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Factors predicting the capacity of Los Angeles city-region recreation programs to promote energy expenditure

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ABSTRACT

An audit of recreation programs with moderate or higher levels of physical activity (PA) in Los Angeles area cities ($N=82$) was conducted using internet, telephone, and survey methods. Metabolic Equivalents (METs) were used to code programs' physical activity intensity. MET-hours per recreation program was associated with required age for enrollment, percent of residents >64 years of age, and fiscal capacity of cities. Capacity to promote energy expenditure may depend on targeted age groups, age of population, and municipal fiscal capacity. Cities with lower fiscal capacity might offer those higher MET-hour activities which require less specialized equipment and seek outside funding to offer higher MET programs.

1. Introduction

The availability and accessibility of parks may be an important environmental determinant of physical activity. As a result, parks may serve as an important resource in efforts to prevent and control obesity. Closer proximity to park and recreational facilities (e.g. living within one mile of a park) has been positively associated with higher levels of total physical activity and of park use (Brownson et al., 2001; Cohen et al., 2006; Kaczynski and Henderson (2007); Mowen, 2010; Godbey and Mowen, 2010). Baran determined that park use was positively related to park size and activity setting (e.g., playgrounds, basketball courts) size, type of activity setting, and the presence of sidewalks and intersections in the parks (Baran et al., 2013). Negative associations with park use were observed for crime, poverty and racial heterogeneity in neighborhoods surrounding the parks. The Trial of Activity for Adolescent Girls (TAAG), a study of adolescent girls across six cities, concluded that subjects who lived in areas where more parks were available within a one-mile radius of their homes, especially parks with active features (e.g. walking paths, running tracks, playgrounds, basketball courts), engaged in higher levels of physical activity than girls who lived near fewer parks (Cohen et al., 2006). Roemmich et al. (2006) found that for each 1 percent increase in park area within a community, there was a 1.4 percent increase in total physical activity among youth in that community. Access is not uniform with lower-income groups reporting limited access to parks and recreational facilities (Gordon-Larsen et al., 2006; Loukaitou-Sideris and Sideris, 2010; Mowen, 2010; Scott and Munson, 1994; Godbey and Mowen, 2010).

Several researchers have found that the proximity of park land to place of residence is associated with levels of physical activity occurring in the parks themselves (Bedimo-Rung et al., 2005; Cohen et al., 2007; Giles-Corti and Donovan, 2002; Grow et al., 2008; Mowen et al., 2007). Characteristics that may increase the amount of physical activity occurring within parks include the park's physical features (e.g. Esthetics and level of maintenance)

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(Bedimo-Rung et al., 2005; Coen and Ross (2006); Corti et al., (1997); Kaczynksi et al., 2008) and the number and types of amenities available in the parks (Cohen et al., 2007; Grow et al., 2008; Sister et al., 2007). A study of 100 parks in Los Angeles found that larger parks and parks with active features attracted more children (Loukaitou-Sideris and Sideris, 2010). Children using parks in Durham, N.C. were more likely to be physically active if the area of the park they chose to play in contained other active children and an increase in the number of recreation facilities in a park was associated with an increase in physical activity levels in organized play activities (Floyd et al., 2011). Kaczynksi et al. (2008) reported that parks with paved and unpaved trails, and wooded areas, produced higher levels of physical activity among park users while Corti, Donovan, and Holman (Corti et al., 1997) found that esthetically pleasing parks with tree-lined paths were more likely to stimulate physical activity than parks with empty open space.

Social characteristics and demographic factors may also be associated with physical activity occurring within parks. Social factors having a positive association with park usage include the friendliness of park staff, number and type of programs and events occurring in the park, and community involvement in park management (Cohen et al., 2009). In Loukaitou-Sideris and Sideris (2010) review of factors that bring children to parks, perceived safety and neighborhood sociodemographic characteristics were associated with park visitation and physical activity. Perceived lack of safety may discourage people from using parks and open spaces (Molnar et al., 2004). Mowen reviewed studies conducted on park use and found that fear of crime was a barrier to local park usage and that adults who perceived their neighborhood to be unsafe at night were less likely to encourage their children to use local playgrounds (Miles, 2008; Mowen et al., 2005; Mowen, 2010). More than 75% of the parents surveyed in the Loukairou-Sideris and Sideris study stated that they did not allow their children to go to the park without an adult, mostly because of concerns about crime and traffic.

