Patterns of Equity Preferences Among Californians for Allocating Park and Recreation Resources

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Abstract The purpose of the study was to illustrate the contribution that normative studies of equity can make to the delivery of recreation and park services. The research goal was to ascertain whether systematic patterns of equity preferences would be identifiable among a probability sample of 971 California residents. Respondents were asked to indicate the extent to which they agreed or disagreed with each of the eight equity guidelines as a basis for allocating park and recreation resources. The most preferred guidelines were those based on demonstrated use, fees that covered operating costs, and areas that had the fewest facilities. The compensatory and equal treatment guidelines were the most controversial. The least support was shown for allocating on the basis of level of taxes paid and cost of the facilities. Linear logit models were developed to assess the effects of nine socioeconomic variables and a level-of-use variable on the "agree" and "disagree" responses to the eight equity guidelines.

Keywords equity, preferences, recreation and parks, resource allocation, socioeconomic variables

The way in which resources are allocated by governmental agencies to provide park and recreation services can bestow substantial benefits or penalties on groups of residents. There is likely to be general agreement that these resources should be allocated "fairly," but the challenge confronting elected officials and administrators is that there are many definitions of what constitutes fair or equitable allocation. The nebulous nature of the concept of equity and the substantially different outcomes that emerge from its alternative interpretations lead to the question "Who gets what?" or, in normative terms, "Who ought to get what?", which is a central political and administrative concern.

In the past, residents, their political representatives, and agency personnel have been remarkably indifferent toward resource allocation issues. The allocation issue was termed by Jones, Greenberg, and Drew (1980) "the hidden function of government" (p. 2) because it received relatively little consideration in the popular press, in the professional literature, or from empirical researchers. However, five conditions have led to

An earlier version of this paper was presented at 1989 National Recreation and Parks Association research symposium held in San Antonio.
has encouraged increased efforts in social theory and equity as an area of study.

Related Literature

The underlying conventional wisdom that studies of service distribution were driven by significantly fewer services than the underclass hypothesis was discredited when subjected to critical analysis. Levy, Meltzer, and Wildavsky (1980) and in Houston by Mladenka and Hill (1980), and in Houston by Mladenka and Hill (1980), and in Houston by Mladenka and Hill (1980), and in Houston by Mladenka and Hill (1980). All of these studies reported that there were often complaints about insufficient services in neighborhoods. This occurred even when these neighborhoods were identified as “losers.” This phenomenon became known as “inequalities” (p. 142). The tendency to cite lack of evidence to support systematic services has also been discounted (Levy, 1987).

Although the underclass hypothesis has been rejected along with the underclassification model, which suggests that underclass neighborhoods receive benefits proportional to the size of the population served (Fisk & Lancaster, 1974; Mladenka & Hill, 1977). The growth of service was equally allocated to all neighborhoods, being synonymous with equality of opportunity. These limitations of this approach and support for the redistribution of resources.

In their studies of recreation, some researchers included a measure of social equity, which should be such as to maximize the benefits of services to those who need them. This approach is based on the principle of “the difference principle” (Farnham, 1974) and concluded that the variable was a measure of political efficacy and therefore more important.

The recreation and parks planning field has frequently emphasized the approach of “the difference principle” as a basis of need. More than 20 years ago, the concept of equity was presented as those who cannot provide them with basic needs. The planning process for recreation services should focus on providing services to those who cannot provide them for themselves.
used on the equitable allocation of what constitutes inequitable Department v. Chicago Park sought to remedy existing services, where their provision was decades (Wicks, 1987).

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cipal resources across society’s those with the least resources, asset avantaged as a result of the ed group.

lication of Rawls’s theory may political bargaining where the 406). Merget (1981) ultimately rofound importance of both the relationship” (p. 406). That is, it has encouraged increased effort to understand the relation between equity as expressed in social theory and equity as manifested in actual service distribution patterns.

Related Literature

The underlying conventional wisdom that motivated early court investigations and early studies of service distribution was that poor or underprivileged groups received significantly fewer services than the wealthy or politically powerful. This notion became known as “the underclass hypothesis” (Lineberry, 1977, p. 12). However, this theory was discredited when subjected to analyses of data collected in Oakland, California, by Levy, Meltzner, and Wildavsky (1974) and Farnham (1981), in Detroit by Jones et al. (1980), and in Houston by Mladenka and Hill (1977) and Antunes and Plumlee (1977). All of these studies reported that the “underclass” groups were not systematically deprived of services when compared with other groups in the respective cities.

Although the underclass hypothesis has been generally refuted, these studies reported that there were often considerable differences in service delivery levels between neighborhoods. This occurred even though no distinctive groups could be uniformly identified as “losers.” This phenomenon was termed by Lineberry (1977) “unpatterned inequalities” (p. 142). The term unpatterned was used because there was no empirical evidence to support systematic discrimination or the presence of unacceptable allocation equity rules.

Like the underclass hypothesis, other popular notions have not proved to be adequate overall predictors of service distribution patterns. Political elite theories, which imply that those with political power are likely to receive more and better services, have been rejected along with the underclass hypothesis (Lineberry, 1977). The citizen participation model, which suggests that groups who participate the most will consistently receive benefits proportional to the efforts they spend contacting government officials, has also been discounted (Levy et al., 1974).

Early studies that investigated the distribution of leisure services typically evaluated fairness by using a ratio of agency inputs, such as park acreage, to a measure of area or population served (Fisk & Lancer, 1974; Lineberry, 1977; Mitchell & Lovingood, 1976; Mladenka & Hill, 1977). The goal of these studies was to determine whether a standard of service was equally allocated across each city. Thus, equity was conceptualized as being synonymous with equality. Gold (1974) and Farnham (1981) recognized the limitations of this approach and suggested that need and political demand, respectively, be considered as alternative interpretations of equity.

In their studies of recreation and park service delivery systems, both of these researchers included a measure of need. Gold (1974) commented that “service distribution should be such as to maximize the value of output, with the possibility of giving different weights to the output according to who receives it. This rule can incorporate notions about need” (p. 121). Farnham (1981) introduced the notion of “demand” in his study and concluded that the variable “median family income” was positively correlated with political efficacy and therefore was a surrogate for “demand.”

