it is possible to talk about his motives. Motives are dispositions to gain specific types of satisfaction. Through various experiences, the individual learns that certain objects (or activities) are likely to provide satisfaction. Confronted with an object or activity, he sets up an *expectancy* regarding whether or not the object will provide satisfaction. With repeated trials reinforcement occurs, and the expectancy evaluation becomes automatic. Since there are groups of objects related to a specific motive, another variable is necessary. This is *incentive*: the relative attractiveness of one object versus another object. The individual preferences resulting from the interaction of these three variables can be expressed in general terms. Recreation activities are "related" to specific motives. Recreation activities in the aggregate represent a phenomenon related to the fulfillment of human needs.

Viewing recreation as a phenomenon leads to certain types of behaviorally oriented research necessary to describe the original state. A major concern must be to identify how the recreational phenomenon fits with other life style phenomena. For instance, the degree of discretion in recreational activity choices needs to be specified so that the effective constraints on behavior can be identified. Another question is, "What ways can behavioral factors be adequately described so that characterization of the original state is most clearly related to individual needs?"

Relationship of Environment to Facilities

The task of identifying facilities existing in a system is a primary concern in describing the original state. Much work has been done on resource and facility inventories, but little has been done on correlating resource inventories and facility inventories. One approach to do this is to refine and implement existing computer graphic techniques and resource and facility classifications in a spatial facilities and resources model. Specifically, attention must be focused on: (1) identification of resource criteria necessary for facilities; (2) collection of data of several types like ecological, visual, historical, and cultural; (3) identification of environmentally sensitive areas; (4) location of appropriate existing and potential facilities based upon integration of the first three items.

Existing Institutions

Managing outdoor recreation facilities is a complex assortment of private, municipal, county, state and federal institutions. Competition exists in the

market system (where it is deemed good) and in the public sector (where it is deemed the product of bureaucratic inefficiency).

Before attempting to analyze how to alter these institutional structures to obtain particular social goals, it is necessary to examine the status and relationships between institutions which shape outdoor recreation opportunities. Answers to several specific questions are needed to describe the "original state" of the institutions and their interaction. To what extent do private and public recreation developments complement each other and to what extent are they competitive? To what extent do various public agencies complement each other and to what extent are they competitive? What portion of the supply of outdoor recreation facilities can and should be provided by the private sector? For what kinds of recreation opportunities are existing institutions suitable suppliers? Finally, how flexible are existing institutions for meeting changing demands of recreationists? Once these considerations have been addressed, it is possible to determine where the system should go and how it can be driven there.

Process

Behavioral Explanations

The planning goal is to move from the original to the desired state. One means to do this is through modifying individual preferences. To reach the desired state through this route, one needs to understand the structure on which preferences are built and the means for changing preferences given a specific structure.

In a recreational context the entire activity-environment preference structure needs examination. Preferences result from successful need-fulfilling experiences or from object specific information which triggers expectations. These are some questions which need answers: What research tools and techniques are appropriate for assessing recreation preferences? What motives are fulfilled by participation in what recreational activities? What recreational activities cluster together and are capable of fulfilling the same needs? What are the possibilities for substituting one activity or environment for another? How do recreationists learn about new activities in which they engage? What constraints limit the fulfillment of needs through recreation activities?

Another set of preference considerations must also be considered—the preferences of recreation area residents. Not only must the potential user of recreation facilities be considered, but also those who might absorb impacts of the recreational phenomenon. Several questions might be asked. What are resident attitudes toward outside recreationists? What are resident attitudes toward the social desirability of specific recreation activities? What levels of recreation development and participation do residents perceive as desirable? What are resident priorities for land utilization?

It is not possible to move toward the desired state through behavioral manipulation without also knowing operable means of inducing behavioral change. Questions needing study in this realm are these: What effect do attitude-change campaigns, designed to create desirable images of specific recreation activities, have on preferences? What preference effects are there of information dissemination campaigns? What changes in preferences are caused by changes in the supply of opportunities? What changes in activity preferences are caused by changes in recreation opportunity pricing? What are recreationists' reactions to

manipulation of other process components such as changing administrative policies for recreation resources under an agency's management? How are residents' attitudes toward recreationists and recreation activities modified? How can the costs and benefits to individuals of recreation participation and development be displayed and incorporated into planning decisions?

Resource Capabilities

To be able to alter the *process* so that the desired environmental state is achieved, an environmental appraisal technique capable of predicting environmental changes occurring in conjunction with facility development must be developed.

One might ask the following questions with this in mind. What kind of facility developments have significant environmental impacts? What is the nature of the environmental impacts that users of these developments are likely to generate? What criteria are necessary to guide development decisions so that environmental impact data are incorporated into facility development and location decisions? What arrangements (institutional, etc.) would increase the probability of impact information being utilized in facility development and location?