While the literature describes the influence of parks on physical activity and identifies factors contributing to park utilization, little work has been done researching the availability of recreation resources within parks. A few studies have examined factors determining the availability of park-based recreation centers and programs and the influence of these recreation programs on physical activity and BMI. Dahmann et al. (2010) studied the spatial distribution of public recreation programs in southern California, including parks, and identified factors that were associated with the provision of recreation programs by cities. Cities characterized by low fiscal capacity, low household incomes, minority populations, and multi-family housing had fewer park-based recreation programs offered to residents (Dahmann et al., 2010). Cohen et al. (2007) examined eight parks in minority communities in the city of Los Angeles and found that the provision of organized park programs and supervised activities may have increased park use and physical activity, especially among youth. Wolch et al. (2011) reported that the number of recreational programs within 10 km of a child's home had a substantial effect on body mass index (BMI) at age 18 in a large cohort of children followed for eight years (Wolch et al., 2011). Effect sizes over the 10–90th percentile contrast were in the range of a 20% reduction in attained BMI when comparing the most to least serviced children. Research by Joassart-Marcelli (2010) concluded that cities with limited fiscal capacity, limited sales tax and insufficient governmental grants, had constrained public funding for parks and fewer recreation programs. The inability of lower income families to pay fees to participate in organized recreation programs may limit opportunities to free and less structured activities on playgrounds, athletic fields, and other open spaces (Dahmann et al., 2010). Lower fiscal capacity of municipalities and lower income of residents were related to a reduced availability of parks and recreational offerings in parks in Los Angeles (Dahmann et al., 2010; Sister et al., 2007; Wolch et al., 2005).

To our knowledge, no studies have been published documenting the level of energy expenditure required by recreational programs offered in municipal parks and recreation centers. A better understanding of the energy expenditure promoted by participation in these programs could help determine whether park-based recreational programs will help address the obesity epidemic. If park based recreation programs demand low levels of energy expenditure, program planners could revise offerings to demand higher Metabolic Equivalent output and thereby help participants achieve energy balance. Further, the energy expenditure needed to engage in recreational offerings in municipal parks may help explain the varying effects of park availability on physical activity and BMI across studies. The present paper seeks to identify correlates of the energy expenditure required by recreational programs in a major urban area. We anticipate that the energy expenditure demand of courses offered by cities will be positively associated with the fiscal capacity and the income of the residents of the city and with the number of recreational offerings provided by the city and negatively associated with the percentage of minority residents of the city. This information may be useful to researchers and also to urban planners, politicians, and leaders in parks and recreation departments when making decisions about the allocation of recreation resources.

2. Methods

2.1. Study region

The current study sampled municipalities located in the greater Los Angeles area, the second largest urban region in the Unites States. Park space in Los Angeles remains below traditional standards per capita (Bedimo-Rung et al., 2005; Wolch et al., 2002). Simultaneously, the region has increasing rates of chronic disease and other health concerns associated with physical inactivity (Lewis et al., 2005; Mendez-Luck et al., 2005). Similar to many metropolitan regions in the United States, Los Angeles has experienced increasing racial/ethnic diversity and greater economic disparities across population subgroups. The region is also characterized by large inter-jurisdictional fiscal disparities (Joassart-Marcelli and Musso, 2001; Joassart-Marcelli et al., 2005), which influence the distribution of park and recreational resources (Joassart-Marcelli, 2010). Thus, information about active recreation opportunities in the Los Angeles region is urgently needed.

2.2. Recreation program audit

An audit was conducted of formal recreation programs offered in the summer of 2006 by municipalities ($N=82$) in Southern California, primarily located in Los Angeles County with a few located in Orange and Ventura counties. Information about recreational course offerings was collected through analysis of municipally produced park and recreation brochures and materials. The majority of data was gathered through internet searches or direct telephone contact. An audit database was created with each listing for sports, fitness, or other recreational program offerings that required a Metabolic Equivalent (MET) value greater than 3.5 (i.e. moderate intensity physical activity or higher). A MET is a unit that describes the energy expenditure required by a specific activity. As described in the 2008 Physical Activity Guidelines for Americans, “A MET is the ratio of the rate of energy expended during an activity to the rate of energy expended at rest.” (United States. Department of Health and Human Services., 2008) One

