Exploring Social Demographic and Social Psychological Bases of Urban Park and Forest Visitation and Outdoor Recreation Characteristics Among Ethnic Minority Populations

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INTRODUCTION

The ethnic minority population of the US continues to increase due to rising minority birth rates coupled with the influx of ethnic immigrants to America's cities, suburbs and towns (Parrillo, 1994). Based on present immigration trends, by the year 2050, 22 percent of the US population will be Hispanic and 10 percent will be Asian (US Bureau of the Census, 1994). Urban ethnic minority groups thus constitute an important and growing user segment of urban and community parks and forests. These parks and forests not only provide diverse opportunities for recreation, leisure, and cultural activities (Chicago Park District, 1989; More, 1985), but they also serve as alternative access routes to shop or work and connectors between neighborhoods; foster diversity of social relationships in much the same way that they foster biological diversity among flora and fauna (Shafer and Floyd, 1997). To better manage urban and community forests and parks, a heightened understanding of the values, attitudes and behaviors of the ethnic minorities they serve is important.

Multiculturalism Initiatives in Urban Parks and Forests

Development of effective urban parks and forests requires intensified efforts by urban and community forestry programs to meet the needs and interests of America's growing multicultural, diverse ethnic minority communities (NUCFAC Mission Statement). Further, cultivation of public understanding and appreciation of the economic, environmental, social, and psychological benefits of maintaining and managing urban trees, wildlife, community forests, parks and related resources within ethnic minority communities is essential for the development of effective, self-sustaining municipal and volunteer urban and community forestry and park programs in urban areas with high ethnic minority populations.

As part of a long-term plan for meeting public needs and building healthy urban and community forestry programs, it is important to assess and address the perceptions, values and needs of our nation's growing multi-cultural, diverse ethnic minority populations with respect to urban parks, wildlife and their management (U.S. Department of Agriculture, 1998). Parks and forestry programs can effectively meet existing needs of urban populations by recognizing and incorporating the diverse set of values, perceptions and needs of ethnic minority communities regarding urban parks, trees, and wildlife, and by involving ethnic minority communities in planning, decision making, and implementation of urban and community forestry initiatives (Grove, Vachta, McDonough, and Burch, Jr., 1993).

Local community involvement and participation in urban and community forestry projects is important for the development and preservation of healthy urban and community parks and forests (Talbot, 1993). Existing studies suggest that trees planted in community sponsored tree plantings have better survival rates than those planted without community participation (Grove, Vachta, McDonough, and Burch, Jr., 1993). Assessing ethnic minority populations' values and perceptions of the environment, trees and wildlife in their cities and towns, educating them about the importance and value of urban and community forests and programs, and meeting their needs in this area should lead to their increased feelings of ownership and responsibility for urban trees, wildlife, community forests, parks, and related resources (Sklar and Ames, 1985).

Community involvement in the protection and expansion of parks and forests in urban and community areas requires additional research to help forestry program planners and managers better understand the relationship between urban and community park and forestry resources and ethnic minority populations: What are ethnic minority populations' values and perceptions of the environment, of trees and wildlife in their cities and towns? Are there underlying differences among and within ethnic minority communities that could have implications for planners and managers trying to meet the needs of an increasingly diverse clientele (Jeong, 1999; Gobster and Delgado, 1993)? What can be learned to help managers understand more clearly the meaning of the urban forests to ethnic minority citizens (Westphal, 1993)? What kinds of educational programs should be developed to reach ethnic minority communities with an urban and community forestry message?

Ethnic and Racial Diversity in Urban Parks and Forests

Current demographic trends indicate population growth of racial and ethnic minority groups is increasing considerably faster than the rate for the U.S. population as a whole. If race and ethnic definitions remain the same, and so do immigration, fertility, and mortality patterns, minority groups will continue to grow faster than the non-minority population (Riche, 2000). According to current projections, non-Hispanic Whites will make up barely one-half of the total population by 2050 and will lose their majority status by 2060. The U.S. population is presently comprised of 72 % non-Hispanic Whites, 12% non-Hispanic African Americans, 12% Hispanics, and 4% Asian and Pacific Islanders, and the share of the minority population in the U.S. will rise from 28% in 1999 to 47 % in 2050 (Riche, 2000). Over the next 30 years, 82 % of the nation's growth will come primarily from Hispanic, Asian, African American, and other ethnic minorities (Dwyer, 1994; Murdock, Backmann & Coldberg, 1990, USDA Forest Service, 1994). Based on present immigration trends, by the year 2050, 22% of the US population will be Hispanic, 15% African American and 10% will be Asian (U.S. Department of Commerce, 1994). Most of the ethnic population in the U.S. resides in urban and metropolitan areas — almost 95% of Asian Americans, more than 91% of all Hispanics, and more than 85% of African Americans are urban residents. Non-Hispanic Whites account for 50% or less of the urban population (Frey, 1998). Moreover, in many urban areas, these ethnic and racial "minority" groups outnumber the traditional "White" majority. Indeed, nationwide, ethnic and racial "minority" groups constitute an important and growing user segment of urban parks and forests.

Much of the research examining leisure behavior, including recreation participation rates and patterns of participation, of the US population has relied predominantly on general population samples, consisting usually of a larger proportion of White than non-White respondents (Ewert, Gramann & Floyd, 1991). Despite the undeniable significance of such studies and their contribution to leisure research, they have not provided a sufficient examination of the recreation participation rates and participation patterns of specific ethnic minority groups (Can & Williams, 1993). Besides examining the probability and frequency of an individual recreation ist's participation in a particular recreation activity, it is vital for leisure and recreation researchers to understand the meanings attributed to a specific recreation activity and the significance of participation or lack of participation in a given recreation activity to the individual or (ethnic) group. In order to better understand the forms and meanings of ethnic recreation, this study will attempt to investigate differences in outdoor recreation characteristics (patterns, activity participation, and preferences) across six population subgroups, i.e., Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, Korean or Korean American, African American, and Anglo or White groups.

Growth of Ethnic and Racial Groups

According to Riche (2000), U.S. racial and ethnic origin groups generally grow in three ways: from *natural increase* (the excess of births over deaths), *net immigration* (immigration minus emigration), and *evolving identities* (self-identification of race and ethnicity). Natural

increase is largely responsible for the changes in the absolute numbers and percentage share of the White, Black, and American Indian populations. In 1998, racial and ethnic minorities contributed 40% of all U.S. births, even though they represented only 28% of the total population. Fertility rates are generally higher for minority populations for two reasons. First, recent immigrants tend to maintain the relatively higher fertility rates of the countries from which they came. Second, minority populations tend to be relatively younger - the product of both immigration (young adults are more likely to migrate) and fertility. Although immigration keeps adding to the number of foreign-born Hispanics and Asians, the number of U.S.-born Hispanics and Asians is projected to increase at an even faster rate. This natural increase will eventually reduce the percentage of these populations that is foreign-born. Minority populations also have higher mortality rates, due in part to lower socioeconomic status and more limited access to health care, but the gaps between life expectancy for different populations groups has been narrowing since the early 1990s and Census Bureau projections suggest that this trend will continue.

Immigration, along with natural increase, has driven the rise in the number of Hispanics and Asians. Current projections suggest that immigration will keep these U.S. minority groups growing briskly with approximately one million immigrants per annum. The U.S. Census Bureau estimates that immigration will add 468,000 Hispanics, 229,000 Asians, 161,000 non-Hispanic Whites and 93,000 non-Hispanic blacks annually to the U.S. until 2025. Hispanic immigration rates are expected to decline over the next 25 years, while rates of non-Hispanic Whites and Blacks and especially Asians, are projected to increase.

A third source of growth is change in self-identification of race and ethnicity. The concept of race is relatively fluid and a product of a social construction, depending in part on how people perceive themselves, and how they are perceived by the society in which they live. Americans choose the race and ethnic groups with which they identify but patterns of identification are often driven by the political context. Recent patterns reflect the decisions of people who wanted to gain power and political representation by joining with under-represented groups beneath one large umbrella. Additionally, socioeconomic status could make racial definitions more important to certain minority groups than national origin, especially as the groups' growing numbers make them less a "minority." Furthermore, increased intermarriage between Americans of different racial and ethnic groups is resulting in more children of mixed racial heritage, with multiple ethnic identities, thereby creating a new minority of multiracial people.

Ethnic Recreation Research in the U.S.

Ethnic diversity will impact the social landscape of urban areas, including the ways in which residents use urban parks and forests for recreational purposes. In the past, only a few scholars have examined the relationship between ethnicity and urban recreation participation (e.g., Jones, 1970; Marans & Fly, 1981). The occurrence of civil unrest in major U.S. cities and culmination of the U.S. Civil Rights movement during the 1960s generated heightened public awareness regarding the widespread existence of racial inequality in societal institutions. Consequentially, inequality of recreation and leisure services became the focus of several government initiated research studies examining differences in participation patterns, and the causes of such variations, between Anglo or White majority and ethnic minority groups (Kraus and Lewis, 1986; Johnson et al., 1997; Floyd, 1998). The following discussion synthesizes Johnson et al. (1997) and Floyd's (1998) summarizations of race and ethnic studies conducted in the U.S. since the 1960s.

Most studies undertaken in the 1960s and 1970s suggested that differences in cultural norms and socioeconomic status (education, income, employment) between the Anglo or White and ethnic minority groups were the key factors responsible for differences in recreation and leisure participation. Lee (1972) furthered the ethnic research status quo of the 1960s and 1970s by proposing the sociocultural-meaning theory. According to this theory, recreation behavior and participation patterns of population subgroups are related to social psychological variables and are products of place- and activity-specific meanings and everyday norms and habits. Two other theories - opportunity or demographic theory and compensation theory - also emerged during this time; both emphasized socioeconomic causes as being the determinants of recreation participation or non-participation. Opportunity theory suggested that demographically related inaccessibility to recreation resources was the primary cause of nonparticipation among ethnic groups. According to the compensation theory, contrary to general belief that ethnic minority groups underparticipated in recreation activities, ethnic minority groups occupied relatively marginal status in society and therefore their recreation participation levels were, in fact, higher than that of Anglos or Whites of similar socioeconomic status (Johnson et al., 1997). Washburne (1978) classified ethnic recreation theories into two categories - marginality and ethnicity. While the marginality perspective underscored the relevance of social structural and economic constraints (lack of adequate information, lack of transportation, financial incapacity) in explaining differences in recreation behavior (Washburne, 1978), from the ethnicity perspective, differences in cultural norms and values were considered to be the primary determinants of differences in recreation behavior (Carr & Williams, 1993; Woodard, 1988).

