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Perceived Constraints to Park Usage Among Individuals With Low Incomes

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ABSTRACT: The purpose of this paper was to determine what constraints limited poor people's use of public parks in Greater Cleveland, and whether proposed changes in park delivery might result in greater park visitation among people with low income. Among the various population characteristics included in these analyses, income was the single best predictor of perceived constraints to park visitation. Individuals with low incomes reported that their use of parks was limited by fear of crime, lack of companionship, poor health, transportation problems, and costs. A disproportionate number also stated they might use parks more if they are made safer and located closer to home, travel time to parks is reduced, public transportation to parks is provided, costs associated with going to parks are reduced, and they are provided assistance in the care of children and other family members.

KEY WORDS: Urban poor, urban parks, leisure constraints, income

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The origins of public and quasi-public park and recreation delivery are rooted in the social reform era of the late 19th and early 20th centuries (Duncan, 1991). Early park and recreation proponents believed that cities should provide park and recreation services for disadvantaged groups. Indeed, from 1900 to 1930, a major goal among many public park and recreation providers was to establish parks or extend existing park and recreation facilities in neighborhoods with high concentrations of people with low incomes (Cranz, 1982). Even today, there is a general belief among park and recreation professionals that people with low incomes have a greater need for government park and recreation services. Yet efforts to reach the poor[1] have been greatly compromised in recent decades as park and recreation agencies have become more business-like in order to effectively deal with rising costs of providing basic services (Sessoms, 1993). The problems of the poor, nevertheless, remain acute and will require creative solutions if they are to be solved. In this paper, we focused on non-use of public

parks in Greater Cleveland among people with low income. Specifically, we sought to answer two questions: (a) what are the unique constraints, if any, that impact poor people's use of public parks? and (b) what changes in park delivery might result in greater park visitation among those with low incomes?

Literature Review

Equal access to economic resources is not the norm in most countries (Kelly & Godbey, 1992; Osberg, 1984). Within countries grounded in market economies, such as the United States, there are vast differences in wealth and income within the population (Lenski, 1966; Tumin, 1967). In 1986 the bottom fifth of the U.S. population received 3.8 percent of the income while the top fifth received 46.1 percent (United States Bureau of the Census, 1990).

While there is general agreement that there is economic inequality in the United States, there is less agreement on what constitutes a low income (Wilson, 1987). Low income is sometimes reported in terms of the poverty line. As originally formulated by the Social Security Administration in 1964, the official poverty line was drawn by combining the smallest amount of money it costs to feed a family and estimating the proportion of yearly family income directed to food purchasing. Despite the ease by which this definition lends itself to comparisons, some critics have argued that it understates the problem of low income (see Wilson, 1987, p. 170). Social researchers are, therefore, much more likely to rely on a theoretical definition of low income. Here, a low income is defined less in terms of some "real" condition and more in terms of an abstract category.

When defined as an abstract category, we tend to look at how income influences access to resources, lifestyle, or, more simply, life chances. In general, low income has been shown to have a deleterious impact on a person's life chances. In the United States, the poor are far more likely to be limited in terms of their choice of residence and neighborhood, schools for their children, and access to food and health coverage and more likely to be victims of crime, drug addiction, mental illness, broken families, and infant mortality (Wilson, 1987).

The effects of low income on leisure behavior are also well documented. Over 30 years ago, de Grazia (1962) reported that people with low incomes spend one-fifth the amount of money on recreation and recreation equipment than those with high incomes. Cheek and Burch (1976) showed that people with low incomes traveled far fewer miles and spent far less money while traveling than individuals with average and high levels of income. Low income also has been found to be related to lower levels of participation in artistic activities and events (Robinson, 1994), museums and zoos (Hood, 1993; Scott, 1994), physical fitness activities (Shaw, Bonen, & McCabe, 1991), and a number of outdoor recreation activities (Howard & Crompton, 1980).