MET reflects the energy expenditure while someone is at rest. A three MET activity would require three times more energy to perform than is required while that person is at rest. Throughout the paper, the term course refers to the recreational program offering and the term session refers to a single episode of the course. For example, a class on aerobic dance held at a city park would be described as a course and a single meeting of the people who are taking that course would be described as a session. Inclusion criteria also required that the course take place on a city park or community recreation center and be sponsored by either the municipality or a non-profit organization, or be held at a non-city owned site but yet still be sponsored by the city. Courses not sponsored by the city were excluded. For each recreation course, we recorded location (on or off a park), type of activity, session duration, frequency of the sessions per week, age group, gender, enrollment size, capacity, and cost. If a program was sponsored by a non-profit organization, the name of the organization and whether the course was conducted independently of the city were further recorded. A standard coding scheme for physical activities was applied to all municipalities to remove inconsistencies in form and content. Targeted age was also classified into 6 groups: 0–5, 5–18, 18–50, 50+, all ages, and missing. For recreation courses, locations that occurred outside the confines of parks were cross checked with Google's address database. Addresses were geocoded in ESRI ArcView 9.2. Audit data collection was checked randomly each week for accuracy and consistency in data entry.

2.3. MET-coding of recreation programs

Physical activity intensities of recreation programs were coded using Metabolic Equivalents (METs) from the compendium developed by Ainsworth et al. (2000). The intensity (in METs) was multiplied by the duration (in hours) of each session for that program to generate an indicator of energy expenditure per session (in MET-hour) (United States. Department of Health and Human Services, 2008).

2.4. Demographic, land use, fiscal, and institutional characteristics of Municipalities

Demographic and land use data for these municipalities, including population size and density, median household income, race, ethnicity, age distribution, and housing type, were collected from the 2000 Census of Population and Housing (SF3). Job density was computed using data from the 2000 Census of Transportation Planning Package, which provides the number of jobs by census tract. Values are aggregated by municipalities and divided by the 18 to 64 year old population to obtain an average job density figure reflecting the number of jobs per working-age resident. In addition, we gathered fiscal and institutional variables from the 2000 to 2002 Cities Annual Report of the California State Controller's Office. Indicators of municipal fiscal capacity were created using a regional average tax burden approach (Joassart-Marcelli et al., 2005). Institutional characteristics of cities, such as age, subcontracting of services (e.g., park and recreation services provided in house), per capita total expenditure on parks and recreation (including municipal, special districts, nonprofit, and state), and type of governance (e.g., charter) were also collected from these reports. Information on nonprofit organizations involved in the provision of park and recreation services was obtained from the 2003 National Center for Charitable Statistics' digital data. All operating charities that reported recreation, sports, and athletics as their primary purpose were included. Any foundations and grant-making institutions that did not directly participate in the provision of recreation were excluded. The number of nonprofits and their expenditure were aggregated at the municipal level using Zip code information.

2.5. Data analysis

Data were analyzed using multi-level random coefficient modeling in HLM (version 6.0, Bryk & Raudenbush), a procedure that adjusts standard errors to take into account violations of statistical assumptions with clustered data (i.e., recreation programs nested within municipalities). Prior to data analyses, outcome data were screened for violations of statistical normality (i.e., skewness, kurtosis.) MET-hour per session was found to be positively skewed, and this distributional problem could not be corrected through transformation. Therefore, we used robust standard errors in all subsequent models. Robust standard errors are relatively insensitive to distributional assumptions at each level of the model (Zeger et al., 1988). The outcome variable in all models was the raw continuous MET-hour unit. A random intercept model with no predictor variables was tested to estimate between- and within-municipality variability. Next, multilevel models examined the bivariate relationships between each of the program-level characteristics and MET-hour per session. For each comparison, the level-one equation estimated MET-hour per session (π_{0jk}) as a function of the intercept (i.e., mean MET-hour per session for that particular municipality) (β_{00k}) and the predictor variable (e.g., age category, enrollment size, offered on or off a park) (β_{01k}). The level-two equations estimated the mean MET-hour per session (γ_{000}) and mean coefficient for the association between the program-level predictor variables and MET-hour per session (γ_{010}) across all municipalities: $\beta_{00k}=\gamma_{000}+\mu_{00k}$ and $\beta_{01k}=\gamma_{010}+\mu_{01k}$.