Ethnic recreation researchers have recently proposed additional theories based on advanced conceptual applications - class identification theory, multiple hierarchy stratification theory, and class polarization theory. The class identification theory describes social class rather than ethnicity as the primary determinant of differences in recreation behavior both among and within population subgroups (Floyd et al., 1994). According to the multiple hierarchy stratification theory, people who occupy certain marginal status (based on race, class, gender, and age) within society differ from other sociodemographic groups (Shinew et al., 1995). The class polarization theory proposed by Shinew et al. (1995) suggests that "there is a widening class difference between upper- and lower-class black males than between upper- and lower-class black females, due in large part to two labor related trends (Wilson, 1980): (1) decline in jobs for unskilled, physical labor typically performed by males; and (2) the growing availability of professional occupations for educated black males" (Johnson et al., 1997; p. 5).

Overall, marginality and ethnicity perspectives have been inadequate for furthering ethnic recreation research due to several reasons. Floyd (1998) identified five drawbacks to the marginality theory. First, researchers have not adequately defined the concept of marginality and the construct fails to consider the effects of racial stratification through institutionalized racism and discrimination (p. 5). Second, the marginality concept assumes a homogeneous class structure among minority groups and fails to explain recreation behavior patterns based on socioeconomic differentiation within ethnic groups (p. 5). Third, the impact of historical and contemporary racism and discrimination on recreation behavior and patterns has been largely overlooked by the concept (p.6). Fourth, the marginality concept has been limited to a "classbased" explanation of ethnic differences in recreation behavior, as opposed to focusing on "racebased" discrimination (p.6). Finally, the marginality concept is inadequate in providing a clear explanation for the influences of behavioral and cognitive constructs such as preferences, attitudes, and meanings of recreation participation (p.6). Floyd (1998) also highlighted the flaws associated with the ethnicity perspective. First, researchers have used racial and ethnic classifications as proxy measures for culture (and subculture) without attempting to provide clear definitions and elaborations for these groupings (p.6). Second, rather than treating the concept of ethnicity from an evolutionary and dynamic standpoint, the ethnicity perspective projects ethnic

groups as being static and monolithic in nature (p.6). Third, although recent studies have incorporated variables such as assimilation, acculturation, and ancestry (Carr & Williams, 1993; Floyd & Gramann, 1993) to examine differences within ethnic groups, such differentiations may be applicable only to recent immigrants and would be unsuitable for ethnic groups, such as African Americans and Native Americans, with longer historical connections in the U.S. (p.7).

Finally, both perspectives are based on the common ideological assumption that ethnic and racial minority groups will eventually exhibit the leisure styles of the dominant Anglo or White group with the elimination or reduction of socioeconomic barriers (in the case of marginality) or with cultural assimilation (in the case of ethnicity). This assumption addresses merely racial and ethnic variations in recreation and leisure patterns, but fails to provide reasoning for the causes of such differences (p.7). Overall, existing literature on race and ethnic recreation has not adequately addressed issues related to the measurement of racial and ethnic determinants and fails to provide a satisfactory explanation for the influence of socioeconomic status on the recreation and leisure patterns of racial and ethnic groups (Floyd, 1998).

Johnson et al. (1997) suggested that future racial and ethnic recreation research should incorporate interdisciplinary theories and alternative methods in order to gain a holistic understanding of the specific issue and the groups or individuals being studied (p.13). Furthermore, future studies should also concentrate their focus on place-related racial and ethnic differences in recreation and leisure behavior (regional/geographical variations and differences between rural and urban ethnic communities) as well as differences both within and among ethnic communities in relation to their interactions with natural resources (p.13). Most importantly, future research should a) avoid over-reliance on the marginality and ethnicity theories for explaining ethnic recreation behavior; b) recognize and include the dynamic and emergent properties of race and ethnicity within their framework; c) investigate the impacts of racial stratification and subordination on leisure choices and constraints; d) identify and examine additional dependent variables for explaining ethnic recreation behavior; and e) investigate the role of leisure as an explanatory variable for the maintenance and expression of racial and ethnic identity (Floyd, 1998, p.18).

Ethnic and Racial Variations in Outdoor Recreation Characteristics

Past research has shown that ethnic minority groups, in general, differ in their urban park and open space landscape, and natural setting preferences (Kaplan & Talbot, 1988; Talbot & Kaplan, 1993; Zhang & Gobster, 1998), park needs and interests (Gobster & Delgado, 1993; Zhang & Gobster, 1998), urban park use and leisure participation (Dwyer, 1993; Gobster, 1998; Hutchinson, 1993; Jeong, 1999; Taylor, 1993), recreation experiences (Can & Williams, 1993; Keefe & Padilla, 1987), park visitation patterns and attitudes (Carr & Chavez, 1993), and environmental attitudes (Floyd & Noe, 1993; Noe & Snow, 1990). Overall, these and other studies have investigated urban park use and outdoor recreation preferences of ethnic minority populations by categorizing Hispanics and Asian Americans as homogenous, monolithic segments. Thus, less seems to be understood about the perceptions, values and needs of the largest, fastest-growing segments within urban Hispanic (Cuban, Mexican, Puerto Rican, Dominican, etc.) and Asian American (Chinese, Korean, Japanese, Filipino, etc.) populations (Hutchinson, 1993), with respect to urban parks, forests, trees, wildlife and their management.

Since intra-ethnic differences are likely to influence site use and preference, style and meaning of recreational use may also be influenced by such differences (Carr & Williams, 1993). For example, differences may be observed in size and composition of the recreation group, reasons for participation, or values toward nature. Studies examining intra-ethnic differences would be invaluable to managers of parks, forests or recreational areas which receive high levels of visitation from ethnic minority groups, with little or no use from Anglo-visitors. Since patterns of participation may vary within a specific recreation activity as well as within and among population subgroups, studies employing large-scale general population surveys for comparing the leisure and recreation participation rates of ethnic groups cannot be generalized to ethnic minorities and immigrants to the U.S. A more rigorous treatment of the ethnicity concept may add more depth to the understanding of the leisure behavior of the U.S. population (and population subgroups).

The findings from studies concerning leisure behavior of general populations are often non-generalizable to ethnic sub-population groups, since general samples usually consist largely of Anglo respondents who were born in the US. Additionally, studies often assume ethnic groups to be homogenous, without accounting for intra-ethnic or within-group variability in recreation and leisure behavior. According to Carr and Williams (1993), three significant dimensions of intra-ethnic variability can potentially influence leisure and outdoor recreation behavior: 1) ancestral group membership, 2) generational status, and 3) levels of acculturation.

- Ancestral group membership this dimension can contribute to similarities and differences in recreation preferences and behavior among ethnic groups depending upon both whether an individual is of ethnic or Anglo descent as well as the individual's country of origin (Carr & Williams, 1993, p.24). If the individual identifies himself or herself to be of Anglo descent, then he or she is more likely to exhibit recreation behavior similar to that of the dominant White population. Those individuals who are of ethnic descent and/or who were born and raised outside the U.S. are likely to exhibit recreational characteristics of their respective ethnic groups.
- 2. Generational status this dimension can be interpreted as a good indicator of individuals' and/or their families' relationship to the U.S. (Carr & Williams, 1993, p.24). Since generational status is highly correlated with socioeconomic status, size of household, educational level, and other aspects of an individual's life, it can significantly influence the individual's recreation behavior (Keefe, 1980).
- 3. Levels of acculturation this dimension includes the loss of traditional cultural characteristics and the acceptance of new cultural traits or vice versa (reinforcement and retention of native cultural traits). Acculturation takes place at the individual level and changes take place at varying rates. While some native cultural characteristics are rapidly replaced by host traits, others happen gradually, while some are maintained, reinforced and strengthened (Keefe, 1980). The multifaceted effects of acculturation can possibly influence an individual's or ethnic group's recreation behavior (Carr & Williams, 1993, p.24).

Another factor which can be considered to have a significant influence on both intra- and inter-ethnic variability is discrimination, both perceived and actual. Although historical and current discrimination are contributory factors to low ethnic minority participation in outdoor recreation activities, they are under-reported (Gobster, 1998) and theoretical and empirical support for these factors has been inadequate. According to Gobster and Delgado (1993), discrimination decreases levels of satisfaction associated with a recreation experience by making the recreationist feel uncomfortable, and, in extreme cases, can result in antagonistic behavior (overt anger and violence) leading to the displacement of the user and sometimes non-use by the recreationist. Discrimination can stem from the lack of sensitivity of park personnel toward certain groups, inequities in the quality of park facilities, programs, and services in areas with high proportions of ethnic users (Gobster & Delgado, 1993), and anti-racial actions of non-ethnic users.

Existing research has been inadequate in explaining how the recreational users' ethnic and sociocultural background affects their recreational experiences. This knowledge gap hinders a manager's ability to provide a high quality recreation experience for his/her recreation resource users by meeting their needs while managing the natural resources for recreational purposes. This study will attempt to investigate inter-ethnic differences in outdoor recreation characteristics (patterns, activity participation, and preferences) across various sub-population groups. Additionally, this study will also examine the influence of levels of acculturation on intra-ethnic variability in outdoor recreation characteristics across various sub-population groups.

Purpose and Objectives of the Study

The purpose of this study was:

To explore urban recreation characteristics and urban and community forestry related environmental and wildlife attitudes among the largest, fastest-growing ethnic minority communities residing in urban and community areas in the US, based on their social demographic and social psychological characteristics.

The study surveyed five population subgroups [Hispanics (e.g., Cuban, Mexican, Puerto Rican, Dominican, etc.)/Hispanic Americans, Chinese/Chinese Americans, Japanese/Japanese Americans, Koreans/Korean Americans, African Americans, and Anglos or Whites] in two urban centers in Northeastern and Southern US, respectively — Philadelphia, PA and Atlanta, GA - located within close proximity to urban and community park and forest lands, in order to achieve the following objectives:

- 1.To identify social and demographic predictors of attitudes toward urban and community forestry, parks and wildlife of ethnic minority communities.
- 2. To identify outdoor recreation participation characteristics of ethnic minority communities.
- 3.To identify behavioral intentions of ethnic minorities in regard to urban and community forestry, parks and wildlife.
- 4.To develop an environmental education framework for educating urban and community forestry practitioners regarding cross-cultural variations in outdoor recreation and park and forest visitation characteristics, based upon the findings of the study.

