Rejoinder to McMillen’s Comments on “The Attitudes of Recreation and Park Administrators Toward Public Involvement”

Critical dialogue among conscientious researchers is one sign of a healthy discipline. It is a necessary and important function for each of us to evaluate critically the work of our peers and correct conceptual and methodological errors that appear in our literature. Clearly we respect Professor McMillen’s right to raise questions regarding our work. We find offensive, however, the disparaging language that he has chosen to use. His charges that we have taken a “cavalier” approach to science and that our work was “hastily conceived” are unfounded personal charges that are inappropriate and unprofessional regardless of the quality of the research.

Professor McMillen raises three objections to our work (Crompton et al., 1981). First, he contends that the notion of there being any differences in the attitudes toward public involvement of park-oriented and recreation-oriented personnel is archaic, yet he fails to provide any empirical support for his assertion.

Conceptually, parks and recreation are different kinds of services. The energies of most park personnel are devoted primarily to improving or upgrading the quality of land resources. There is a lesser requirement for most of them to interact directly with citi-
izens. Recreation personnel, on the other hand, appear more likely to be required to interact directly with citizens. This suggests that there may be differences between the two groups in their perception of the usefulness of seeking citizen involvement.

Pragmatically, the differences in job focus between park and recreation personnel are increasingly being recognized as a growing number of cities elect to reorganize their service delivery efforts. Frequently in such reorganizations, parks are being assigned to Environmental Services Departments, while recreation becomes the responsibility of Human Resource Departments. Given the gathering momentum of these divorce proceedings, research exploring philosophical similarities and differences between recreation and parks personnel, far from being “archaic,” is in fact very topical.

In response to McMillen’s second objection, the central response category for the dependent variables in the instrument was “neither agree nor disagree.” Discussion of the response categories was omitted from the published version of the paper in deference to the editor’s request to reduce the length of the paper because of space limitations in the journal.

McMillen’s assertion that parametric statistical procedures such as t-tests and analysis of variance may be inappropriate when applied to less-than-interval data is a basic statistical truism that is presented in most introductory statistical textbooks. This general rule holds that the use of parametric statistics theoretically requires adherence to a set of more stringent assumptions concerning distribution of the data, most notably an assumption of normality, than does the use of nonparametric statistics. Thus they are intended primarily for use with data exhibiting an interval or ratio level measurement.

As behavioral researchers we do not disagree with this general rule. However, there are often occasions when justifiable reasons exist for knowingly violating the assumptions inherent in this rule and selecting parametric statistics to analyze less-than-interval data. Such was the case in this study.

A substantial body of literature has evolved in the behavioral sciences, suggesting that the increased possibility of systematic error accruing through relaxing these assumptions, and treating ordinal data as interval, is offset by the increased power, sensitivity, and
robustness inherent in parametric statistics (for example, Mindak, 1961; Kerlinger, 1964; Labovitz, 1967; Labovitz, 1970; Osgood, et al., 1971; Labovitz, 1972; and Borgatta and Bohrnstedt, 1980). Indeed, the use of the more powerful statistics made it more likely that differences between the two groups would be identified (Lemon, 1973). The failure of the chosen techniques to identify significant differences provides stronger support for our contention that such differences do not exist.

In general, the proposition emerging from the literature is that if the underlying construct (i.e., attitude) can be assumed to be continuous in nature, and if the purpose of the researcher is to tap this underlying construct, then the level of measurement for that construct (be it ordinal or interval) can often be improved by “reconceptualizing the way in which it (the construct) is operationalized or measured” (Labovitz, 1972:21; Kelly, 1980). Accordingly, if the researcher intends to treat ordinal data as interval in a proper manner (via the reconceptualization of the data), the measurement instrument (or scale) should exhibit adequate levels of both reliability and validity. These were established in the original study. These procedures have been widely accepted, and the practice of applying selected parametric statistics such as t-tests and analysis of variance to less than interval scale data is common in the literature of all behavioral science fields. In summary, McMillen’s argument proposing strict inviolate adherence to rules linking specific statistics to particular levels of measurement generally has been rejected in the behavioral sciences.

McMillen’s rationale for condemning our treatment of ordinal data as interval is likewise inappropriate. While he acknowledges the acceptance of such a practice by “Likert and his associates in other disciplines,” he discourages such a practice in leisure behavior research on the grounds that there is a lack of research providing “a conceptual basis for practical application in leisure behavior.” This reasoning is unacceptable. The study of behavior relating to leisure activities is a subset of behavioral science that seeks to further knowledge of human behavior. If science in the leisure field is to progress, we must draw upon sound conceptual and methodological advances developed in related behavioral science disciplines.

McMillen’s third point regarding our conclusions is dependent
upon the false assumption that his own first two criticisms are valid. We reject McMillen’s opinion that the study does not stand up to the question, “so what?” The rationale and implications for exploring differences between park-oriented and recreation-oriented personnel were elaborated upon earlier in this response. The purpose and implications of the study were discussed in the original paper. Knowledge of practitioner attitudes toward public involvement in the decision-making process is a logical starting place toward furthering understanding of the mechanics of decision making in public leisure agencies. It appears axiomatic to us that, at a time of dwindling taxpayer support, the attitude of professionals toward citizen involvement is of considerable interest.

The well-known article by Brown et al. (1973), which is cited in the Comment, draws some generalized observations about recreation research and suggests a systematic approach for identifying appropriate areas for research. It has no specific relevance to the particular problem addressed in our paper.

Science is the accumulation of knowledge. The literature in the leisure field pertaining to the issues addressed in the paper is minimal. Exploratory studies of this nature form building blocks upon which subsequent efforts build. It is in this way that increased insights into the phenomenon emerge.

In sum, the rationale for hypothesizing potential differences in the attitude of recreation versus park administrators toward public involvement is apparent from either a cursory review of the pertinent literature or observation of contemporary practices in many metropolitan jurisdiction. The literature also offers a preponderance of evidence to support the use of parametric statistics to analyze ordinal data that are continuous in nature. Finally, although the results of the study cannot be generalized beyond the selected universe, this limitation was acknowledged in our original article.

References


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