Clearly, low discretionary income makes leisure participation problematic. Kelly and Godbey (1992) noted that the very notion of discretionary income is a meaningless term for persons who are poor. But exactly how does low income

constrain leisure involvement? Not surprisingly, low income limits access to the resources and skills necessary to participate in a range of activities. This point of view is emphatically supported by Chubb and Chubb (1981): "The poor do not have the recreation rooms, landscaped backyards, automobiles, recreation vehicles, seasonal homes, and other amenities that enhance the recreation environments of those with higher incomes" (p. 94). Some have pointed out that low income limits the *expression of tastes* (Howard & Crompton, 1980). Increases in income, thus, would provide the means by which people could act upon their leisure preferences. While this may be true, it is highly probable that low income also impacts leisure preferences. Those with higher incomes have the skills and resources to experiment with different leisure styles and are likely to have a broader knowledge of what leisure services, activities, and locales are available.

Although persons with low incomes may be more dependent on public provision of park and recreation resources, studies have indicated that the poor participate in public park and recreation programs at a lower rate than the general population (Howard & Crompton, 1984; Godbey, Graefe, & James, 1992). A number of writers have argued that reform initiatives on the part of park and recreation professionals have taken a back seat to problems associated with reduced budgets and rising costs of providing services (Cranz, 1982; Sessoms, 1993). These conditions are much more acute in large urban areas than many suburbs and smaller communities. Indeed, Kraus (1990) indicated that in the three decades following World War II a two-track, "have" and "have not" park and recreation system developed. The result of inadequate funding in the cities led to rapid deterioration and limited program operations for poor persons. In the suburbs, however, where parks and recreation continued to receive strong financial support (particularly for large county park and recreation systems), residents have continued to enjoy a wide array of services and opportunities.

The tide may be turning. A recent study reported by Whyte (1992) indicated a growing concern among park and recreation professionals in providing access to the disadvantaged. To assist park and recreation professionals in this endeavor, more research is needed to reveal the unique constraints that have an impact on poor people's use of public park and recreation services.

While there are few such studies that have directly focused on the constraints that limit poor people's use of public park and recreation services, research on leisure constraints in general indicates that income is highly related to the perceived intensity of different leisure barriers. Two Canadian studies are particularly noteworthy because they both show that *the poor are more severely impacted by leisure constraints than any other population group.* In one of these studies, Searle and Jackson (1985) reported that individuals with low income were much more likely than others to state that their leisure involvement was limited by an absence of partners, high admission prices, a lack of information about recreation sites, shyness, a lack of artistic ability, gasoline prices, a lack of physical abilities, and a lack of transportation. In the other Canadian study, McCarville and Smale (1993) found that low income was associated with constraints such as costs, lack of companionship, transportation problems, lack

of information, programs not being available, health problems, and the perception that there are not enough activities for one's age, language or ethnic group. Other studies support these general findings. McGuire (1984) reported that among older adults in the United States, income was negatively related to constraints associated with physical well-being (lack of energy, health factors, and fear of getting hurt). Kay and Jackson (1991) found that leisure opportunities among individuals with low income in England were constrained as a result of transportation problems.

The purpose of this paper was to determine what unique constraints, if any, limited poor people's use of public parks in Greater Cleveland. By using data from a sample of residents of a large urban area in the United States, this paper extends findings from Canadian data about the effects of income on the perception of leisure constraints. The study also provided a unique opportunity to determine whether proposed changes in park delivery might result in greater park visitation among the poor. These findings are important, given the need to involve the poor in making decisions that affect their lives (Hultsman, Kaufman, & Hultsman, 1986).

Study Area and Procedures

The research was conducted by Cleveland Metroparks with the cooperation of the Survey Research Center at the University of Akron, in October and November 1991. The study area included residents of Greater Cleveland. Greater Cleveland includes residents of seven counties in northeast Ohio (Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, and Summit). Greater Cleveland, which is predominantly urban, had a 1990 population exceeding 2.7 million. The two largest cities in the region include Cleveland and Akron. According to 1990 census data, twenty-four percent of residents of Greater Cleveland had family incomes of less than $15,000; 52 percent had family incomes of between $15,000 to $49,999, and 24 percent had family incomes of $50,000 or more. The 1990 poverty rate in the region was 12 percent.