The recreation and parks philosophical literature regarding leisure service delivery frequently emphasizes the appropriateness of adopting service allocation goals on the basis of need. More than 20 years ago, Gray (1969) observed that “there is growing acceptance of the idea that services should be provided from community resources for those who cannot provide them for themselves” (p. 24). Kelly (1982) endorsed the view that the prevailing philosophy should be need based:
The issue is one of equity. Public recreation is an attempt to administer justice in the sense of making some opportunities available to those least able to provide them for themselves. Public recreation recognizes the current inequalities in opportunities and gives special attention to those whose deprivation is acute... public recreation is an institution organized to mitigate inequity. (p. 389)

A notable exception to advocating the need criterion was the emphasis placed on equality of service allocation by Brightbill (1969), who said that “public recreation is not largely for the less advantaged... There is more than enough margin, and even a greater obligation, in a democracy for services which are supported by the community for the benefit of all” (p. 16). Gray (1969) pointed out that Brightbill’s position represented an evolution of the original philosophy underlying recreation provision:

In the earliest days of the recreation movement, playgrounds were located in what was then called “under-privileged” neighborhoods. Gradually, as the movement matured and public acceptance increased, the idea grew that any neighborhood which lacked public recreation services was, in a sense, underprivileged, and that centers ought to be provided throughout the city. (p. 23)

Thus, in the context of recreation and parks, a variety of perceptions of what constitutes the most appropriate modus operandi for fairly allocating recreation and parks resources have been proposed. In the broader context of public service delivery, several typologies of equity have been suggested by different authors (Campbell, 1976; Lucy, Gilbert, & Birkhead, 1977; Lucy & Mladenka, 1980; Ostrom & Ostrom, 1977; Rich, 1979; Savas, 1979; Vernez, 1978). Crompton and Wicks (1988) attempted to integrate these various approaches and offered a taxonomy of eight equity allocation guidelines. The eight alternatives are categorized into four generic types, each of which can be operationalized in one, two, or three different ways. They are depicted schematically in Figure 1 and briefly defined in the following four paragraphs. The numbers in parentheses refer to the operationalizations of each approach used in this study, which are listed in Table 1.

**Compensatory equity** (Number 4) involves allocating services so that economically disadvantaged groups, individuals, or areas receive extra increments of resources. The operational objective of this allocation guideline is to increase the compensatory role of public leisure services in order that opportunities for the economically disadvantaged may be improved.

**Equality** entails allocating resources so that either all residents receive equal input allocations for leisure services (Number 3) or all residents receive equal benefits from leisure services, regardless of need, the amount of taxes contributed, or the price paid (Number 2).

**Demand as an equity allocation guideline allocates resources on the basis of demonstrated use** (Number 8) or vociferous advocacy (Number 5). These two manifestations of demand may be conceptualized as economic and political guidelines, respectively. The rational appeal of the economic guideline is that the maximum number of citizens is likely to benefit if it is adopted. Political demand is operationalized through the relative intensity of vociferous advocacy and citizen contacts.

**Market equity** may be operationalized in three ways. First, resources may be allo-
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cated on the basis of the amount of taxes paid (Number 6). This approach would allocate leisure services to each area of a jurisdiction in direct proportion to the amount of taxes paid by residents and businesses. Second, direct prices are imposed and residents can buy as little or as much of a service as they wish (Number 1). They neither receive leisure services they do not want nor are required to pay through the tax system for what other residents use. The third operationalization of market equity is a least-cost approach (Number 7). This guideline seeks to deliver a leisure service at the lowest cost, rationalizing that this is the most equitable use of tax dollars because it enables more of a service to be offered to all citizens for a given amount of money. It responds to market forces by seeking out sites where the costs of delivering park and recreation services are lowest.

The only previous studies that we are aware of that have addressed preferences for recreation and park equity guidelines, as opposed to actual distribution of existing service patterns, are those reported by Wicks and Crompton (1986, 1987). The first of these studies reported the comparative responses of 64 Texas Park and Recreation Department directors and a probability sample of 833 Texas residents to the four generic interpretations of equity shown in Figure 1. Both samples overwhelmingly supported the view that parks should be allocated to all areas equally, rather than on the basis of compensatory demand or market equity. The researchers also used a limited set of

Figure 1. A taxonomy of equity models for delivering public leisure services.
socioeconomic variables to identify constituencies that were most likely to be supportive of deviations from the equality standard. Although support for the deviations was relatively slight, there was some support for the compensatory equity approach by low-income, elderly, and black respondents. Presumably, these respondents perceived that they would receive disproportionate benefits from this equity guideline.

In their later study, Wicks and Crompton (1987) hypothesized that different equity rules would be favored for different types of recreation and park services. They tested their hypothesis on samples selected from three populations in Austin, Texas: resident group members, park and recreation department employees, and present and former city council members. The citizen group members consisted of a judgment sample of 424. Wicks and Crompton reported that within each of the three subpopulations, equity preferences differed significantly for each of the seven services.

Despite these differences, there were some patterns within the resident group sample. With one exception, the market equity models (allocate on the basis of amount of taxes paid and where fees cover costs) received little support, with the fees-paid option being strongly rejected and ranked as least favored of the eight equity guidelines for all seven types of services. The exception was for athletics, in which the fees cover costs allocation rule was the most preferred guideline. Providing services in which the cost of provision was lowest or on the basis of residents’ advocacy also received relatively little support.

**Purpose of the Study**

Most of the work reported on equity has evaluated the actual distribution of recreation and park services within a jurisdiction (Antunes & Plumelee, 1977; Farnham, 1981; Gold, 1974; Jones et al., 1980; Levy et al., 1974; Lineberry, 1977; Mladenka, 1985; Mladenka & Hill, 1977; Thomas, 1986). If public agencies are committed to adopting marketing or consumer-oriented approaches to providing services, then it is reasonable to expect that part of this consumer orientation will require incorporating the public’s preferred equity guideline into service allocation decisions.

Wicks and Crompton (1989) have suggested a five-phase process for integrating equity into public policy, and equity preferences are the starting point of the process. The suggested five phases are as follows:

1. Normative distribution phase, which identifies the prevailing equity preferences of the agency’s decision-making publics, especially those of the jurisdiction’s residents.
2. Actual distribution phase, which documents existing service distribution patterns.
3. Equity objectives phase, during which an evaluation is made of the extent to which the equity preferences of an agency and its publics (Phase 1) coincide with the existing service distribution patterns (Phase 2). Objectives are specified so that differences between equity preferences and actual distribution patterns will be reconciled.
4. Action plan phase, which addresses the “what, where, when, how, and who” questions that specify the actions necessary to achieve the equity objectives.
5. Evaluation phase, which involves periodically monitoring how well the objectives are being met in the short term. In the long term, it means reiterating the process to identify whether the objectives have changed.