Methodology

Instrumentation

The survey instrument utilized by this study was a self-administered questionnaire. This questionnaire consisted of thirty-one questions pertaining to social psychological and social demographic characteristics of ethnic minority communities in regard to their outdoor recreation preferences, behavior and participation patterns. The survey was conducted using self-administered questionnaires owing to several useful characteristics of this data collection method including its cost-effectiveness, ability to facilitate adequate sample control, as well the fact that the sensitive nature of information (especially, related to socio-demographics) requested would necessitate ensuring anonymity on behalf of the respondents. A page containing twelve colored photographs of parks and forests was enclosed along with the questionnaire. This page was included with the intention that the color pictures would serve as a source of reference for the respondents, enabling them to think about areas with which they were familiar that were similar to those in the photos, while responding to the questions included in the survey.

The questionnaire was translated into four ethnic languages (including two different Chinese versions) - Spanish, simplified Chinese, traditional Chinese, Korean, and Japanese spoken by the respective ethnic subgroups residing in Philadelphia, PA and Atlanta, GA, respectively (Hispanic, Chinese, Korean, and Japanese) using a back-translation (doubletranslation) procedure. The final survey instrument consisted of four sections. The first section included ten questions addressing a range of issues related to urban park and forest visitation, including access to urban parks and forests (distance from home), attitudes toward socioeconomic, and environmental aspects of urban parks and forests, frequency of urban park and forest visitation, patterns of urban park and forest visitation (group composition, days, times and hours of visitation), recreational participation in urban parks and forests (activities and frequency of participation), constraints to urban park and forest visitation, preferred characteristics of urban parks and forests (facilities, services, landscape, management), and attitudes (or interests) towards volunteerism for causes related to urban parks and forests.

The second section comprised of a single question with twenty-two items for identifying the importance attributed to value orientations such as equality, power, unity with nature, protecting the environment, devoutness, social justice, etc. The twenty-two value items that appear in this section were extracted from a multi-culturally validated instrument developed by Schwartz (1992).

The third section posed twenty questions related to sociodemographic characteristics of the respondent, including gender, race/ethnicity, age, language preference, respondent's and his or her parents' place of birth and length of residence in the United States, household composition, educational level, work status, years of residence at present address, household income before taxes, and religious affiliation.

The fourth section included one open-ended question asking for additional comments about parks and natural areas in and around the respective urban center (Philadelphia or Atlanta).

Operationalization of Variables

Access to Urban Parks and Forests

The respondent's access to urban parks and forests was examined by using three items relating to *distance of residence from park area* (walking distance, a day's round trip or less,

more than a day's trip, don't know), *park visitation trend* (visited parks in last twelve months, did not visit parks in the last twelve months), and *frequency of park visitation* (almost daily, weekly, three or more times a month, once or twice a month, three or more times in the last twelve months, never visited in the last twelve months).

Attitudes Toward Socioeconomic and Environmental Aspects of Urban Parks and Forests

The respondent's attitudes toward socioeconomic and environmental aspects of urban parks and forests were examined by employing eighteen items which addressed issues such as social desirability and benefits, economic desirability and benefits, as well as environmental desirability and benefits). All eighteen items were measured on a three-point Likert Scale format (`Undesirable,' `Neutral,' and 'Desirable' or `None,' `Some,' and 'Almost All').

Patterns of Urban Park and Forest Visitation

The frequency at which the respondent exhibited certain visitation patterns in urban parks and forests in the preceding twelve months was assessed by employing nine items relating to *group composition* (alone, with one or two other people, with three or more other people, with others from your own racial/ethnic group), *days of visitation* (during weekdays, during weekends), and *lengths of visitation* (for less than one hour, for one to two hours, for more than two hours). All nine items were measured on a three-point Likert Scale format (`None,' `Some,' and 'Almost All.').

Recreational Activity Participation in Urban Parks and Forests

The frequency at which the respondent participated in outdoor recreation activities in urban parks and forests in the preceding twelve months was assessed by employing fourteen items that represented various types of recreational activities activities - *solitary activities* (being alone, reading, etc.), *social activities* (playing with children, talking with friends, etc.), *food-related activities* (picnicking, eating, etc.), *team activities* (soccer, basketball, etc.), *outdoor land activities* (backpacking/hiking, pleasure driving, etc.), *outdoor water activities* (boating/canoeing, fishing, etc.), *physical exercises* (running/jogging, bicycling, etc.), *experiential activities* (aerobics, Tai Chi, etc.), *subsistence activities* (festivals, parties, etc.), *educational activities* (animal/birdwatching, nature study, etc.), *gardening* (vegetables, fruits, etc.), *photography* (still photos, videos, etc.) and other activities (open-ended). All fourteen items were measured on a three-point Likert Scale format (`None,'`Once or Twice,' and 'Three or More Times').

Constraint' to Urban Park and Forest Visitation

Factors that prevented the respondent from visiting urban parks and forests more often were identified by asking the respondent to choose (or check) applicable constraints from a list of sixteen options, including lack of interest, lack of time, lack of money, illness/disability, old age, pollution problems, lack of transportation, etc.

Preferred Characteristics of Urban Parks and Forests

The respondent's preferences for characteristics of urban parks, forests and recreational areas were examined by employing thirty five items which addressed themes such as litter control (e.g., trash containers for garbage disposal, containers for recycling, well-maintained litter-free facilities), visitor-contact (e.g., lack of interference from other visitors, non-crowded areas), facilities (recreational facilities and programs, parking spaces, outdoor cooking facilities), ethnic-presence (presence of other visitors from same ethnic/racial group, availability of information in racial/ethnic language), landscape (short, evenly mowed grass, shade trees), and natural resources (lake or lakes, animals, fish). These thirty five items were measured by using a three-point Likert Scale format (`Not Important,' `Somewhat Important,' and 'Very Important'). [These items were subjected to a principal components analysis using varimax rotation. Seven initial factors were

respondents do not indicate any response for the corresponding item relating to urban parks and forests.

Non-response percentages (percentage of the population that did not indicate an answer/response for the corresponding question) have been reported, in the charts, as missing data for each of the six population subgroups. The percentages of non-response to certain questions seem unusually high. Rather than omit the missing data from the respective figures, the decision to include these figures in the charts was based on the need to draw attention to cultural differences in responses/non-responses to the corresponding items and to underscore the influence of an individual's cultural background on his or her decision to respond to a particular questionnaire item.



Access to Urban Parks and Forests

The following charts compare the responses of the six population subgroups (Hispanics or Hispanic Americans, Chinese or Chinese Americans, Japanese or Japanese Americans, Korean or Korean Americans, African Americans, and Anglo or White respondents) to the items relating to access to urban parks and forests. The response categories [(Walking distance/A day's round trip or less/More than a day's trip/Don't know/Missing), (Yes/No/Missing), (Almost daily/Weekly/Three or more times a month/Once or twice a month/Three or more times in the last twelve months/Once or twice in the last twelve months/Never visited in the last twelve months/Missing)] for each item are represented by color-coded boxes. For each item relating to access to urban parks and forests, the percentage of respondents indicating a specific response category, is shown in the respective color-coded box within each population subgroup.

Note: In some cases, the cumulative percentages for each population subgroup add up to more than 100 percent when respondents indicate more than one response category for the corresponding item relating to access to urban parks and forests.



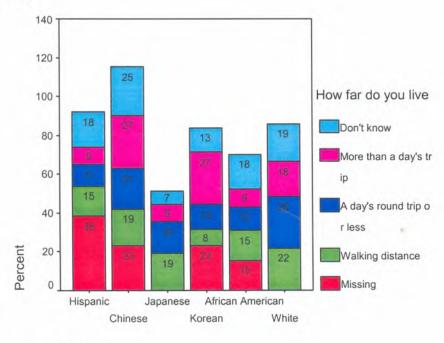
HOW FAR FROM WHERE YOU LIVE IS THE *NEAREST PARK AREA* **SIMILAR TO THOSE IN THE PHOTOS?**

For the Atlanta sample, the percentage of respondents who reported living within walking distance from the nearest park area ranged from 8% for Korean Americans to 22% for Anglo or White respondents. The percentage of respondents who reported requiring a day's roundtrip or less to reach the nearest park area ranged from 11% for the Hispanic Americans to 26% for Anglo or White respondents. The percentage of respondents who reported requiring more than a day's trip to reach the nearest park area ranged from 9% for Hispanic Americans, Japanese Americans and African Americans to 27% for Korean American respondents. The percentage of respondents who didn't know how far they lived from the nearest park area ranged from 7% for Japanese Americans to 25% for Chinese Americans.

For the Philadelphia sample, the percentage of respondents who reported living within walking distance from the nearest park area ranged from 10% for Japanese Americans to 25% for Anglo or White respondents. The percentage of respondents who reported requiring a day's roundtrip or less to reach the nearest park area ranged from 11% for African Americans to 22% for Anglo or White respondents. The percentage of respondents who reported requiring more than a day's trip to reach the nearest park area ranged from less than 13% for Korean Americans to 38% for Anglo or White respondents. The percentage of respondents who didn't know how far they lived from the nearest park area ranged from less than 7% for Japanese Americans to 28% for African Americans.

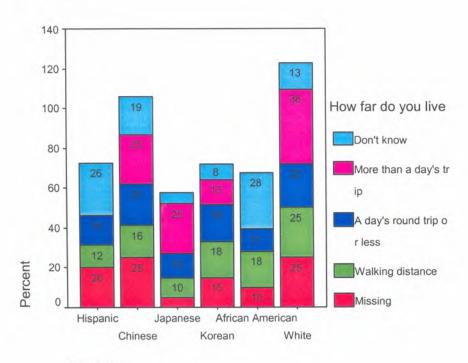
HOW FAR FROM WHERE YOU LIVE IS THE *NEAREST PARK AREA* SIMILAR TO THOSE IN THE PHOTOS?

Atlanta



Ethnicity

Philadelphia



Ethnicity

DURING THE LAST 12 MONTHS, HAVE YOU VISITED PARK AREAS SIMILAR TO THOSE IN THE PHOTOS?

For the Atlanta sample, the percentage of respondents who had visited park areas in the last 12 months was 26% for the Anglos or Whites, 14% for the Hispanic Americans, 18% for the Chinese Americans, 17% for the Japanese Americans, 12% for the Korean Americans, and 13% for the African Americans.

For the Philadelphia sample, the percentage of respondents who had visited park areas in the last 12 months was 22% for the Anglos or Whites, 16% for the Hispanic Americans, 20% for the Chinese Americans, 10% for the Japanese Americans, 19% for the Korean Americans, and 12% for the African Americans.