Using random digit dialing, 1,054 people (a sixty percent response rate) in Greater Cleveland were interviewed about their use of public parks in the region. The sample of telephone numbers was purchased from Survey Sampling, Inc. Interviews were conducted on weekdays primarily during the evening hours. Respondents were selected by choosing the household member who celebrated the most recent birthday and who was 18 years of age or older.

The sample differed from the population in Greater Cleveland in some important ways. Individuals with low family incomes were under-sampled, as were males, Blacks, and individuals who did not graduate from high school. The age distribution of the sample resembled that of the Greater Cleveland area.

Respondents were asked how frequently they used public parks in the Greater Cleveland area. Because the focus of the study was on general park use, there was no effort to differentiate what kind of parks people used or visited (e.g., playgrounds, city parks, regional or "metro parks," lake front parks, etc.). Subsequent analyses were performed only on nonusers and infrequent users of

parks (respondents who said they used parks less than once a month). This resulted in a reduced sample size of 636. Due to missing data for the variables of interest, the sample size was reduced further. Missing data for all independent variables were deleted on a listwise basis; missing data for the dependent variables were deleted on a pairwise basis.

Nonusers or infrequent users were asked to indicate whether different factors were *very important, somewhat important,* or *not important* in limiting their use of parks. The items were similar to those used in previous constraints research (e.g., Buchanan & Allen, 1982; McGuire, 1984). Each item was scored from 1 to 3 (1=not important, 2=somewhat important, 3=very important).

Non-users and infrequent users were also asked whether certain changes in park operations or programming might result in their using public parks more often. These "change" items represent potential solutions to the kinds of constraints limiting people's use of parks. The response categories for the change items were limited to "yes" (a change might result in greater use of parks) and "no" (a change probably would not result in greater use of parks). For purposes of analysis, yes was coded 1 and no was coded 0.

Demographic data were also collected from respondents. Income, the primary variable of interest here, was measured in terms of yearly family income. Nine categories of income were used ranging from less than $5,000 (1) to over $75,000 (9). This number of income categories was chosen to ensure a wide range of variability among income groups. Control variables included sex (0=females, 1=males), age (measured in years), race (0=Blacks, 1=Whites)[2], and level of education (measured using the following five categories: (1) *did not graduate from high school,* (2) *high school graduate,* (3) *technical school,* (4) *college graduate,* and (5) *post-graduate*).

The analysis was conducted in two phases. First, we cross-tabulated the constraints items and change items with the income variable. For purposes of summary, response categories for income were recoded into four income groups (less than $15,000; $15,000-$29,999; $30,000-$49,999; $50,000 or more). These four income categories were chosen merely to show the nature of the relationships between income and the constraints and change items. Significant relationships (p-values) between income and these items are reported. Chi-square tests were used for this purpose. Second, step-wise regression was used to test whether income and the demographic variables were significantly related to the constraints and change items.[3] Stepwise regression is designed to choose from a set of independent variables the one variable, at each stage of analysis, that has the largest contribution to R-square (Cohen & Cohen, 1983) This procedure provided a basis for testing the net effect of income after controlling for the effects of other variables in each regression equation. Income was measured here in terms of the original nine response categories. For summary purposes, standardized Beta coefficients are reported. A standardized Beta coefficient signifies the amount of change in a dependent variable that is produced by a standardized change in an independent variable after controlling for the effects of other variables. In general, variables with the highest standardized Beta coefficients (positive or negative) are the most predictive of a given dependent variable.