The study reported here as a part of this process. It investigated the preference of California residents. The objective of the research was to determine whether there was a functional relationship and a level-of-use variable, and all populations were selected by the California Department of Parks and Recreation to the department with regard to race.

To some extent this study is connected to the study of Wicks and Crompton (1986). Their Texas study was a feasibility study. The study reported by Wicks and Crompton (1986) in Table 1 and 2 of education, age, ethnicity, and income. Wicks and Crompton (1986) study incorporates eight equity guidelines and facilitates comparisons between the two studies. The California study included only five equity guidelines but facilitates comparisons with the study of Wicks and Crompton (1986) study consistency of statements. Hence, responses were used to compare the relative levels of equity.

Third, this study focused on California Park agencies had been subjected for tax limitation statutes launched in 1978 and not been subjected to such strict guidelines to linear analysis to analyze the data and information than the independent variables in the study.

**Methodology**

Data were collected by a contracted firm for study as a part of its state planning effort. On the instrument, the questions are as follows (California Department of Parks and Recreation).

The sampling plan for the five states was as follows. The square-root approach, the most up-to-date population figures were divided out as a percentage of the square root of the number of sample points to each state. The square-root approach was used because it recognized larger counties (the other hand, would have allocated those large counties and possibly excluded them from the sample).

Once the number of sampling points was determined, a random selection of telephone numbers in proportion to the specific geographic locations.
were most likely to be supportive of the deviations was a relative equity approach by low-income respondents perceived that equity guidelines hypothesized that different equity and park services. They tested these in Austin, Texas: residents and present and former city 1 of a judgment sample of 424. See subpopulations, equity preferences.

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where, when, how, and who achieve the equity objectives.

monitoring how well the objective term, it means reiterating the process to identify whether the equity preferences or environmental conditions have changed.

The study reported here addressed normative distribution, the first phase of the process. It investigated the preferred equity guidelines of a probability sample of California residents. The objectives were to identify the level of support for the eight operational alternatives of equity suggested by Crompton and Wicks (1988) and to ascertain whether there was a functional relationship between nine socioeconomic variables and a level-of-use variable, and the eight equity guidelines. The socioeconomic variables were selected by the California Parks and Recreation Department. They were of interest to the department with regard to other issues addressed on the questionnaire.

To some extent this study replicated the study reported by Wicks and Crompton (1986). Their Texas study was also part of a statewide survey and it also used a probability sample. The study reported here incorporates five of the equity guidelines (Numbers 1, 3, 4, 5, and 6 in Table 1) and four of the five socioeconomic variables they used (level of education, age, ethnicity, and income level). However, this study extends the Wicks and Crompton (1986) study in four ways. First, it uses an expanded taxonomy of eight rather than five equity guidelines. Second, it uses a consistent response format that better facilitates comparisons between the guidelines. The equity questions in the Wicks and Crompton (1986) study consisted of three trade-off questions and two agree-disagree statements. Hence, responses were dichotomous and response formats mixed, so comparison of the relative levels of support for the five equity guidelines was difficult. Third, this study focused on California, and at the time of the study, parks and recreation agencies had been subjected for a decade to the financial challenges posed by a series of tax limitation statutes launched by Proposition 13 in June 1978. Texas, by contrast, has not been subjected to such stringent financial legislation. Fourth, this study uses logistic analysis to analyze the data, which is a more powerful approach yielding more information than the independent chi-squares used in the Wicks and Crompton (1986) study.

Methodology

Data were collected by a contractor for the State of California, which commissioned the study as a part of its state planning efforts. Although we formulated the equity questions on the instrument, the questions constituted part of a more comprehensive set of questions (California Department of Parks and Recreation, 1987).

The sampling plan for the study involved geographic stratification of the sample points. The square-root approach was used, which involved taking the square root of the most up-to-date population figure for each county in California. This figure was then divided out as a percentage of the total. These percentage figures were used to calculate the number of sample points to be interviewed in each county, which totaled 2142. The square-root approach was used as a means of providing the desired statewide coverage because it penalizes large counties and assists small counties. Proportional sampling, on the other hand, would have allocated an excessively large number of sample points to the large counties and possibly excluded the small counties.

Once the number of sample points per county was determined, a random-digit dialing software program was used by the contractor. This program revealed random-digit telephone numbers in proportion to the issuance of prefixes that were designated for specific geographic locations. Designated prefixes were weighted according to each
one's issuance, thus ensuring a random sample, including those with new or unlisted numbers. Every county in the state was represented. A sample frame for the mail survey could not be predetermined because it depended on the willingness of telephone survey respondents to accept and complete this survey.

Of the 2142 California residents who were surveyed by telephone, 1807 agreed to complete a more detailed follow-up written questionnaire that was mailed to them. A total of 796 questionnaires were returned after the first mailing and an additional 175 after a second mailing, so 54% of questionnaires were returned. Responses from these 971 respondents constituted the source of data for this study.

Respondents were asked the following question on their mail-back questionnaire: “In terms of equity, where should public parks and recreation agencies be spending their funds? Eight possible guidelines are listed below. For each guideline, indicate the degree to which you agree or disagree with it.” They responded on a 5-point scale. The aggregate responses, and the way in which each of the eight equity guidelines was operationalized, are shown in Table 1. Wicks and Crompton (1987, 1990) had tested and used similar statements in a study in Austin, Texas. Their statements were used in this study with slight wording adjustments to reflect the different context.

Three limitations of the study should be noted. First, the request that respondents respond generally to the guidelines assumed that their indicated equity preferences would be constant across the whole spectrum of recreation and park services. Wicks and Crompton (1987) highlighted the limitations of this approach when they reported that equity guideline preferences differed according to type of leisure service. Second, the cover letter for the mail survey incorporated the California State Department of Parks and Recreation letterhead, so respondents might have focused on state facilities and programs rather than on public facilities and programs in general (including those of local and federal governments). Third, the use of single-item scales rather than multi-item scales to measure equity models made it difficult to assess the validity and reliability of the responses.

Nine socioeconomic variables and a level-of-use variable were included in the survey instrument. These variables were (1) place of residence (urban, suburban, rural); (2) education level; (3) household structure; (4) number living in the household; (5) number under 17 years of age living in the household; (6) number of four other age-cohorts living in the household (18-30, 31-40, 41-64, and 65+); (7) income level; (8) ethnicity; (9) age; and (10) level of use (heavy, medium, light).