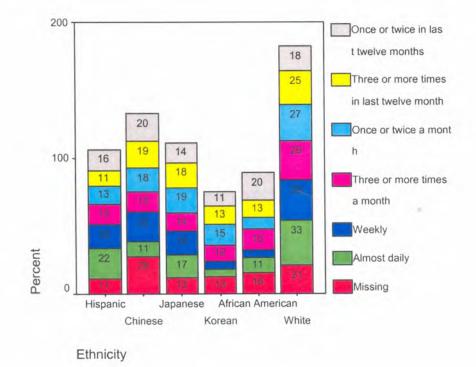
HOW OFTEN IN THE LAST 12 MONTHS HAVE YOU VISITED PARK AREAS SIMILAR TO THOSE IN THE PHOTOS?

For the Atlanta sample, the percentage of respondents who reported visiting a park area once or twice in the last 12 months ranged from 11% for Korean Americans to 20% for Chinese American and African American respondents. The percentage of respondents who reported visiting a park area three or more times in the last 12 months ranged from 11% for the Hispanic Americans to 25% for Anglo or White respondents. The percentage of respondents who reported visiting a park area once or twice a month in the last 12 months ranged from less than 7% for African Americans to 27% for Anglo or White respondents. The percentage of respondents who reported visiting a park area three or more times a month in the last 12 months ranged from 12% for Korean Americans to 29% for Anglo or White respondents. The percentage of respondents who reported visiting a park area three or more times a month in the last 12 months ranged from 12% for Korean Americans to 29% for Anglo or White respondents. The percentage of respondents who reported visiting a park area weekly in the last 12 months ranged from less than 5% for Korean Americans and African Americans to 29% for Anglo or White respondents. The percentage of respondents. The percentage of respondents who reported visiting a park area weekly in the last 12 months ranged from less than 5% for Korean Americans to 33% for Anglo or White respondents.

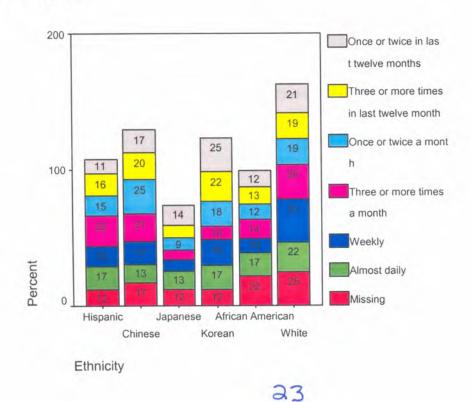
For the Philadelphia sample, the percentage of respondents who reported visiting a park area once or twice in the last 12 months ranged from 11% for Hispanic Americans to 25% for Korean American respondents. The percentage of respondents who reported visiting a park area three or more times in the last 12 months ranged from less than 7% for the Japanese Americans to 22% for Korean American respondents. The percentage of respondents who reported visiting a park area once or twice a month in the last 12 months ranged from 9% for Japanese Americans to 25% for Chinese American respondents. The percentage of respondents who reported visiting a park area three or more times a month in the last 12 months ranged from 9% for Japanese Americans to 25% for Chinese Americans to 26% for Anglo or White respondents. The percentage of respondents who reported visiting a park area three or more times a month in the last 12 months ranged from less than 5% for Japanese Americans to 26% for Anglo or White respondents. The percentage of respondents who reported visiting a park area weekly in the last 12 months ranged from less than 7% for Japanese Americans to 31% for Anglo or White respondents. The percentage of respondents who reported visiting a park area almost daily in the last 12 months ranged from less than 13% for Chinese Americans and Japanese Americans to 22% for Anglo or White respondents.

HOW OFTEN IN THE LAST 12 MONTHS HAVE YOU VISITED PARK AREAS SIMILAR TO THOSE IN THE PHOTOS?

Atlanta



Philadelphia





Attitudes Toward Socioeconomic and Environmental Aspects of Urban Parks and Forests

The following charts compare the responses of the six population subgroups (Hispanics or Hispanic Americans, Chinese or Chinese Americans, Japanese or Japanese Americans, Korean or Korean Americans, African Americans, and Anglo or White respondents) to the items relating to attitudes toward socioeconomic and environmental aspects of urban parks and forests. The response categories [(Undesirable/Neutral/Desirable/Missing),

(Agree/Neutral/Disagree/Missing)] for each item are represented by color-coded boxes. For each item relating to attitudes toward socioeconomic and environmental aspects of urban parks and forests, the percentage of respondents indicating a specific response category, is shown in the respective color-coded box within each population subgroup.

Note: In some cases, the cumulative percentages for each population subgroup add up to more than 100 percent when respondents indicate more than one response category for the corresponding item relating to attitudes toward socioeconomic and environmental aspects of urban parks and forests.



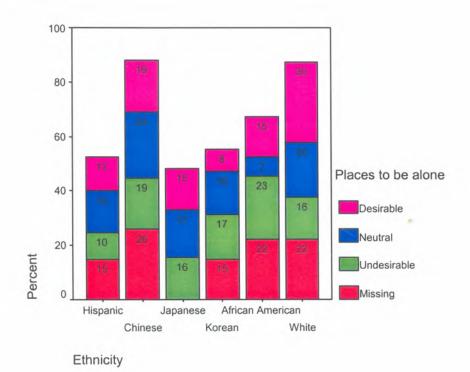
HOW WOULD YOU RATE PARK AREAS SIMILAR TO THOSE IN THE PHOTOS AS *PLACES TO BE ALONE?*

For the Atlanta sample, the percentage of respondents who reported park areas as desirable places to be alone ranged from 8% for Korean Americans to 30% for Anglo or White respondents. The percentage of respondents who reported park areas as undesirable places to be alone ranged from 10% for Hispanic Americans to 23% for African American respondents.

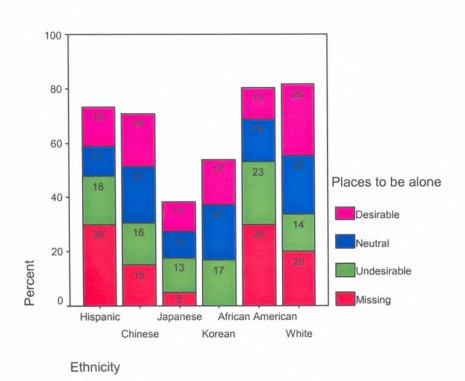
For the Philadelphia sample, the percentage of respondents who reported park areas as desirable places to be alone ranged from 11% for Japanese Americans and African Americans to 26% for Anglo or White respondents. The percentage of respondents who reported park areas as undesirable places to be alone ranged from 13% for the Japanese Americans to 23% for African American respondents.

HOW WOULD YOU RATE PARK AREAS SIMILAR TO THOSE IN THE PHOTOS AS *PLACES TO BE ALONE*?

Atlanta



Philadelphia



27

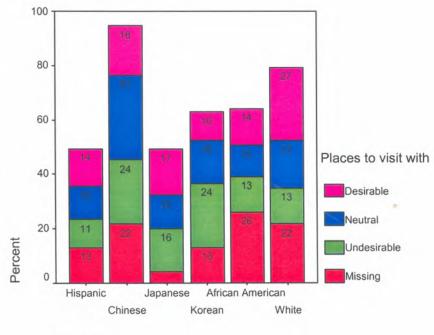
HOW WOULD YOU RATE PARK AREAS SIMILAR TO THOSE IN THE PHOTOS AS *PLACES TO VISIT WITH OTHERS?*

For the Atlanta sample, the percentage of respondents who reported park areas as desirable places to visit with others ranged from 10% for Korean Americans to 27% for Anglo or White respondents. The percentage of respondents who reported park areas as undesirable places to visit with others ranged from 11% for Hispanic Americans to 24% for Chinese American and Korean American respondents.

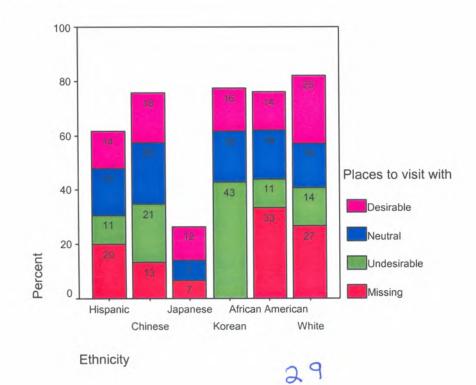
For the Philadelphia sample, the percentage of respondents who reported park areas as desirable places to visit with others ranged from 12% for Japanese Americans to 25% for Anglo or White respondents. The percentage of respondents who reported park areas as undesirable places to visit with others ranged from 11% for Hispanic Americans and African Americans to 43% for Korean American respondents.

HOW WOULD YOU RATE PARK AREAS SIMILAR TO THOSE IN THE PHOTOS AS *PLACES TO VISIT WITH OTHERS?*

Atlanta



Ethnicity



Philadelphia

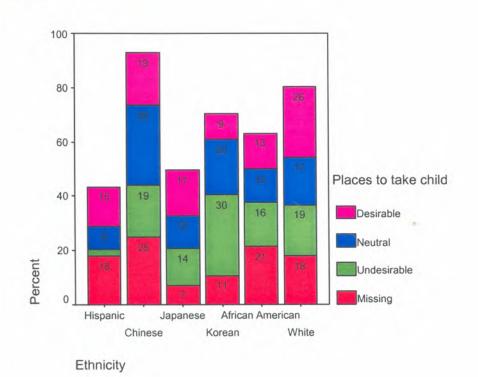
HOW WOULD YOU RATE PARK AREAS SIMILAR TO THOSE IN THE PHOTOS AS *PLACES TO TAKE CHILDREN?*

For the Atlanta sample, the percentage of respondents who reported park areas as desirable places to take children ranged from 9% for Korean Americans to 26% for Anglo or White respondents. The percentage of respondents who reported park areas as undesirable places to take children ranged from less than 7% for Hispanic Americans to 30% for Korean American respondents.

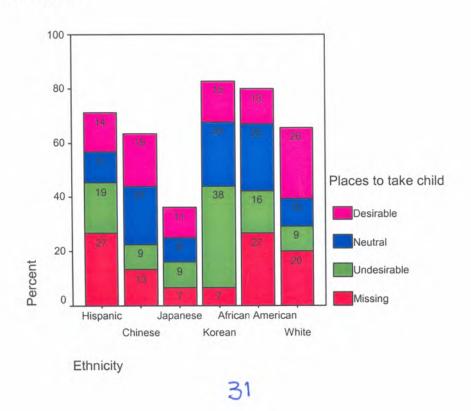
For the Philadelphia sample, the percentage of respondents who reported park areas as desirable places to take children ranged from 11% for Japanese Americans to 26% for Anglo or White respondents. The percentage of respondents who reported park areas as undesirable places to take children ranged from 9% for Chinese Americans, Japanese Americans, and Anglos or Whites to 38% for Korean American respondents.