Next, multilevel models tested the bivariate association of each municipality-level predictor (γ_{001}) with average MET-hour per recreation session: $\beta_{00k}=\gamma_{000}+\gamma_{001}+\mu_{00k}$. No program-level predictors were entered in level 1 of these models, since the strength of the association between program-level characteristics and MET-hour per session was not expected to vary across municipalities. Municipality-level predictor variables demonstrating a statistically significant bivariate relationship with average MET-hour per session ($p<0.05$) were entered into the multivariate multilevel regression model, with the exception of income (i.e., median household income) and ethnicity (i.e., percent white), which were retained in the multivariate model regardless of bivariate significance.

3. Results

3.1. Recreation program audit

The recreation program audit identified 8174 programs that were located within 82 municipalities across the Los Angeles region (see Table 1). Approximately 45% of courses were offered at a park, and 62% of courses targeted youth ages 6–18 years. On average, each recreation course was offered over 3–4 sessions per week, with a wide range of 1–105 sessions per week. Recreation program sessions lasted about 1.5 h, on average, and had a mean intensity level of about 6.0 METs. Variables for funding source (government or non-profit) and enrollment size had substantial missing data (total sample sizes ranged from 1112 to 3567). After casewise deletion of missing data for duration (in hours) of recreation program sessions, a total of 7045 courses distributed across 82 municipalities remained in the final analysis.

3.2. Characteristics of Municipalities

Descriptive statistics (demographic, land use, fiscal, institutional) for the 82 municipalities are shown in Table 2. The average

population size was about 68,000, and the median annual household income was around $54,000, with a wide range across municipalities. On average, 40% of residents within municipalities were white, 28% were under age 18 years, and 11% were over age 64 years.

3.3. Between- and within-Municipality variability

The first step of the multilevel modeling involved testing a random intercept model with no predictor variables. The chi-square for the variance component was statistically significant, suggesting that there was significant between-municipality variation in MET-hour per session ($\chi^2 = 371.69$, df = 81, $p < 0.001$). The intraclass correlation coefficient (ICC) for MET-hour per recreation session was.057, which indicates that 6% of the total variance occurs between municipalities, and 94% of the of the total variance lies within municipalities. Thus, there was considerable within-municipality variance available to explain by testing program-level predictor variables.

Table 1
Characteristics of Recreation Programs.

Variable	*n*	Mean (or %)	SD	Range
Location	7653			
On Park		(44.6%)		
Off Park		(55.4%)		
Funding source	3567			
Nonprofit		(3.1%)		
Government		(96.9%)		
Age group targeted	7268			
0–5 years		(12.1%)		
6–18 years		(61.9%)		
19–50 years		(15.9%)		
50+ years		(5.4%)		
All ages		(4.7%)		
Enrollment	1112	21.44	19.26	1–200
Number of sessions (per week)	6742	3.62	6.94	1–105
Exerciseintensity (METs)	8174	5.93	1.88	2–12
Exercise intensity	8174			
Moderate		(57.7%)		
Vigorous		(42.3%)		
Length of session (h)	7129	1.48	1.57	0.33–18.00
MET-hour per session	7129	8.74	10.13	1.25–120.00

Note: $N = 8174$ programs.

3.4. Program-level predictors of energy expenditure per session

Multilevel models examined the bivariate relationships between each of the program-level characteristics and MET-hour per session. Results showed that the average MET-hour per session was greater for programs targeting youth ages 6–18 years (Coeff. = 1.73, $p = 0.014$) and all ages (Coeff = 4.69, $p = 0.001$) as compared to adults over age 50. Programs targeting children 0–5 years had significantly lower average MET-hour per session than those targeting adults ages 50+ years (Coeff. = −3.87, $p < 0.001$). Average MET-hour per session did not differ between courses held on a park site location as compared to off a park site location ($p = 0.170$) or for courses funded by a government as compared to a non-profit source ($p = 0.247$). Bivariate analyses revealed that course enrollment size was positively related to MET-hour expended per session (Coeff. = 0.27, $p < 0.002$). A multivariate model that included all of the significant bivariate program-level predictors was unstable due to the large amount of missing data for the enrollment size variable (less than 15% of programs had this data) which significantly reduced the number of programs and municipalities included.