Institutional Dynamics

In determining how to reach the desired state, there is a need to study decision processes regarding resource allocation between kinds of recreation and between recreation and other possible resource uses. This is particularly relevant in the United States where most economic activity is decided in the market place. In those cases where government intervenes, it is for the purpose of achieving a socially more desirable state. When the market system inadequately weights social costs and benefits it is desirable to alter the decision making system to achieve a desired result.

Research on this topic might answer these questions: Do the programs of government agencies supplying recreation opportunities approximate "best" allocation of resources to recreation? If they do not, why not? Are existing institutions responsive to changes in recreationists' desires? Are existing institutions oriented to today's programs or to goals?

Political scientists, sociologists, and economists need to join forces to deliver acceptable answers to these questions. To date many of the academicians in these disciplines have not grappled with them. The result is the information void which presently exists.

Desired State

Individual Aspirations

The desired state also has a behavioral component. Two tasks are apparent: (1) assessing individual aspirations and (2) monitoring whether or not actions result in the desired state. The first task is instrumental to the second.

Assessment of individual aspirations relies on the activity preference scheme previously presented. The major research question is, "What recreational opportunities would individuals like to see provided on a specific land unit defined in the original state?" An answer to this question should describe the individual preference component of the desired state.

If the original state and the desired state are accurately described and the decision process understood, the desired state should always be reached by modifying the process. Since a probability is involved in whether or not the state and process assessments are made accurately, a means of monitoring the results of a change in the process is necessary.

Such a system indicates when processes change, as well as the accuracy of original assessments. In a behavioral context, an important question is, "How accurate is the description of the desired state?" If there is a divergence between the actual and the desired state, two questions become important: (1) What was incorrect in the original preference assessments? or (2) What has contributed to changes in preferences during the process?

Environmental Impacts

Most decision processes produce multiple results having both benefits and costs. Environmental impacts are often costs. For rational decisions, whenever there are negative environmental impacts, there must be positive benefits in other categories which offset these costs.

The problem in logical analysis when non-market commodities are involved is the assignment of comparable value indexes. In recreation, indexes have been constructed, but their usefulness is open to question (Seckler, 1966). Given the problem of assigning relative weights in these systems, decision makers are left with an information void. Pertinent considerations are these: What are the trade-offs between environmental impact, income, social tension, employment, etc., in the preference schedule of society? What are the trade-offs between production goods? What degree of stability exists in preference schedules? (Are people essentially fickle and fad motivated in ranking commodities?) Essentially, one must ask, "How much environmental degradation is society willing to tolerate to achieve recreational (or any other) goals?"

These questions must be handled if one is to have confidence in the direction the system is to be steered. The general equilibrium concept of economics is an adequate framework to examine the correctness of this statement, but the concept does little to help us with the real world problem because of nonmarket commodities and ill-defined production functions. This is an area where the talents of social psychologists might profitably be used.

Definition of the desired state rests on answers to questions such as those posed. However, one must realize that the subjectiveness of bias and values cast doubt on the ability of any decision system to objectively handle these questions.

Social Goals

Definition of the desirable institutional state depends upon clearly determining the social goals that are to be achieved by public supply of recreation. If there has been a misallocation of public dollars in recreational development, it may be because Congress or an executive agency did not clearly articulate the social goals to be achieved by investment. Is the rationale for public recreation investment equal opportunities for all regardless of other factors? If it is, what do we know about the problems of access and differences in recreation wants associated with different races, income levels, and ages?

To actually achieve optimal conditions one must develop management institutions to fit new requirements. Changing the recreation opportunity mix (and associated land use patterns) does not eliminate the need for a recreation opportunity supplier and manager. It does imply, however, that this agency be responsive to peoples' aspirations and, therefore, adaptive. Investigations in this realm might examine many questions. What legal modifications are necessary for existing agencies to adopt new roles? If legal changes are necessary, is it reasonable to expect they will be made, or is it more reasonable to develop new agencies? What administrative structures are most likely to be responsive to individual aspirations? Answers to such questions should provide insight into means to insure that institutions are responsive to meeting social goals.

Conclusion

The above paragraphs point out research areas which need attention for effective recreation planning. It has been our contention that there are three desired state considerations which must be incorporated into planning: preferences and behavior; resource capabilities and environmental inputs; and the nature and dynamics of institutions designed to meet social goals. These considerations must be examined in the original state, process, and desired state segments of recreational planning. Under the system outlined both recreation research and planning can be lifted above the realm of, "So what?"

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