A linear logit model was developed for each equity guideline to assess effects of the socioeconomic variables on dichotomous responses to the equity guidelines. To create the dichotomous responses, the “strongly agree” and “moderately agree” points on the scale were collapsed, as were the “moderately disagree” and “strongly disagree” points; the “neither agree nor disagree” and “don’t know” responses were not included in the analyses.

A maximum likelihood estimation algorithm was used to calibrate the logit model. This algorithm was selected because it is able to accommodate some of the cells having relatively few observations. This approach enabled a functional relationship to be developed that explained agreement and disagreement with the eight equity guidelines as a function of the set of socioeconomic variables. In order to simplify interpretation, only the main effect parameters were considered, and interaction effects were not examined.

Results

The data in Table 1 show that the model based on demonstrated expenditures model, using vociferous advocates as substantial opposition.

Responses to the three operational guidelines also exhibited substantial opposition (Number 1) was favored by 62.5% of respondents based on the amount of taxes paid, supported by 56.9%, and the approach that was supported by only 19.6% and operated.

The compensatory guidelines were most controversial because the positions were similar: 34% and 38.6% respectively. Particularly controversial, with only 4% of respondents disagreeing with the alternative equality guideline, was the guideline that the number of facilities (Number 2), resource use agreement (15.2%). It appeared that the need for allocation on the basis of need was not as controversial when there was strong support when no need.

One-way chi-square tests were employed to determine the strength of the opposition to the equity guidelines. The results were used to investigate whether the respondents would oppose the equity guidelines.

All 13 explanatory variables were used in the analyses identified the variables with the strongest relationship to the subsequent development and conclusions for each of the models are significant with its level of significance in explaining agreement and disagreement. The explanatory variables that were identified as being the most useful by the model.

Table 2 shows the likelihood estimates of the goodness of fit for each model, where the better fit is the one with the most useful for explaining the data. Then the likelihood ratio chi-square is small, the probability of the $G^2$ value is small, and expected values will be relatively large if the table refers to the probability between the observed and expected.
Results

The data in Table 1 show that there was a clear preference consensus for the demand model based on demonstrated use (Number 8). By contrast, the alternative demand model, using vociferous advocacy (Number 5), received relatively little support and substantial opposition.

Responses to the three operationalizations of the market equity approach to resource allocations also exhibited substantial differences in opinion. The direct price guideline (Number 1) was favored by 62.8% with only 19.5% opposed. By contrast, allocations based on the amount of taxes paid (Number 6) were favored by only 17.9% and opposed by 56.9%, and the approach based on where the cost was lowest (Number 7) was supported by only 19.6% and opposed by 44.4%.

The compensatory guideline based on income (Number 4) seemed likely to be the most controversial because the proportions supporting and opposing it were relatively similar: 34% and 38.6% respectively. The equal inputs guideline (Number 3) was similarly controversial, with only 41.2% in support and 30% opposed. By contrast, the alternative equality guideline, which would allocate more services to those areas with fewest facilities (Number 2), received substantial support (60.3%) and minimal disagreement (15.2%). It appears that although there was reluctance to support resource allocation on the basis of need when need was defined in terms of the lowest incomes, there was strong support when need was defined in terms of the fewest facilities.

One-way chi-square tests were undertaken to test for significant differences in the responses. To facilitate this, the five response categories were collapsed to three: strongly agree and moderately agree; neither agree nor disagree; and moderately disagree and strongly disagree. In the case of all eight equity guidelines, the differences were significant at the .001 level.

Once significant differences had been identified in the levels of support for and opposition to the equity guidelines within the total sample, linear logit models were developed to investigate whether there were meaningful relationships between the nine socioeconomic subgroups and one level-of-use subgroup, and the eight equity guidelines.

All 13 explanatory variables initially were entered into the algorithm. Preliminary analyses identified the variables with significant chi-squares, and these were included in the subsequent development and calibration of the eight models. The optimum calibrations for each of the models are shown in Table 2. The table shows the chi-square value, with its level of significance in parentheses, of the variables that were most useful in explaining agreement and disagreement with each of the eight equity guidelines. The explanatory variables that were initially entered into the algorithm but were not identified as being the most useful by any of the linear logit models are not listed in Table 2.