HOW WOULD YOU RATE PARK AREAS SIMILAR TO THOSE IN THE PHOTOS AS *PLACES TO TAKE CHILDREN*?

Atlanta



Philadelphia

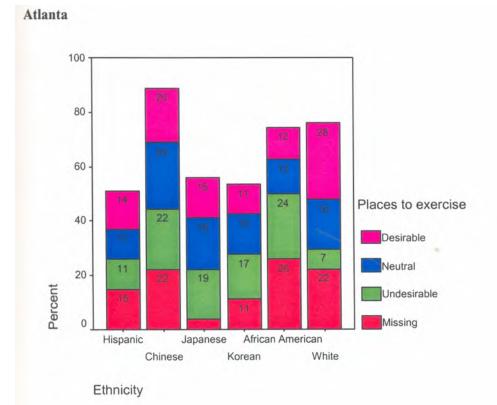


HOW WOULD YOU RATE PARK AREAS SIMILAR TO THOSE IN THE PHOTOS AS *PLACES TO EXERCISE?*

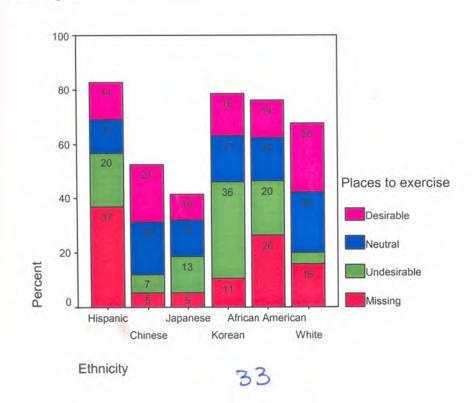
For the Atlanta sample, the percentage of respondents who reported park areas as desirable places to exercise ranged from 11% for Korean Americans to 28% for Anglo or White respondents. The percentage of respondents who reported park areas as undesirable places to exercise ranged from 7% for Anglos or Whites to 24% for African American respondents.

For the Philadelphia sample, the percentage of respondents who reported park areas as desirable places to exercise ranged from 10% for Japanese Americans to 25% for Anglo or White respondents. The percentage of respondents who reported park areas as undesirable places to exercise ranged from less than 7% for Anglos or Whites to 36% for Korean American respondents.

HOW WOULD YOU RATE PARK AREAS SIMILAR TO THOSE IN THE PHOTOS AS *PLACES TO EXERCISE*?



Philadelphia



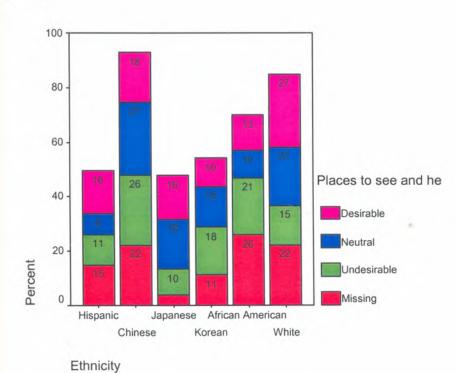
HOW WOULD YOU RATE PARK AREAS SIMILAR TO THOSE IN THE PHOTOS AS *PLACES TO SEE AND HEAR WILDLIFE AND BIRDS?*

For the Atlanta sample, the percentage of respondents who reported park areas as desirable places to see and hear wildlife and birds ranged from 10% for Korean Americans to 27% for Anglo or White respondents. The percentage of respondents who reported park areas as undesirable places to see and hear wildlife and birds ranged from 10% for Japanese Americans to 26% for Chinese American respondents.

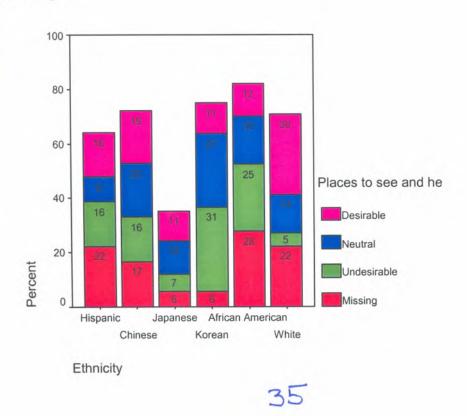
For the Philadelphia sample, the percentage of respondents who reported park areas as desirable places to see and hear wildlife and birds ranged from 11% for Japanese Americans and Korean Americans to 30% for Anglo or White respondents. The percentage of respondents who reported park areas as undesirable places to see and hear wildlife and birds ranged from 5% for Anglos or Whites to 31% for Korean American respondents.

HOW WOULD YOU RATE PARK AREAS SIMILAR TO THOSE IN THE PHOTOS AS *PLACES TO SEE AND HEAR WILDLIFE AND BIRDS?*









HOW WOULD YOU RATE PARK AREAS SIMILAR TO THOSE IN THE PHOTOS AS *PLACES TO GET AWAY FROM TRAFFIC AND NOISE?*

For the Atlanta sample, the percentage of respondents who reported park areas as desirable places to get away from traffic and noise ranged from 9% for Korean Americans to 26% for Anglo or White respondents. The percentage of respondents who reported park areas as undesirable places to get away from traffic and noise ranged from less than 7% for Hispanic Americans to 30% for African American respondents.

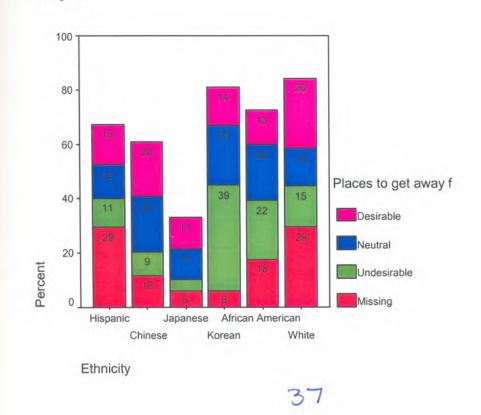
For the Philadelphia sample, the percentage of respondents who reported park areas as desirable places to get away from traffic and noise ranged from 11% for Japanese Americans to 26% for Anglo or White respondents. The percentage of respondents who reported park areas as undesirable places to get away from traffic and noise ranged from less than 7% for Japanese Americans to 39% for Korean American respondents.

HOW WOULD YOU RATE PARK AREAS SIMILAR TO THOSE IN THE PHOTOS AS *PLACES TO GET AWAY FROM TRAFFIC AND NOISE?*

100 80 60 30 Places to get away f 40 13 26 Desirable 15 Neutral 20 7 Percent Undesirable Missing 0 African American Hispanic Japanese Chinese Korean White Ethnicity

Philadelphia

Atlanta



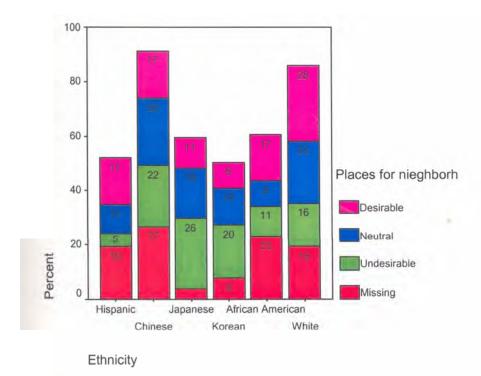
HOW WOULD YOU RATE PARK AREAS SIMILAR TO THOSE IN THE PHOTOS AS *PLACES FOR NEIGHBORHOOD RESIDENTS TO GATHER?*

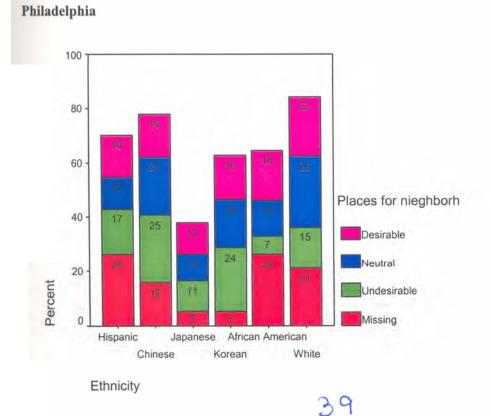
For the Atlanta sample, the percentage of respondents who reported park areas as desirable places for neighborhood residents to gather ranged from 9% for Korean Americans to 28% for Anglo or White respondents. The percentage of respondents who reported park areas as undesirable places for neighborhood residents to gather ranged from 5% for Hispanic Americans to 26% for Japanese American respondents.

For the Philadelphia sample, the percentage of respondents who reported park areas as desirable places for neighborhood residents to gather ranged from 12% for Japanese Americans to 22% for Anglo or White respondents. The percentage of respondents who reported park areas as undesirable places for neighborhood residents to gather ranged from 7% for African Americans to 25% for Chinese American respondents.

HOW WOULD YOU RATE PARK AREAS SIMILAR TO THOSE IN THE PHOTOS AS *PLACES FOR NEIGHBORHOOD RESIDENTS TO GATHER?*

Atlanta





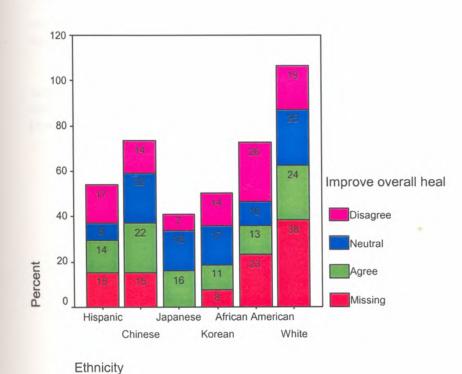
DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS *IMPROVE OVERALL HEALTH*?

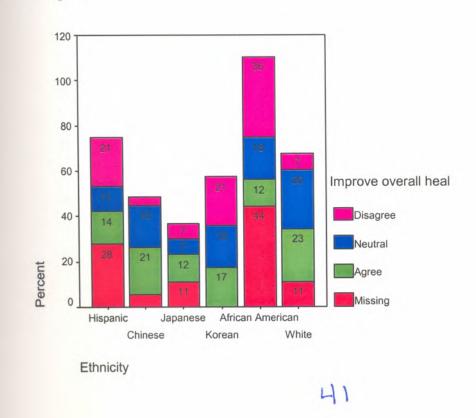
For the Atlanta sample, the percentage of respondents who agreed that park areas improve overall health ranged from 11% for Korean Americans to 24% for Anglo or White respondents. The percentage of respondents who disagreed that park areas improve overall health ranged from 7% for Japanese Americans to 26% for African American respondents.

For the Philadelphia sample, the percentage of respondents who agreed that park areas improve overall health ranged from 12% for Japanese Americans and African Americans to 23% for Anglo or White respondents. The percentage of respondents who disagreed that park areas improve overall health ranged from less than 7% for Chinese Americans to 36% for African American respondents.

DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS *IMPROVE OVERALL HEALTH*?

Atlanta



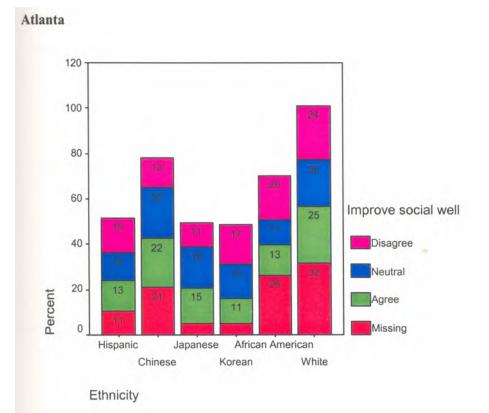


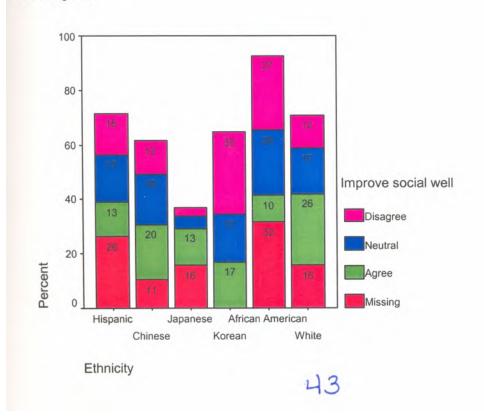
DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS *IMPROVE SOCIAL WELL BEING*?

For the Atlanta sample, the percentage of respondents who agreed that park areas improve social well being ranged from 11% for Korean Americans to 25% for Anglo or White respondents. The percentage of respondents who disagreed that park areas improve social well being ranged from 11% for Japanese Americans to 24% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who agreed that park areas improve social well being ranged from 10% for African Americans to 26% for Anglo or White respondents. The percentage of respondents who disagreed that park areas improve social well being ranged from less than 7% for Japanese Americans to 30% for Korean American respondents.

DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS *IMPROVE SOCIAL WELL BEING*?





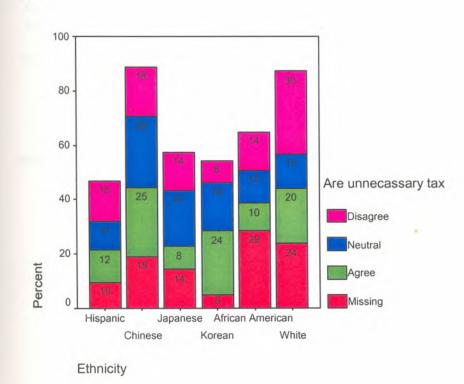
DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS *ARE UNNECESSARY TAX BURDENS*?

For the Atlanta sample, the percentage of respondents who agreed that park areas are unnecessary tax burdens ranged from 8% for Japanese Americans to 25% for Chinese American respondents. The percentage of respondents who disagreed that park areas are unnecessary tax burdens ranged from 8% for Korean Americans to 30% for Anglo or White respondents.

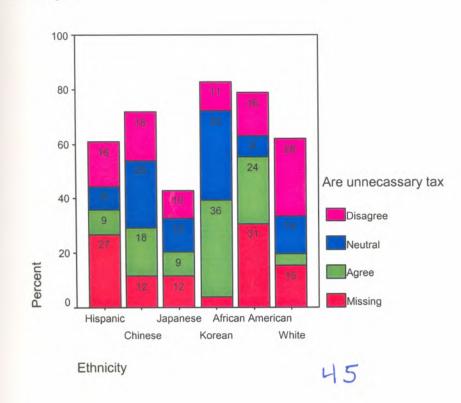
For the Philadelphia sample, the percentage of respondents who agreed that park areas are unnecessary tax burdens ranged from less than 7% for Anglos or Whites to 36% for Korean American respondents. The percentage of respondents who disagreed that park areas are unnecessary tax burdens ranged from 10% for Japanese Americans to 28% for Anglo or White respondents.

DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS *ARE UNNECESSARY TAX BURDENS*?

Atlanta





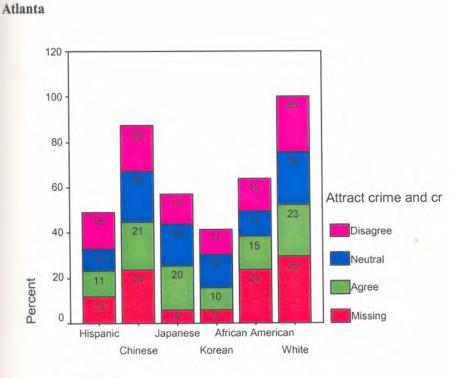


DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS *ATTRACT CRIME AND CREATE UNSAFE CONDITIONS*?

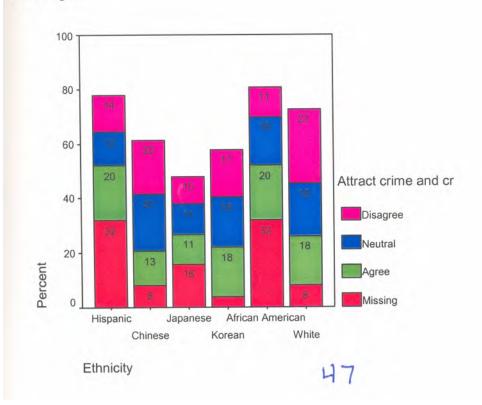
For the Atlanta sample, the percentage of respondents who agreed that park areas attract crime and create unsafe conditions ranged from 10% for Korean Americans to 23% for Anglo or White respondents. The percentage of respondents who disagreed that park areas attract crime and create unsafe conditions ranged from 11% for Korean Americans to 25% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who agreed that park areas attract crime and create unsafe conditions ranged from 11% for Japanese Americans to 20% for Hispanic American and African American respondents. The percentage of respondents who disagreed that park areas attract crime and create unsafe conditions ranged from 10% for Japanese Americans to 27% for Anglo or White respondents.

DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS ATTRACT CRIME AND CREATE UNSAFE CONDITIONS?



Ethnicity

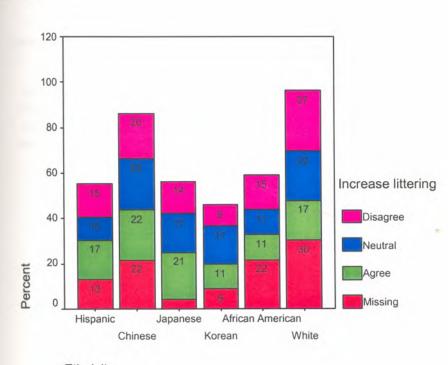


DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS *INCREASE LITTERING*?

For the Atlanta sample, the percentage of respondents who agreed that park areas increase littering ranged from 11% for Korean Americans and African Americans to 22% for Chinese American respondents. The percentage of respondents who disagreed that park areas increase littering ranged from 9% for Korean Americans to 27% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who agreed that park areas increase littering ranged from 12% for Japanese Americans to 21% for Anglo or White respondents. The percentage of respondents who disagreed that park areas increase littering ranged from 11% for Japanese Americans to 27% for Anglo or White respondents.

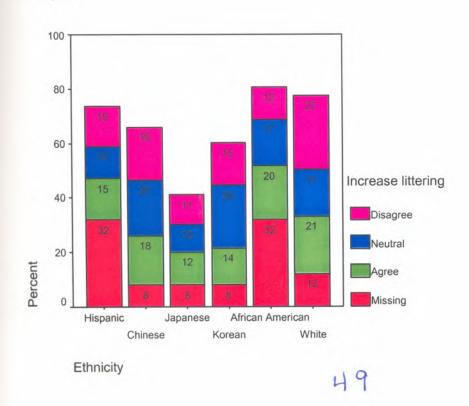
DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS *INCREASE LITTERING?*



Ethnicity

Philadelphia

Atlanta

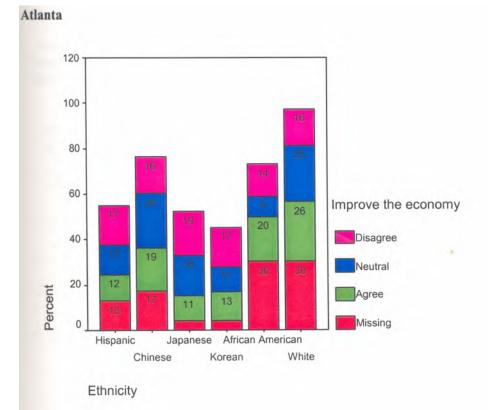


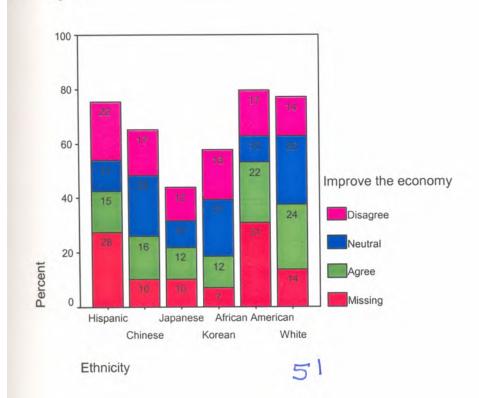
DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS *IMPROVE THE ECONOMY*?

For the Atlanta sample, the percentage of respondents who agreed that park areas improve the economy ranged from 11% for Japanese Americans to 26% for Anglo or White respondents. The percentage of respondents who disagreed that park areas improve the economy ranged from 14% for African Americans to 19% for Japanese American respondents.

For the Philadelphia sample, the percentage of respondents who agreed that park areas improve the economy ranged from 12% for Japanese Americans and Korean Americans to 24% for Anglo or White respondents. The percentage of respondents who disagreed that park areas improve the economy ranged from 12% for Japanese Americans to 22% for Hispanic American respondents.

DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS *IMPROVE THE ECONOMY*?





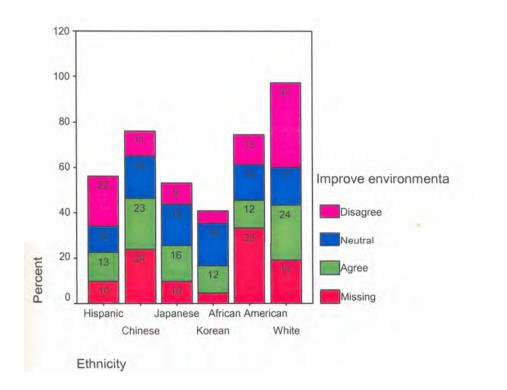
DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS *IMPROVE ENVIRONMENTAL QUALITY* ?