Results

Table 1 provides a summary of the characteristics of respondents cross-tabulated by frequency of park visitation. Nonusers of parks (people who said they do not use parks in Greater Cleveland) comprised just over one-quarter of the sample. This is almost identical to a national figure reported by Godbey, Graefe, and James (1992). Infrequent users comprised one-third of the sample, and about four of ten respondents said they visited parks on a regular basis (at least once a month). Park visitation in Greater Cleveland varies greatly across demographic groups. Those with low incomes were three times more likely than those with high incomes to be non-users. Low levels of park visitation were also evident among females, older adults, Blacks, and individuals with lower levels of education.[4]

Table 1
Frequency of Park Visitation Broken Down by Population Groups

Population Group[a]	Sample Size	Non-Users %	Infrequent Users %	Frequent Users %
Total Sample	1,054	27.3	33.1	39.6
Sex				
Females	631	30.7	35.0	34.2
Males	423	22.2	30.3	47.5
Age				
18-24	80	25.0	33.8	41.3
25-44	495	13.9	34.5	51.5
45-54	148	29.1	31.8	39.2
55-64	132	37.1	38.6	24.2
65-74	124	46.8	29.8	23.4
75+	64	68.8	15.6	15.6
Race				
Blacks	91	38.5	42.9	18.7
Whites	934	26.2	32.1	41.6
Level of Education				
Did not finish high school	87	56.3	27.6	16.1
High school graduate/technical school	603	32.2	31.2	36.7
College graduate	263	12.5	36.9	50.6
Professional degree	98	11.2	40.8	48.0
Annual Family Income				
Less than $15,000	129	54.3	24.8	20.9
$15,000-$29,999	266	30.1	31.6	38.3
$30,000-$49,999	289	17.3	38.4	44.3
$50,000+	224	17.0	35.7	47.3

[a] Due to missing data, the sample size for individual population groups do not add up to 1,054 (total sample size).

A correlation matrix of the independent variables is provided in Table 2. Correlations were calculated for only nonusers and infrequent users of parks. Among the nonusers and infrequent users included in this study, income was significantly related to all of the other independent variables. Income was positively related to education and negatively related to age. Males reported higher incomes than females, while Whites reported higher incomes than Blacks. Females were significantly older and had significantly less education than males in the sample. A negative relationship was observed between education and age: among those sampled, education level decreased with age.

Table 2
Bivariate Correlation Coefficients Among Independent Variables
(Sample Size=529)

	Age r	Race r	Education r	Income r
Sex[a]	-.116**	-.023	.116**	244***
Age		.031	-.174***	-.359***
Race[b]			.077	.107*
Education				.436***

[a] 0 = Females, 1 = Males. [b] 0 = Blacks, 1 = Whites.
* ≤ .05, ** ≤ .01, *** ≤ .001

Table 3 summarizes responses for 13 different constraints along with a cross-tabulation of the responses by the four recoded income groups. For summary purposes, only totals for the "very important" response categories are provided here. A cross-tabulation of the data revealed dramatic differences among income groups in terms of perceived constraints to park visitation. In fact, there was significant variation across income groups for all but two of the constraints (*lack of information* and *don't like outdoor recreation*).

Time constraints and outside commitments (busy with other activities and busy with family responsibilities) were the most important factors that limited park visitation for the sample as a whole. Nearly 50 percent of all non-users and infrequent users cited time constraints and outside commitments as being very important in limiting their use of parks. As might be expected, time constraints and outside commitments were likely to be perceived among those in the higher income groups. While fear of crime was a very important barrier to one-third of those surveyed, those in the lowest income category were more likely to perceive this as a barrier to park visitation (53 percent). One-quarter said pursuing recreation elsewhere was very important in limiting their use of parks;

Table 3
Chi-Square Analyses of Relationships of Family Income to Constraints to Park Visitationa