3.5. Municipality-level predictors of energy expenditure per session

Multilevel models also examined the bivariate associations of each municipality-level predictor with average MET-hour per recreation program session. Results found that average MET-hour per session was greater for municipalities with higher per capita total fiscal capacity (coeff. = 0.10, $p = 0.041$), a greater number of

Table 2
Descriptive statistics by Municipality.

Variable	Mean	SD	Range
Recreation programs per thousand	2.43	2.86	0.33–23.10
Demographic			
Population size	67,732	67,862	1472–461,381
Median household income	$54,323	$19,073	$28,941–$117,263
Percent white	0.40	0.27	0.03–0.89
Percent black	0.05	0.08	0.00–0.46
Percent Latino	0.37	0.27	0.05–0.95
Percent Asian	0.15	0.15	0.01–0.61
Percent other ethnicity	0.03	0.01	0.00–0.09
Percent under 18 years	0.28	0.06	0.06–0.41
Percent over 64 years	0.11	0.05	0.04–0.37
Land use			
Percent attached housing units	0.42	0.17	0.01–0.92
Percent rental housing units	0.42	0.17	0.08–0.78
Fiscal			
Per capita total fiscal capacity	$1297	$654	$457–$3559
Job density	1.52	3.40	0.25–29.46
Institutional			
Per capita total expenditure on parks and recreation[a]	$120.50	$115.45	$20.93–$593.29
City age	71.61	32.28	16.00–131.00
Charter (binary 0,1)	0.24	0.43	0.00–1.00
Park and recreation services provided in house (binary 0,1)	0.67	0.47	0.00–1.00

Note: $N = 82$ municipalities.

[a] Including municipal, special districts, nonprofit and state expenditures.

Table 3
Multivariate multilevel model of municipality-level factors predicting energy. Expenditure (in MET-hour) per recreation program session.

Variable	Coeff.	Robust SE	*T*-ratio	df	*P*-value
Intercept	9.02	0.30	31.01	74	< 0.001
Median household income (in thousands of dollars)	−0.10	0.03	−1.42	74	0.155
Percent white	−0.02	0.01	−1.49	74	0.137
Population size (in thousands of persons)	0.02	0.003	−1.23	74	0.219
Percent over 64 years	−0.19	0.06	−3.02	74	0.003
Per capita fiscal capacity (in hundreds of dollars)	0.25	0.07	3.49	74	0.001
Job density	−0.31	0.24	−1.32	74	0.186
Recreation programs per 1000 residents	0.34	0.25	1.35	74	0.176

Note: Data are based on 7045 programs at level-1 and 82 municipalities at level-2.
Final estimation of fixed effects with robust standard errors.

recreation courses per thousand (coeff.=0.24, p=0.001), and greater job density (coeff.=0.15, p=0.012). Average MET-hour per session was lower for municipalities with a larger population size (coeff.=−0.006, p=0.06) and a larger proportion of the population over age 64 (coeff.=−9.89, p=0.088). Median household income, ethnicity, proportion of population under 18 years, percent attached and rental housing units, whether municipalities have their own charter, per capita total park and recreation expenditure, city age, and whether park and recreation services were contracted to a private or non-profit organization were unrelated to MET-hour expended per recreation session. In the multivariate multilevel model that included all of the significant bivariate municipality-level predictors and median household income and ethnicity (i.e., percent white); only per capita fiscal capacity (coeff.=0.25, p=0.001) and percent of the population over age 64 (coeff.=−0.19, p=0.003) were statistically significant (See Table 3). Interpreting the regression coefficient for per capita fiscal capacity suggests that a $100 increase would lead to a 0.25 MET-hour increase in energy expenditure per recreation course session. Also, a 1% increase in the proportion of the population over 64 years would be associated with a 0.19 MET-hour decrease in energy expenditure per recreation program session. Removing median household income and ethnicity from the multivariate model did not change the size, direction, or significance of these coefficients.