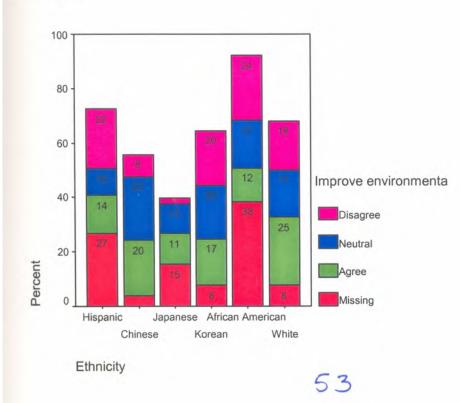
For the Atlanta sample, the percentage of respondents who agreed that park areas improve environmental quality ranged from 12% for Korean Americans and African Americans to 24% for Anglo or White respondents. The percentage of respondents who disagreed that park areas improve environmental quality ranged from less than 7% for Korean Americans to 37% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who agreed that park areas improve environmental quality ranged from 11% for Japanese Americans to 25% for Anglo or White respondents. The percentage of respondents who disagreed that park areas improve environmental quality ranged from less than 7% for Japanese Americans to 24% for African American respondents.

DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS *IMPROVE ENVIRONMENTAL QUALITY*?

Atlanta





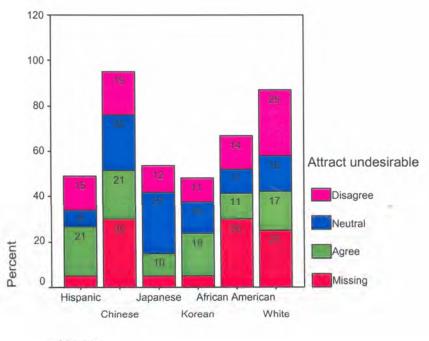
DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS ATTRACT UNDESIRABLE ANIMALS AND BIRDS?

For the Atlanta sample, the percentage of respondents who agreed that park areas attract undesirable animals and birds ranged from 10% for Japanese Americans to 21% for Hispanic American and Chinese American respondents. The percentage of respondents who disagreed that park areas attract undesirable animals and birds ranged from 11% for Korean Americans to 29% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who agreed that park areas attract undesirable animals and birds ranged from 11% for Hispanic Americans to 21% for Anglo or White respondents. The percentage of respondents who disagreed that park areas attract undesirable animals and birds ranged from 11% for Japanese Americans to 26% for Anglo or White respondents.

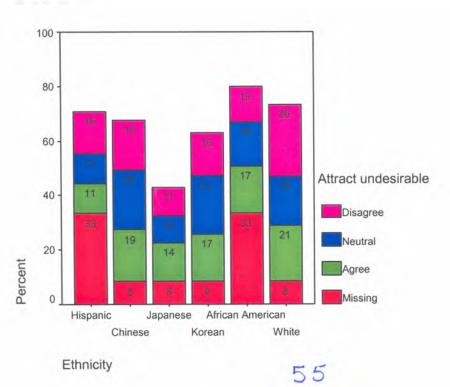
DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS ATTRACT UNDESIRABLE ANIMALS AND BIRDS?

Atlanta



Ethnicity





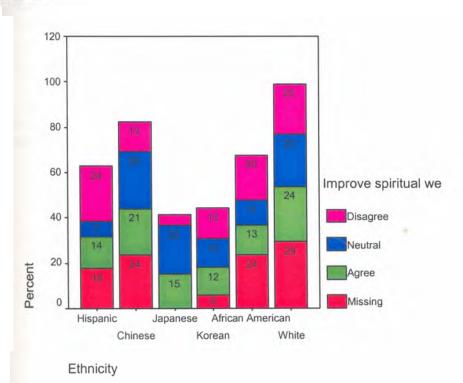
DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS *IMPROVE SPIRITUAL WELL BEING*?

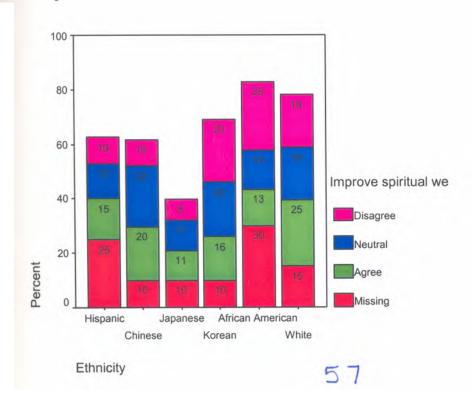
For the Atlanta sample, the percentage of respondents who agreed that park areas improve spiritual well being ranged from 12% for Korean Americans to 24% for Anglo or White respondents. The percentage of respondents who disagreed that park areas improve spiritual well being ranged from less than 7% for Japanese Americans to 24% for Hispanic American respondents.

For the Philadelphia sample, the percentage of respondents who agreed that park areas improve spiritual well being ranged from 11% for Japanese Americans to 25% for Anglo or White respondents. The percentage of respondents who disagreed that park areas improve spiritual well being ranged from 8% for Japanese Americans to 25% for African American respondents.

DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS *IMPROVE SPIRITUAL WELL BEING*?

Atlanta





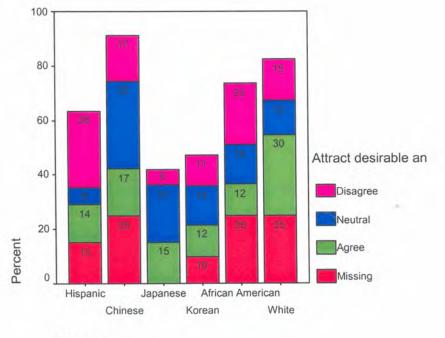
DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS ATTRACT DESIRABLE ANIMALS AND BIRDS?

For the Atlanta sample, the percentage of respondents who agreed that park areas attract desirable animals and birds ranged from 12% for Korean Americans and African Americans to 30% for Anglo or White respondents. The percentage of respondents who disagreed that park areas attract desirable animals and birds ranged from 6% for Japanese Americans to 28% for Hispanic American respondents.

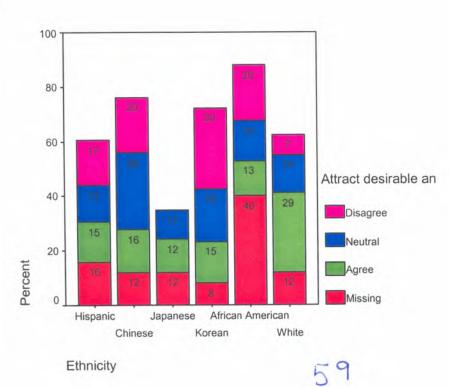
For the Philadelphia sample, the percentage of respondents who agreed that park areas attract desirable animals and birds ranged from 12% for Japanese Americans to 29% for Anglo or White respondents. The percentage of respondents who disagreed that park areas attract desirable animals and birds ranged from 7% for Anglos or Whites to 30% for Korean American respondents.

DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS ATTRACT DESIRABLE ANIMALS AND BIRDS?

Atlanta



Ethnicity

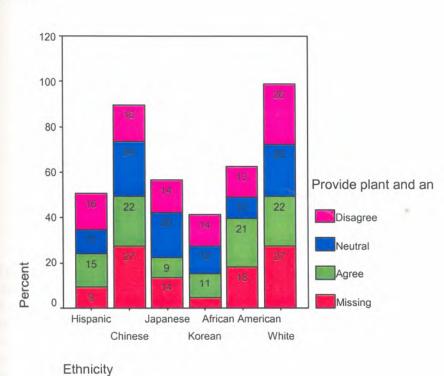


DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS *PROVIDE PLANT AND ANIMAL MATERIALS FOR HOME USE (FOOD, MEDICINE, DECORATION)?*

For the Atlanta sample, the percentage of respondents who agreed that park areas provide plant and animal materials for home use ranged from 9% for Japanese Americans **to** 22% for Chinese American and Anglo or White respondents. The percentage of respondents who disagreed that park areas provide plant and animal materials for home use ranged from 13% for African Americans to 26% for Anglo or White respondents.

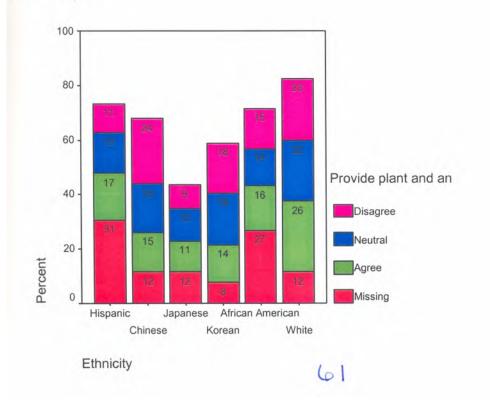
For the Philadelphia sample, the percentage of respondents who agreed that park areas provide plant and animal materials for home use ranged from 11% for Japanese Americans to 26% for Anglo or White respondents. The percentage of respondents who disagreed that park areas provide plant and animal materials for home use ranged from 9% for Japanese Americans to 24% for Chinese American respondents.

DO YOU AGREE OR DISAGREE THAT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS *PROVIDE PLANT AND ANIMAL MATERIALS FOR HOME USE (FOOD, MEDICINE, DECORATION)?*



Atlanta







Patterns of Urban Park and Forest Visitation

The following charts compare the responses of the six population subgroups (Hispanics or Hispanic Americans, Chinese or Chinese Americans, Japanese or Japanese Americans, Korean or Korean Americans, African Americans, and Anglo or White respondents) to the items relating to patterns of urban park and forest visitation. The response categories (None/Some/Almost All/Missing) for each item are represented by color-coded boxes. For each item relating to patterns of urban park and forest visitation, the percentage of respondents indicating a specific response category, is shown in the respective color-coded box within each population subgroup.

Note: In some cases, the cumulative percentages for each population subgroup add up to more than 100 percent when respondents indicate more than one response category for the corresponding item relating to patterns of urban park and forest visitation.



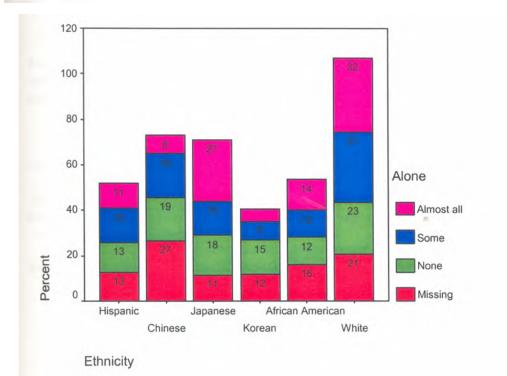
OF YOUR VISITS IN THE LAST 12 MONTHS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS, HOW MANY OF THESE WERE UNDERTAKEN ALONE?