Constraint Items	Sample Size	Total Sample %	FAMILY INCOME Less than $15,000 %	$15,000-$29,999 %	$30,000-$49,999 %	$50,000+ %	Chi-Square Probability
Lack of time	493	46.0	29.6	39.6	49.7	62.4	.001
Busy with other activities	527	42.3	25.0	38.0	49.4	54.0	.001
Busy with family responsibilities	527	35.1	19.2	30.0	45.5	42.0	.001
Fear of crime	527	31.9	53.0	34.6	27.1	15.9	.001
Pursue recreation elsewhere	520	25.6	28.1	15.9	27.3	34.5	.01
Lack of information	523	20.8	18.0	19.5	23.7	21.4	ns
No one to go with to parks	528	15.5	34.3	19.4	6.4	6.2	.001
Poor health	529	15.3	33.0	16.9	11.5	2.7	.001
Parks are too far away	526	12.9	33.0	10.6	5.8	8.1	.001
Don't like outdoor recreation	526	12.9	18.2	13.9	12.8	7.1	ns
No way to get to parks	529	10.8	35.0	9.4	3.2	1.8	.001
Lack public transportation to parks	526	10.6	28.0	11.3	5.8	0.9	.001
Cost too much	502	5.8	15.1	7.3	2.7	0.0	.001

[a] Percentages correspond to the proportion of respondents who said a constraint was "very important" in limiting their use of parks.

apparently, these respondents focused their interests and/or resources on other activities. Moreover, this appeared to be less constraining among nonusers and infrequent users with family incomes ranging from $15,000 to $29,999. Lack of information about parks was very important to one-firth of those surveyed, a pattern relatively constant across income groups. For the sample as a whole, companionship, poor health, transportation problems (parks are too far away, no way to get to parks, and lack public transportation to parks), and costs were far less constraining than other factors. However, each of these factors were significantly more constraining among individuals with lower incomes. Particularly striking were the differences among income groups in their responses to the three transportation items. Those with low income (less than $15,000) were more than 4 times more likely than those with the highest income ($50,000 or more) to say that their use of parks was limited by parks being too far away, 19 times more likely to cite not having any way to get to parks, and 31 times more likely to cite lack of public transportation.

To repeat, regression analysis provided a basis for testing whether or not income was significantly related to the constraints items after controlling for the effects of sex, age, race, and level of education. Table 4 summarizes the stepwise regression analyses for the relationship of the 5 demographic variables to the 13 different constraints items. Results from this procedure revealed that income was significantly related to all but one of the constraints (lack of information). Income was not only a good predictor of perceived constraints to park use, it was a better predictor than the other variables: age was significantly related to eight of the thirteen constraints; level of education was significantly related to five constraints; sex was significantly related to three constraints; and race was significantly related to only one constraint. In addition, income had the highest standardized Beta coefficient in 9 of the 13 regression equations. This means that income was the single best predictor of nine perceived constraints.

Respondents were asked to identify which, if any, changes planners and programmers could make that would result in their making greater use of parks. Results were informative, particularly when responses were cross-tabulated by the four recoded income groups (Table 5). Chi-square analysis revealed that income was significantly related to all but two of the changes (*provide more information* and *provide more activities*). Over 70 percent of all non-users and infrequent users said they might use parks more if parks were made safer and if more information is provided about existing parks and park programs. Those in the lowest income group were the most likely to say they might use parks more if they were made safer (86 percent). Over half said they might use parks more if more activities were provided and if parks were developed closer to home. Again, those with low income were significantly more likely to state they might use parks more if parks were developed closer to home. Less than four-out-often said they might use parks more if travel time to parks were reduced, assistance were provided in the care of children or other family members, costs associated with going to parks were reduced, and public transportation to parks were provided. In each of these four instances, low incomes earners were the most likely to state that they would use parks if the changes were implemented.