Table 2 shows the likelihood ratio chi-square ($G^2$) value, which provides a measure of the goodness of fit for each model. The higher the probability level shown in Table 2, the better fit is the calibration of the model. When the fit of the two or three variables most useful for explaining the dichotomous responses to the equity guidelines is good, then the likelihood ratio chi-square value will be small. When the chi-square value is small, the probability of the $G^2$ value being close to a perfect fit (1.0) between observed and expected values will be relatively high. Hence, the probability statistic at the foot of the table refers to the probability of rejecting the null hypothesis of no difference between the observed and expected frequencies of the equity guideline response variable.
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<th>Equity Guideline</th>
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<td></td>
<td>Don't Know (%)</td>
<td>Strongly Agree (%)</td>
<td>Moderately Agree (%)</td>
<td>Neither Agree nor Disagree (%)</td>
<td>Moderately Disagree (%)</td>
<td>Strongly Disagree (%)</td>
<td>Percentage Who Agree (Col. 2 &amp; 3) (%)</td>
<td>Percentage Who Disagree (Col. 5 &amp; 6) (%)</td>
<td>Ranking Based on Percentage Who Agree</td>
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<tr>
<td>1. Higher priority should go to those facilities where user fees and entrance charges can be expected to cover a large share of the park's operating and maintenance costs.</td>
<td>2.5</td>
<td>30.4</td>
<td>32.4</td>
<td>15.2</td>
<td>13.6</td>
<td>5.9</td>
<td>62.8</td>
<td>19.5</td>
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<td>2. Higher priority should go to areas which currently have the fewest facilities.</td>
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<td>25.1</td>
<td>35.2</td>
<td>21.0</td>
<td>11.3</td>
<td>3.9</td>
<td>60.3</td>
<td>15.2</td>
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<td>3. All areas of the community and the state should be treated equally.</td>
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<td>21.1</td>
<td>20.1</td>
<td>23.3</td>
<td>20.1</td>
<td>9.9</td>
<td>41.2</td>
<td>30.0</td>
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<tr>
<td>4. Higher priority should go to areas where people have the lowest incomes.</td>
<td>3.6</td>
<td>13.0</td>
<td>21.0</td>
<td>23.9</td>
<td>22.7</td>
<td>15.9</td>
<td>34.0</td>
<td>38.6</td>
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<td>5. Higher priority should go to areas where the residents are most vocal about having recreational facilities.</td>
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<td>8.2</td>
<td>18.4</td>
<td>24.1</td>
<td>21.2</td>
<td>25.0</td>
<td>26.6</td>
<td>46.2</td>
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<td></td>
<td>1. No area of the community and the state should be treated equally.</td>
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<td>----</td>
</tr>
<tr>
<td>4.</td>
<td>Higher priority should go to areas where people have the lowest incomes.</td>
<td>3.6</td>
<td>13.0</td>
<td>21.0</td>
<td>23.9</td>
<td>22.7</td>
<td>15.9</td>
<td>34.0</td>
<td>38.6</td>
</tr>
<tr>
<td>5.</td>
<td>Higher priority should go to areas where the residents are most vocal about having recreational facilities.</td>
<td>3.0</td>
<td>8.2</td>
<td>18.4</td>
<td>24.1</td>
<td>21.2</td>
<td>25.0</td>
<td>26.6</td>
<td>46.2</td>
</tr>
<tr>
<td>6.</td>
<td>Higher priority should go to areas that pay the most taxes.</td>
<td>2.2</td>
<td>3.8</td>
<td>14.1</td>
<td>23.1</td>
<td>27.3</td>
<td>29.6</td>
<td>17.9</td>
<td>56.9</td>
</tr>
<tr>
<td>7.</td>
<td>Higher priority should go to areas where the cost of the facilities is lowest.</td>
<td>3.0</td>
<td>3.9</td>
<td>15.7</td>
<td>33.1</td>
<td>27.1</td>
<td>17.3</td>
<td>19.6</td>
<td>44.4</td>
</tr>
<tr>
<td>8.</td>
<td>Higher priority should go to areas where existing facilities are most heavily used.</td>
<td>1.4</td>
<td>43.8</td>
<td>38.5</td>
<td>10.4</td>
<td>3.9</td>
<td>2.0</td>
<td>82.3</td>
<td>5.9</td>
</tr>
</tbody>
</table>

Note. N = 963.
Table 2
Variables Shown by the Logit Models to Be Most Useful in Explaining Agreement and Disagreement With Each of the Eight Equity Guidelines

<table>
<thead>
<tr>
<th>Variable</th>
<th>Direct Price Paid</th>
<th>Equal Benefits</th>
<th>Equal Inputs</th>
<th>Compensatory</th>
<th>Vociferous Advocacy</th>
<th>Amount of Taxes Paid</th>
<th>Least Cost Alternative</th>
<th>Demonstrated Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>9.52 (.01)</td>
<td>3.87 (.14)</td>
<td>21.93 (.01)</td>
<td></td>
<td>7.61 (.02)</td>
<td>16.76 (.01)</td>
<td>3.04 (.22)</td>
<td>1.13 (.57)</td>
</tr>
<tr>
<td>No. of persons 18–30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of persons 41–65</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of persons over 65</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>7.17 (.03)</td>
<td>3.63 (.16)</td>
<td>16.41 (.01)</td>
<td>5.77 (.06)</td>
<td></td>
<td></td>
<td></td>
<td>1.14 (.28)</td>
</tr>
<tr>
<td>Ethnic background</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>5.82 (.12)</td>
<td>7.28 (.06)</td>
<td>11.10 (.01)</td>
<td>7.74 (.05)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood ratio chi-square G²</td>
<td>1.85</td>
<td>2.80</td>
<td>4.93</td>
<td>16.81</td>
<td>0.55</td>
<td>4.86</td>
<td>3.25</td>
<td>10.40</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>15</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Probability of rejecting the null hypothesis</td>
<td>.76</td>
<td>.83</td>
<td>.29</td>
<td>.33</td>
<td>.76</td>
<td>.30</td>
<td>.78</td>
<td>.58</td>
</tr>
</tbody>
</table>

Note. N = 963. The chi-square value has no parentheses; the numbers in parentheses are the levels of significance of the chi-squares.
Table 3 shows the estimates of the parameters and the odd ratios associated with those chi-square values that were significant in the logit models reported in Table 2. In this table, the last level of each of the explanatory variables is not included. This missing level was the reference level that was assigned a parameter value of 1.0, and the other levels were measured against this reference. For example, in reference to the age variable, the 65 and over age group served as the reference point for the other three age cohorts. No parameters and odd ratios are shown in Table 3 for the variables emerging from the logit models developed for the equal benefits and the demonstrated use guidelines. This is because the chi-squares associated with the most important explanatory variables for these two models shown in Table 2 were not significant.

The two explanatory variables that exhibited the most significant effects on the direct price paid guideline were education and income. Respondents whose formal education ended before or at 12th grade were significantly (.06 level) more supportive of the direct price guideline than those who had received a college degree. Those with some college education or technical training were also more supportive than the reference group, but the difference was not significant. The odd ratios in Table 3 indicate that responses from the income subgroups were antithetical to those of the education subgroups. Those at the lowest income level of less than $20,000 were significantly more (.07 level) opposed to this guideline than the highest income reference group, while those in the middle $20,000–40,000 income range were also more opposed, although the difference was not significant.

Education and age emerged as the two most important variables in the equal benefits model, but neither had significant chi-squares. This suggests that none of the individual variables was very useful for explaining agreement or disagreement with the equal benefits guideline.

Level of education showed a strong and significant effect on the equal inputs guideline. There was a linear pattern. Respondents with a high school education were significantly more supportive of this guideline than the reference subgroup. The difference between the reference highest educated subgroup and the middle group was in the same direction but was not significant. The number of people in the household aged over 65 was identified by the model as an important variable, but the first two levels did not exhibit a significant chi-square when compared with the reference level of two or more people.

Income, ethnic background, and age were all shown by the logit model to have an important and significant effect on the compensatory equity guideline. Respondents in the lowest income cohort (<$20,000) and members of ethnic minority groups were significantly (.01 level) more supportive of this guideline than those in the high-income and Anglo reference groups. Among the age cohorts, respondents in the 31–40 subgroup were significantly (.01 level) less likely to support this guideline than the 65+ reference group. By contrast, the 18–30 age group was as supportive of it as the oldest cohort.