4. Discussion

Overall, these findings suggest that the capacity of recreational courses to promote energy expenditure may depend on the age group targeted by the course and on the economic and demographic characteristics of the cities that offer the courses. At the program level of analysis, recreation courses targeting youth 6–18 years of age and courses targeting all ages were higher in energy expenditure required than those for the oldest (50 years and older) and youngest age groups (4 years and younger). This finding is not surprising given that the ability of individuals to engage in higher MET activities, on average, is greater for those between the ages of 5 and 50. This finding is consistent with Floyd et al. who found that physical activity levels were negatively correlated with formalized recreation activities for those under the age of 5 (Floyd et al., 2011). Concern might be raised for courses targeting those over 50 years of age that MET demands may have been reduced unnecessarily based solely on age. Many individuals over 50 have the ability to engage in higher MET activities and particularly if attention is given to issues such as reduced impact on joints, and good exercise technique with warm up and warm down stages. In addition, careful planning can create courses that decrease the MET expenditure required as people age over 50 with higher demands for those between 50 and 60 versus those over 60 years of age. The size of enrollment of the course was also related with larger courses requiring a higher level of energy expenditure. This finding may be driven by the fact that some very popular courses also demand higher energy expenditure, such as aerobics courses in various forms. Further, this finding implies that courses demanding higher energy expenditure have the ability to reach large numbers of people.

At the municipal level, age again emerged as an important determinant in the multivariate analyses. As the percentage of population over 64 years of age increased in a city, the energy expenditure requirements of its recreation courses decreased. This may reflect appropriate planning on the part of parks and recreation officials who are being responsive to the needs of the citizens in their municipality. Fiscal capacity of the city also emerged as a significant determinant of MET expenditure required in recreation course offerings. Those cities with a higher per capita fiscal capacity provided recreation courses with higher energy expenditure requirements. This was found in the multivariate analyses after controlling for age and other potential confounding variables. This finding compliments the earlier work of Joassart-Marcelli (2010) who found that lower fiscal capacity in cities led to constrained funding for public parks and fewer recreational offerings. This finding is also consistent with prior studies showing the higher availability of park resources in higher SES areas (Gordon-Larsen et al., 2006; Scott and Munson, 1994). Our finding indicates that limited fiscal capacity leads not only to fewer recreational courses but to recreational courses that demand less energy expenditure than offerings in cities with higher fiscal capacity. Over time, this might lead to a disparity in the ability of residents of lower income communities, relative to higher income communities, to achieve energy balance which may contribute to higher levels of obesity. This interpretation appears consistent with reports that neighborhood income is inversely associated with BMI status in adults and adolescents (Black and Macinko, 2010; Wall et al., 2012). Evidence of a higher longitudinal progression of BMI in children and youth aged 10–18 in areas of low recreational programming also support this interpretation (Wolch et al., 2011). Among children and adolescents, greater accessibility to parks and recreation facilities appears to be associated with higher levels of physical activity (Cohen et al., 2006; Gordon-Larsen et al., 2006; Roemmich et al., 2006). It is possible that residents of cities with higher fiscal capacity desire courses with higher energy expenditure demands and cities respond by providing corresponding program offerings. This is consistent with prior research showing that SES is positively related to levels of physical activity (Brodersen et al., 2007; Ford et al., 1991; Yen and Kaplan, 1998) with this association most consistently found in lower and middle income countries (Bauman et al., 2012). Finally, it is possible that some forms of higher MET-output physical activity require specialized and expensive equipment. For example, swimming requires a pool large enough to

accommodate lap swimming and staffed for use by the public, and some forms of organized exercise classes (e.g., spinning) and resistance training require expensive equipment. However, this is not consistently the case with some relatively low cost activities leading to higher levels of energy expenditure such as soccer which may only require a ball and an open area for play.

Two caveats should be kept in mind when interpreting the present results. First, the design is cross-sectional and the ability to draw conclusions about causal inference is therefore limited. Second, the risk for type I error may be elevated in the bivariate analyses due to multiple testing.

In sum, several implications for planning, policy and intervention might be gleaned from our findings. Municipalities might offer age appropriate courses demanding higher energy expenditure for those over 50 and producing greater disease prevention benefits. Swimming and other water resistance exercises, low impact aerobics, cycling and other courses can be offered to enhance aerobic fitness and to help maintain energy balance preventing the progression to obesity. More diverse cities with greater fiscal resources appear to offer recreation courses with higher MET demands. Decision makers in cities with lower fiscal capacity might examine recreation offerings and consider courses requiring higher energy expenditure but needing less specialized equipment and space and thereby moderating costs. Private, state, and federal funding might also be sought by cities with lower fiscal capacity to aid in the offering of courses with higher MET capacity in cases where specialized equipment or space are required.

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