Table 4
Significant Results of Stepwise Regression for Predicting Constraints to Park Visitation[a]

Constraint Items	Sample Size	Sex[b] Beta	Age Beta	Race[c] Beta	Education Beta	Income Beta
Lack of time	493	—	-.307***	—	—	.195***
Busy with other activities	527	—	-.206***	—	—	.171***
Busy with family responsibilities	527	-.159***	-.290***	—	-.154***	.256***
Fear of crime	527	-.142***	—	—	-.109*	-.177***
Pursue recreation elsewhere	520	—	-.093*	—	—	.128**
Lack of information	523	—	-.223***	—	-.095*	—
No one to go with to parks	528	-.124**	.170***	—	—	-.181***
Poor health	529	—	.155***	—	-.094*	-.216***
Parks are too far away	526	—	—	—	—	-.197***
Don't like outdoor recreation	526	—	—	—	—	-.157***
No way to get to parks	529	—	.136**	—	—	-.308***
Lack public transportation to parks	526	—	—	—	—	-.307***
Costs too much	502	—	—	-.138**	-.109*	-.187***

[a] Only significant standardized Beta coefficients are reported here. [b] 0 = Females, 1 = Males. [c] 0 = Blacks, 1 = Whites.
* ≤ .05, ** ≤ .01, *** ≤ .001

Table 5

Chi-Square Analyses of Relationships of Family Income to Changes That Might Result in Greater Use of Parks[a]

Change Items	Sample Size	Total Sample %	FAMILY INCOME Less than $15,000 %	$15,000-$29,999 %	$30,000-$49,999 %	$50,000+ %	Chi-Square Probability
Make the parks safer	523	71.5	86.0	75.5	68.8	56.4	.001
Provide more information about existing parks and park programs	528	71.0	70.0	68.6	71.8	74.3	ns
Provide more activities	514	55.6	63.9	49.0	56.9	56.0	ns
Develop parks closer to home	527	51.2	64.0	49.4	50.0	44.2	.05
Reduce travel time to parks	526	40.5	53.6	40.6	36.5	34.5	.05
Provide assistance with the care of children or other family members	521	39.3	54.2	39.9	37.4	28.6	.05
Reduce costs associated with going to parks	511	37.8	53.2	40.6	32.9	27.3	.001
Provide public transportation to parks	525	32.8	61.0	32.9	24.0	19.5	.001

[a] Percentages correspond to the rate of agreement to each of the proposed changes.

Table 6
Significant Results of Stepwise Regression for Predicting Whether Changes Might Result in Greater Use of Parks[a]

Proposed Changes	Sample Size	Sex[b] Beta	Age Beta	Race[c] Beta	Education Beta	Income Beta
Make the parks safer	523	-.179***	—	-.103*	—	-.152***
Provide more information about existing parks and park programs	528	—	-.210***	—	—	—
Provide more activities	514	—	-.165***	-.128**	—	—
Develop parks closer to home	527	—	-.145**	—	—	-.164***
Reduce travel time to parks	526	—	—	-.163***	—	-.100*
Provide assistance with the care of children or other family members	521	—	-.140***	—	—	-.208***
Reduce costs associated with going to parks	511	—	—	—	—	-.165***
Provide public transportation to parks	525	-.119**	.106*	-.151***	—	-.203***

[a] Only significant standardized Beta coefficients are reported here. [b] 0 = Females, 1 = Males. [c] 0 = Blacks, 1 = Whites.
* ≤ .05, ** ≤ .01, *** ≤ .001

Results of the step-wise regression (Table 6) indicate that even after the effects of other variables are controlled, income was a strong predictor of responses to the changes that planners and programmers could make to reduce constraints to park usage. Income was significantly related to six of the eight proposed changes, more than any other variable. In comparison, age was significantly related to five items; race was significantly related to four items; sex was significantly related to two items; and level of education was not significantly related to any of the items. Income had the highest standardized Beta coefficients in four of the eight regression equations, meaning that income was the best predictor for four of the proposed changes.