The two variables best able to explain agreement and disagreement with the vociferous advocacy guideline were number of people in the household aged 65+ and age. There was no linear pattern in the age group responses. Compared with the 65+ reference cohort, the 18–30 subgroup was substantially more supportive, whereas the 31–40 and 41–64 cohorts were substantially less supportive of this guideline. Households containing zero or one person who was 65+ were substantially more supportive of this guideline than the reference group with two or more such people, but the values of their parameters were not significantly different from the reference group.
### Table 3
Maximum Likelihood Estimates of the Parameters Associated With Those Explanatory Variables That Were Significant in the Logit Models Reported in Table 2

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>(1) High school or less</td>
<td>0.29 (.06) [1.34]</td>
<td>0.39 (.01) [1.48]</td>
<td></td>
<td></td>
<td>0.42 (.01) [1.54]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) Some college or less</td>
<td>0.11 (.42) [1.11]</td>
<td>0.09 (.42) [1.10]</td>
<td></td>
<td></td>
<td>0.05 (.66) [1.06]</td>
<td></td>
</tr>
<tr>
<td>No. of persons 18–30</td>
<td>(1) 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.29 (.02) [1.75]</td>
<td></td>
</tr>
<tr>
<td>in the household</td>
<td>(2) 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.32 (.03) [1.37]</td>
<td></td>
</tr>
<tr>
<td>No. of persons over 65</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in the household</td>
<td>(2) 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>(1) &lt;$20,000</td>
<td>-0.30 (.07) [1.74]</td>
<td></td>
<td></td>
<td>0.54 (.01) [1.72]</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) $20,000–$40,000</td>
<td>-0.08 (.54) [1.92]</td>
<td></td>
<td></td>
<td>-0.35 (.82) [1.97]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic background</td>
<td>(1) Minorities</td>
<td>0.65 (.01) [1.92]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>(1) 18–30</td>
<td>0.01 (.96) [1.01]</td>
<td></td>
<td></td>
<td>0.34 (.09) [1.40]</td>
<td>-0.38 (.03) [1.68]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) 31–40</td>
<td>-0.38 (.01) [1.68]</td>
<td></td>
<td></td>
<td>-0.27 (.15) [1.76]</td>
<td>-0.15 (.35) [1.86]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3) 41–64</td>
<td>-0.70 (.63) [1.93]</td>
<td></td>
<td></td>
<td>-0.29 (.08) [1.75]</td>
<td>-0.21 (.13) [1.23]</td>
<td></td>
</tr>
<tr>
<td>Level of use</td>
<td>(1) None or light</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.17 (.17) [1.18]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) Medium</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.41 (.01) [1.67]</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* N = 963. The numbers in parentheses are the levels of significance of the parameter statistic. The numbers in brackets are the odd ratios.

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**Discussion**

There were differences in the response of the earlier equity preference survey of the Texas study (Wicks & Glass, 1986), and the later survey in the city of Austin. In the earlier survey, respondents in all three samples were more likely to accept the higher priority given to the priority groups. By contrast, in the later survey, the priority groups were given higher priority only in the final sample of the study. The relative level of support for the higher priority groups was relatively high, but not the same as in the earlier survey. In the later survey, the highest priority given to the priority groups was not associated with any specific population group.

Number of people in the 18–30 group who had two or more shelter costs. It was reported that 50% of people in the 18–30 group had two or more costs. The 65+ reference group had the most people with two or more shelter costs. The 65+ group had the most people with two or more shelter costs, followed by the 18–30 group and then the 31–40 group.

Level of education and age of the reference group. Level of education and age of the reference group. The three variables best able to distinguish between the 65+ reference group and the 18–30 group were: age, education, and income. The 65+ group had significantly more people with higher education and income than the 18–30 group. The 65+ group had significantly more people with lower education and income than the 18–30 group.

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Number of people in the household aged 18–30 and level of use of recreational facilities had the most effect on the amount of taxes paid guideline. Those with no household members in the 18–30 cohort were significantly less supportive than the reference group who had two or more members in this age cohort. By contrast, those with a single household member in this age group were significantly more supportive of this guideline. Medium users of facilities were significantly less likely to agree with this guideline than were the heavy-user reference group, while the light and nonuser subgroup was somewhat more supportive of it.

Level of education and age emerged from the logit model as having a significant effect on the least cost alternative guideline. Those with the least amount of formal education were significantly more supportive of this than were the highly educated reference group. The youngest age cohort (18–30) was significantly less supportive than the 65+ reference group.

The three variables best able to explain agreement and disagreement with the demonstrated use guideline were number of people in the household aged 18–30, the number aged 41–64, and ethnic background. However, none of these variables had significant chi-squares, suggesting that a tendency to agree or disagree with this guideline was not associated with any specific population subgroup.

Discussion

There were differences in the research design of the study reported here and the designs of the earlier equity preference studies reported by Wicks and Crompton (1986, 1987) in Texas and in the city of Austin, respectively. These included differences in the types of sampling procedure used; in the specific park and recreation services to which the equity guidelines were directed; in the number of equity guidelines investigated; and in the question formats used in each study. These differences make direct comparisons of the three studies hazardous and suggest that any trends that are identified should be regarded as tenuous.

Responses in all three samples indicated substantial variation in what were considered to be acceptable equity guidelines, but the variation was reasonably consistent across all three samples. In each study, respondents reacted least favorably to the guideline that higher priority should go to areas that pay the most taxes. The stark antithesis of this guideline to the compensatory and equality approaches, which have traditionally been used in this field, appeared to make it unacceptable.

By contrast, there was support in this study for the guideline stating that higher priority should go to those facilities where user fees and entrance charges can be expected to cover a large share of the facility’s operating and maintenance costs. It was one of only three guidelines that gained the support of more than half the sample. This relatively high level of support probably reflects the effect of Proposition 13 and subsequent legislation restricting public taxation in California. Californians appear to be sensitized to the notion that leisure services should break even because taxes are not available to provide subsidies. Pricing recreation and park services at a break-even level appears to have become the norm that Californians accept as their point of reference. In the Texas study (Wicks & Crompton, 1986), respondents were asked their reaction to the statement, “Entrance fees for parks should be set at a level that recovers operating costs.” It was reported that 50% agreed, 30% disagreed, and 20% were undecided. For the Austin study (Wicks & Crompton, 1987), support for the fees guideline in the
context of parks was low, but it was the most preferred of the eight allocation guidelines for athletic programs.

The other two guidelines in this study that received support from more than half the sample were that priority should go to areas where existing facilities are most heavily used and to areas that currently have the fewest facilities. These guidelines were not included in the Texas study, but in the Austin study they also emerged as the two most preferred options across the range of services. Respondents appear to have been impressed by the rational appeal of the "Adam Smith" guideline, under which resources would be allocated to benefit the maximum number of people (Wildavsky, 1979). O riently, this appears to be a reasonable approach to allocating resources, but it may harbor a hidden allocation bias if use varies by, for example, ethnicity or level of income. Both the heavy use and fewest facilities guidelines are pragmatic approaches that recognize that resources are scarce and that these approaches will maximize visitor use per public dollar invested. They are devoid of the political ideological connotations that accompany some of the other options.

Two common approaches used by decision makers, those of responding to the most vocal elements and locating facilities where they cost least, were ranked sixth and seventh in terms of percentage of the sample who supported them in both the California study reported here and the Austin study (Wicks & Crompton, 1987). The first of these guidelines was included in the Texas study (Wicks & Crompton, 1986), and only 23% of that sample agreed with the statement. "Those areas of a community whose citizens are most persistent in requesting parks should get the most parks." Although respondents in all three studies perceived consumption to be an acceptable indicator of demand, response to vigorous vocalizing for more services without the evidence of demonstrated substantial use was perceived to be an unacceptable option. Despite its low rating among California and Austin residents, the guideline allocating priority to areas where the cost of the facilities is lowest (Number 7) is an attractive option to many decision makers. They frequently argue that agencies cannot afford to purchase prime locations for recreation and park facilities because the cost of acquisition is too high, or because the opportunity cost of removing valuable property from the tax rolls would adversely impact the jurisdiction's tax base. For these reasons, recreation and park facilities are often located on less visible and less accessible sites, which are relatively low cost, that are not sought by commercial interests.

Given the apparent institutionalization of the equal input guideline (Number 3) in the 14th Amendment to the U.S. Constitution, and the perceived (but incorrect) popular connotation of equality with equity, it was anticipated that there would be much greater support for this approach. The relatively small majority in support reported here contrasted with the findings reported by Wicks and Crompton (1986), who found overwhelming support for this guideline among their probability sample of Texans. However, part of the support in the Texas study may have been attributable to the trade-off nature of the question formats, which forced responses relative to only one or two other equity guidelines. In the Austin study, equal treatment of all areas was consistently ranked third of the eight guidelines across all seven services, behind the heavy use and fewest facilities rules.

The logit models identified population subgroups that were significantly associated with agreement or disagreement with each of the models. Those in the lowest income cohort were significantly more likely to oppose the direct price guideline and to support the compensatory guideline that was consistent with the finding of "overall income level increased," support also were significantly more in line with mirrored findings in the Texas study and significantly associated with an age.

The least support for the heat distribution guidelines was for the have-nots who, whereas the "have hots" were the recreation field traditionally was viewed in the recreation dimension was a direct result of urban areas. Over time, the content of society's movement toward a pronounced shift away from the review of a plethora of direct fees, special findings of this study and of the other studies that this shift away from complaints by high-income groups. Their last reflects perceived self-interest, as their higher incomes and education support the compensatory approach to service.

Level of education was somewhat higher with the direct price paid, equal cost guideline. The lowest level of education guidelines than were those with the least formal model, this direction was anticipated finding because levels of education (Howard & Crompton, 1980). In their Texas study, years of education increased, supporting the result of income areas decreased" (p. 3).

Those with the least formal education have a least cost alternative approach, which is least likely to offend the sensibilities of the more precisely oriented patron orientation and the size of group approach. The youngest groups, those in the oldest age cohort, are the source of primary usage studies (Howard & Crompton, 1980), and important in facility development studies.

Younger people and households tended to be more supportive of a group and households containing children because usually it is older people with their requests for services. In both Austin and Texas studies. For all recreation services examined in "In every service model there is support for this advocacy option increased" (p. 29).
of the eight allocation guidelines support from more than half the sting facilities are most heavily ties. These guidelines were not y also emerged as the two most vident appear to have been im guideline, under which resources pople (Wildavsky, 1979). Osten ing resources, but it may harbor hnicity or level of income. Both matic approaches that recognize maximize visitor use per publical connotations that accompany those of responding to the most east, were ranked sixth and sev ted them in both the California mpton, 1987). The first of these mpton, 1986), and only 23% of a community whose citizens are parks.” Although respondents in table indicator of demand, re the evidence of demonstrated. Despite its low rating among priority to areas where the cos option to many decision makers. chaise prime locations for recre tion is too high, or because the ex tax rolls would adversely mation and park facilities are of relatively low cost, that are not input guideline (Number 3) in received (but incorrect) popular hat there would be much greater y in support reported here mpton (1986), who found overility sample of Texans. However, tributable to the trade-off nature y to only one or two other equity as was consistently ranked third the heavy use and fewest facilii that were significantly associated els. Those in the lowest income et price guideline and to support the compensatory guideline than were those in the highest cohort. This latter finding was consistent with the finding of Wicks and Crompton (1986) in their Texas study that as income level increased, “support for allocation on need decreased” (p. 357). Minorities also were significantly more likely to agree with the compensatory guideline. Again, this mirrored findings in the Texas study, but this was the only model in which ethnicity was significantly associated with agreement or disagreement.

The least support for the compensatory equity guideline came from the “haves,” whereas the “have nots” were the most supportive of that option. The parks and recreation field traditionally was viewed as a welfare services, and the evolution of its recreation dimension was a direct response to the needs of the economically disadvantaged in urban areas. Over time, the compensatory orientation was broadened to equality, reflect ing society’s movement toward egalitarianism. In the past decade, there has been a pronounced shift away from the egalitarian notion toward market equity, manifested by a plethora of direct fees, special taxing districts, revenue bonds, and enterprise funds. The findings of this study and of the earlier Texas study (Wicks and Crompton, 1986) suggest that this shift away from compensatory equity has substantial support from middle- and high-income groups. Their lack of support for the compensatory guideline presumably reflects perceived self-interest. As a greater proportion of American families achieve higher incomes and education levels, it seems likely that there will be less support for the compensatory approach to resource allocation.