Conclusions and Implications for Professional Practice

Findings from this study support and extend those from Canadian studies reported by Searle and Jackson (1985) and McCarville and Smale (1993). Among the population characteristics included in these analyses, income was the single best predictor of perceived constraints to park visitation. This was true even when controlling for the effects of sex, age, race, and level of education. Individuals with low incomes reported that their use of parks was constrained by fear of crime, lack of companionship, and poor health. Accessibility and transportation problems also were perceived as being problematic among those with low incomes. Here, people with low incomes were far more likely than others to state that they did not use parks more often because parks were located too far away, they had no way to get to parks, and public transportation to parks was unavailable. While only 15 percent of individuals in the lowest income category reported costs as a constraint to park visitation, this was far more than individuals with high incomes. In fact, not a single respondent with a reported income of $50,000 or more said that costs were very important in limiting their use of parks in Greater Cleveland.

Would the removal of these constraints result in greater use of parks among individuals with low incomes? Findings from this study indicate that this is a possibility. People with low incomes were more likely than those with high incomes to state they might use parks more if parks were made safer and located closer to home, travel time to parks were reduced, public transportation to parks were provided, and if costs associated with going to parks were reduced. Those reporting low income were also more likely to state they might use parks more if they were provided assistance in the care of children and other family members.

Early park proponents believed that class differences would be neutralized within park boundaries (Cranz, 1982, p. 183). Furthermore, public parks were believed to be a boon to people with low incomes. Results from this study suggest that people with low income in Greater Cleveland tend to use public parks infrequently or not at all, and that greater use of parks is limited by a number of perceived constraints. The challenge in providing park and recreation services for the urban poor in America is similar to the challenge in providing recreation services to special population groups in general (Sessoms, 1984). It is necessary

to understand and appreciate the conditions that make the group special and that potentially act as barriers. Two general guidelines for doing this include (a) greater participant input, and (b) a balance of marketing and human-service approaches (Kraus, 1990).

Participant Input

Crompton (1991) pointed out that, when serving a given target population (in this case people with low income), it is essential for park and recreation agencies to create products (i.e., activities, facilities, programs and services) that are relevant to their special needs. This basic marketing principle is at odds with the long held belief among many park and recreation professionals that they are in the business of "providing the facilities, services and program which they consider to be the most appropriate, as efficiently as they are able, within the resources that they have available" (Crompton, 1991, pp. 214). Park and recreation professionals must look more critically at their services vis-a-vis the needs of low income populations. What benefits do people with low income seek from public parks? Most park and recreation professionals probably cannot answer this question. Clearly what is needed is a revitalization of democratic decision making and empowerment of people with low incomes via advisory boards, tasks forces, neighborhood planning groups, parks and recreation boards and volunteer organizations, and appropriate research methodologies. It is also incumbent upon professionals to go beyond traditional needs assessment methods in order to obtain information which persons frequently are unable to articulate during the needs assessment process (Molnar & Rutledge, 1986). For example, Ron Izumita, of POD Inc., used innovative input methods in the development of the nationally known "Skid Row Park" in Los Angeles. He observed persons at the designated site, obtained needs surveys, and asked them to complete three dimensional park models (using cups and sticks) to elicit greater interest and sustained park participation (Molnar & Rutledge, 1986).

Balance of Marketing and Human Services Approaches

While marketing and human services approaches to park and recreation delivery often appear to be at odds with each other, a balance of the two may be necessary when serving people with low incomes. Many park and recreation professionals suffer from a "Field of Dreams" mentality. We implicitly believe that, by simply building facilities and programs our target populations will surely use them. Failure to attract low income people to parks and park programs may have little to do with lack of interest as much as problems that may (or may not) be outside the control of the agency. Of particular importance here are the issues of transportation and crime. In this study, results clearly indicated that people with low incomes were "transportation disadvantaged," a situation not unrelated to that experienced by persons who have physical disabilities. Innovative outreach strategies need to be devised by park officials that facilitate greater park visitation among people with low income. Partnerships with public/private transportation agencies may need to be fostered to ensure special bus or van services and/or re-routing of existing bus routes. In other cases, where such

efforts are not feasible, bringing park and recreation programs to the people may be the next best alternative (Needham, 1994).

A second major constraint to park usage among people with low incomes was fear of crime. Park and recreation agencies must be committed to bolstering existing law enforcement programs, including highly visible car and bicycle patrols, facility surveillance, and strategic placement of telephones for receiving and responding to distress calls. Park managers can also encourage visitors to police themselves. For example, in one state park that was having problems with motorcycle gangs vandalizing park property and harassing visitors, park management initiated a plan that required large groups to register 24 hours in advance and to have a designated "trip leader" responsible for reserving facilities. This simple management technique helped reduce gang problems dramatically by making the visitors more accountable for their own actions (Jubenville & Twight, 1993).

Suggestions for Future Research

The random digit dialing procedure resulted in an under-sampling of people with low income: only 12 percent of those surveyed had annual incomes of $15,000, compared to 24 percent in Greater Cleveland. Therefore, it is very likely that a limitation of this study was the use of telephone survey methods to study the perceived leisure constraints among people with low income. Other studies are clearly needed to determine the extent to which findings from this study can be generalized to other urban areas. Other research strategies are also needed to understand the leisure needs of people with low income, particularly methods that are in-depth in nature (e.g., in-depth interviewing, focus group research, participant observation). In addition, studies are needed that investigate the potential interactive effect of income and other variables, such as level of education, race, and age. Here we may discover that the relationship of income to perceived constraints varies for men and women, different levels of education, Whites and Blacks, and so on. Finally, studies are needed that further differentiate among different categories of poor people. Here we might explore whether there are differences in perceived constraints among people with low incomes who live in multiple dwellings versus single family dwellings, who reside in rural areas versus urban areas, and who live in households headed by females versus males.

Another limitation of this study is that it fails to determine exactly how constraints are experienced. Three major kinds of constraints were delineated by Crawford and Godbey (1987), each impacting leisure preferences and participation in different ways: intrapersonal, structural, and interpersonal. *Intrapersonal* constraints are those factors that are in one's mind that influence leisure preferences, such as personality needs, prior socialization, abilities, and perceived reference group attitudes. *Interpersonal* constraints are those that arise out of interaction with other individuals or limit participation because of an inability to locate suitable partners. *Structural* constraints are those external factors that intervene between leisure preferences and participation, such as

financial resources, family and work commitments, and availability of resources. In this study, we implicitly assumed that the constraints responded to were structural in nature. This assumption is tenuous. For example, transportation and accessibility problems associated with low income may actually impact a person's attitudes and beliefs about parks in general. This is a case where constraints actually interact with one another to make participation potentially problematic (Jackson, Crawford, & Godbey, 1993). Future research is necessary to determine exactly how people with low incomes experience constraints within the broader context of the leisure decision-making process.

More research is also necessary to explore under what conditions people with low incomes would actually visit parks. In this study we asked nonusers and infrequent users of parks whether certain changes in park delivery might result in greater park visitation. Although, income was an excellent predictor of individuals' responses to these change items, the focus of this study was on behavioral intentions rather than behavior itself. To actually study behavioral change, it might be necessary to use a research design that incorporates some form of experimental design. Field experiments and single-subject methods may be particularly useful in assessing the impact of changes in park delivery on changes on park usage among people with low income.

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Notes

1. The terms poor and people with low income are used interchangeably in this paper.

2. Hispanics and other non-white minorities comprise a very small segment of the population in Greater Cleveland, two percent. These minorities comprised less than three percent of the sample. Because of insufficient numbers, Hispanics and other minorities were excluded from these analyses.

3. While linear regression analysis typically does not employ dependent variables that are dichotomous in nature, this procedure is defended by Cohen and Cohen (1983). Indeed, we reanalyzed the data using logistic regression and found almost identical findings with those reported here.

4. Using regression analysis, we found that all five variables were significantly related to park visitation. Park visitation was positively related to income and education, negatively related to age, and higher for males than females, and higher for Whites than Blacks.