Level of education was shown to significantly affect agreement and disagreement with the direct price paid, equal inputs, and least cost alternative guidelines. Those with the lowest level of education were significantly more supportive of all three equity guidelines than were those with a high level of formal education. In the direct price paid model, this direction was antithetical to that of level of income, which is an unusual finding because levels of education and income are frequently closely related (Howard & Crompton, 1980). In their Texas study, Wicks and Crompton (1986) reported that “as years of education increased, support for disproportionate allocation of resources to low income areas decreased” (p. 357).

Those with the least formal education also were significantly more supportive of the least cost alternative approach. This approach is politically expedient and appeared to offend the sensibilities of the more highly educated, who presumably recognized the lack of patron orientation and the spatial inequities that are likely to be inherent in such an approach. The youngest group was significantly less supportive of this guideline than those in the oldest age cohort. Younger respondents typically emerge as high users in usage studies (Howard & Crompton, 1980) and may thus regard other attributes as more important in facility development than the least cost criterion.

Younger people and households with one or no persons in them aged 65+ years tended to be more supportive of the vociferous advocacy guideline than the over-65 group and households containing two or more people aged 65+. This was surprising because usually it is older people who are portrayed as being more vocal and assertive with their requests for services. These findings are different from those reported in the Austin and Texas studies. For example, in the case of all seven types of park and recreation services examined in the Austin study, Wicks and Crompton (1990) reported, “In every service model there was a positive relationship between residents’ ages and support for this advocacy option. As residents’ ages increased, their support for this option increased” (p. 29).
Concluding Comments

The allocation of resources to services determines who receives the benefits of government activities. Yet the criteria used for this allocation are rarely overtly considered. Judgments about equity require judgments about values. The intent of this article was to illustrate the contribution that normative studies of equity can make to the process of planning the delivery of recreation and park services. Equity is frequently ignored in such processes, but an awareness of a population’s equity perspective can facilitate more responsive decision making and identify sources of potential conflict.

The equity guidelines presented in this sample represent a comprehensive set of alternatives for allocating resources. They provide a context within which the perceived relative appropriateness of any one guideline can be evaluated. For example, agencies increasingly are surveying residents about charging higher prices. Whatever particular allocation criterion option is presented, there will be some proportion of the population opposed to it. When all of the alternatives are presented, the magnitude of this opposition can be placed in perspective relative to the other guidelines. If an administrative goal is to reduce controversy, then selection of the option that receives the most consensus (in this study, Number 8 in Table 1) is likely to contribute to this end.

This study was normative, in that it attempted to identify the equity preferences of a sample of Californians. Few such studies have been reported in the literature. Most reported equity studies have measured actual distribution, documenting existing service distribution patterns. These studies were based on spatial areas. Typically, they were concerned with identifying differences between neighborhoods and seeing whether there were patterns in those differences that related to particular traits, especially ethnic composition. The consensus of these studies is that services did not disproportionately and consistently accrue to any class or race, so there were no consistent patterns. By contrast, this study revealed definitive patterns of equity preferences, but these tended to be based on income, education, age, and household structure. Patterns based on ethnic background were apparent only in the compensatory equity model.

The results of this study provide insight into the equity perspectives of California residents toward park and recreation allocation decisions at a particular point in time. As the financial and political environments change and recreational preferences shift, the nature of users’ attitudes toward equity models is likely to change.

Empirical investigations of equity are in their infancy in the parks and recreation field. An urgent methodological challenge to be addressed by future research efforts is the need to develop multi-item scales to improve the operationalization of the eight equity guidelines. Because the single-item scales used in this study do not provide sufficient information to estimate their measurement properties, it is difficult to assess the validity and the reliability of the responses. This is a particularly important concern in this context because a preferred equity concept for the delivery of public park and recreation services may be an issue that residents have not previously considered, and it is sufficiently complex that it may not easily be grasped. Furthermore, single-item measures are often inherently less reliable than multi-item scales and thus are more prone to random error.

Adding more items increases the probability that respondents capture the exact meaning of what the researcher is seeking to find (McIver & Carmines, 1981). Multi-item scales are more likely than single-item scales to represent the full dimensionality of each of the eight equity guidelines. For example, the demonstrated use equity guideline requires that higher priority should be given either frequency of visitation or

A further limitation of this study is the three components of attitude: (Ajzen, 1975). In this study emphasis toward belief and a need to move beyond belief and behavior toward an equity actually carry out an action. Such belief and behavior toward an equity example, an individual who want to referendum situation, select an least cost alternative.

References

Jones, B. D., Greenberg, S., & Longman.
requires that higher priority should go where services are the most used; this could infer either frequency of visitation or length of use time or both.

A further limitation of the single-item scale is that it is unable to incorporate all three components of attitude: belief, evaluation, and behavioral intention (Fishbein & Ajzen, 1975). In this study each equity scale contained only a belief statement (e.g., “higher priority should go”); it should also include emotions or feelings expressed toward that belief and a measure of predisposition toward action, such as dedicating various efforts (e.g., money or persuasion) to supporting that equity approach. There is a need to move beyond belief and evaluation and to measure behavioral intention. A positive attitude toward an equity model does not necessarily mean that individuals will actually carry out an action. Such an extrapolation assumes consistency between attitude and behavior toward an equity approach, and this assumption may be fallacious. For example, an individual who agrees to the least cost alternative approach may, in a referendum situation, select an alternative closest to his or her residence rather than the least cost alternative.

References


Listokin (Eds.), Cities under stress: The fiscal crisis of urban America. Piscataway, NJ:
Center for Urban Policy Research.
Mladenka, K. R. (1985. April). The myth of the machine and the decline of racial politics:
Distribution in Chicago. Paper presented at the annual meeting of the American Political
Science Association, New Orleans.
Mladenka, K. R., & Hill, K. Q. (1977). The distribution of benefits in an urban environment:
tives for delivering public services (pp. 309–331). Boulder, CO: Chandler.
agenda. Urban Studies, 16, 143–156.
Thomas, J. C. (1986). The personal side of street-level bureaucracy: Discriminating neutral com-
petence. Urban Affairs Quarterly, 22, 80–100.
#8-6223.
Wicks, B. E., & Crompton, J. L. (1986). Citizen and administrator perspectives of equity in the
preferences, service type and decision making groups in a U.S. city. Journal of Leisure
Research, 19, 189–204.
for implementing equity concepts in Austin, Texas. Journal of Urban Affairs 11, 169–188.
Wicks, B. E., & Crompton, J. L. (1990). Predicting the equity preferences of park and recreation
department employees and residents of Austin, Texas. Journal of Leisure Research, 22, 18–35.
Little, Brown.