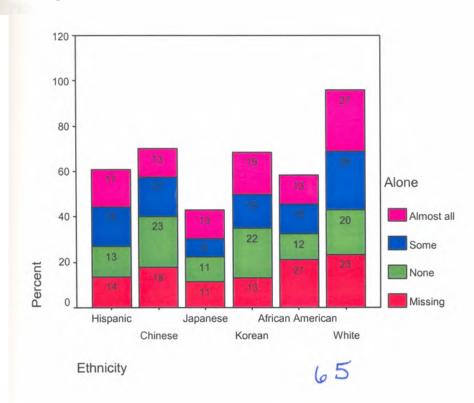
For the Atlanta sample, the percentage of respondents who reported being alone during almost all of the visits to park areas in the last 12 months ranged from less than 7% for Korean Americans to 32% for Anglo or White respondents. The percentage of respondents who reported being alone during some of the visits to park areas in the last 12 months ranged from 8% for Korean Americans to 31% for Anglo or White respondents. The percentage of respondents who reported being alone during none of the visits to park areas in the last 12 months ranged from 12% for African Americans to 23% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who reported being alone during almost all of the visits to park areas in the last 12 months ranged from 13% for Chinese Americans, Japanese Americans, and African Americans to 27% for Anglo or White respondents. The percentage of respondents who reported being alone during some of the visits to park areas in the last 12 months ranged from 8% for Japanese Americans to 26% for Anglo or White respondents. The percentage of respondents who reported being alone during none of the visits to park areas in the last 12 months ranged from 11% for Japanese Americans to 23% for Chinese American respondents.

OF YOUR VISITS IN THE LAST 12 MONTHS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS, HOW MANY OF THESE WERE UNDERTAKEN *ALONE*?

Atlanta



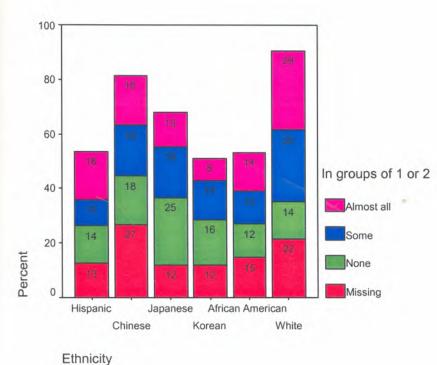


OF YOUR VISITS IN THE LAST 12 MONTHS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS, HOW MANY OF THESE WERE UNDERTAKEN IN GROUPS OF 1 OR 2 OTHER PERSONS?

For the Atlanta sample, the percentage of respondents who reported being in groups of 1 or 2 other persons during almost all of the visits to park areas in the last 12 months ranged from 8% for Korean Americans to 29% for Anglo or White respondents. The percentage of respondents who reported being in groups of 1 or 2 other persons during some of the visits to park areas in the last 12 months ranged from 10% for Hispanic Americans to 26% for Anglo or White respondents. The percentage of respondents who reported being in groups of 1 or 2 other persons during some of the visits to park areas in the last 12 months ranged from 10% for Hispanic Americans to 26% for Anglo or White respondents. The percentage of respondents who reported being in groups of 1 or 2 other persons during none of the visits to park areas in the last 12 months ranged from 12% for African Americans to 25% for Japanese American respondents.

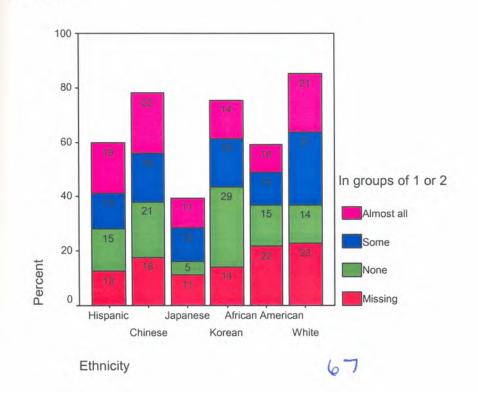
For the Philadelphia sample, the percentage of respondents who reported being in groups of 1 or 2 other persons during almost all of the visits to park areas in the last 12 months ranged from 10% for African Americans to 22% for Chinese American respondents. The percentage of respondents who reported being in groups of 1 or 2 other persons during some of the visits to park areas in the last 12 months ranged from 12% for Japanese Americans and African Americans to 27% for Anglo or White respondents. The percentage of respondents who reported being in groups of 1 or 2 other persons during none of the visits to park areas in the last 12 months ranged from 5% for Japanese Americans to 29% for Korean American respondents.

OF YOUR VISITS IN THE LAST 12 MONTHS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS, HOW MANY OF THESE WERE UNDERTAKEN IN GROUPS OF 1 OR 2 OTHER PERSONS?



Atlanta





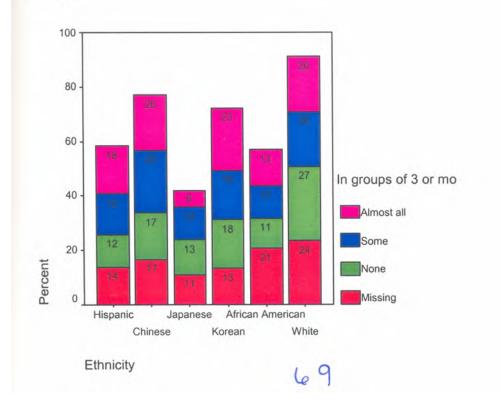
OF YOUR VISITS IN THE LAST 12 MONTHS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS, HOW MANY OF THESE WERE UNDERTAKEN *IN GROUPS OF 3 OR MORE PERSONS?*

For the Atlanta sample, the percentage of respondents who reported being in groups of 3 or more persons during almost all of the visits to park areas in the last 12 months ranged from 13% for African Americans to 22% for Hispanic American respondents. The percentage of respondents who reported being in groups of 3 or more persons during some of the visits to park areas in the last 12 months ranged from 7% for Hispanic Americans to 26% for Anglo or White respondents. The percentage of respondents who reported being in groups of 3 or more persons during none of the visits to park areas in the last 12 months ranged from 7% for Hispanic Americans to 26% for Anglo or White respondents. The percentage of respondents who reported being in groups of 3 or more persons during none of the visits to park areas in the last 12 months ranged from 7% for Korean Americans to 30% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who reported being in groups of 3 or more persons during almost all of the visits to park areas in the last 12 months ranged from 6% for Japanese Americans to 23% for Korean American respondents. The percentage of respondents who reported being in groups of 3 or more persons during some of the visits to park areas in the last 12 months ranged from 12% for Japanese Americans and African Americans to 23% for Chinese American respondents. The percentage of respondents who reported being in groups of 3 or more persons during none of the visits to park areas in the last 12 months ranged from 11% for African Americans to 27% for Anglo or White respondents.

OF YOUR VISITS IN THE LAST 12 MONTHS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS, HOW MANY OF THESE WERE UNDERTAKEN *IN GROUPS OF 3 OR MORE PERSONS*?

Atlanta 120 100 80 60 In groups of 3 or mo 30 40 18 Almost all Some 18 16 9 20 Percent None 0 Missing Japanese Hispanic African American Chinese Korean White Ethnicity

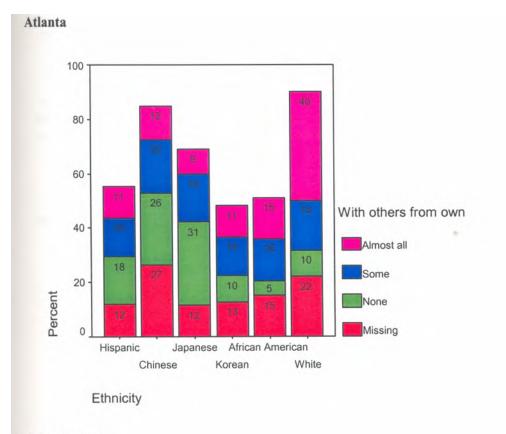


OF YOUR VISITS IN THE LAST 12 MONTHS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS, HOW MANY OF THESE WERE UNDERTAKEN *WITH OTHERS FROM YOUR OWN RACIAL/ETHNIC GROUP?*

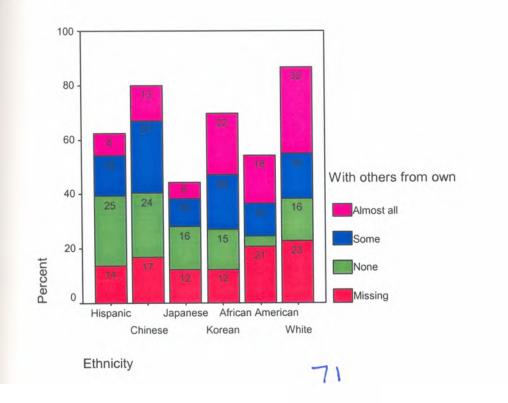
For the Atlanta sample, the percentage of respondents who reported being with others from their own racial/ethnic group during almost all of the visits to park areas in the last 12 months ranged from 9% for Japanese Americans to 40% for Anglo or White respondents. The percentage of respondents who reported being with others from their own racial/ethnic group during some of the visits to park areas in the last 12 months ranged from 14% for Hispanic Americans and Korean Americans to 20% for Chinese American respondents. The percentage of respondents who reported being with others from their own racial/ethnic group during none of the visits to park areas in the last 12 months ranged from 5% for African Americans to 31% for Chinese American respondents.

For the Philadelphia sample, the percentage of respondents who reported being with others from their own racial/ethnic group during almost all of the visits to park areas in the last 12 months ranged from 6% for Japanese Americans to 32% for Anglo or White respondents. The percentage of respondents who reported being with others from their own racial/ethnic group during some of the visits to park areas in the last 12 months ranged from 10% for Japanese Americans to 27% for Chinese American respondents. The percentage of respondents who reported being with others from their own racial/ethnic group during none of the visits to park areas in the last 12 months ranged from 10% for Japanese Americans to 27% for Chinese American respondents. The percentage of respondents who reported being with others from their own racial/ethnic group during none of the visits to park areas in the last 12 months ranged for Japanese American respondents. The percentage of respondents who reported being with others from their own racial/ethnic group during none of the visits to park areas in the last 12 months ranged from less than 5% for African Americans to 25% for Hispanic American respondents.

OF YOUR VISITS IN THE LAST 12 MONTHS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS, HOW MANY OF THESE WERE UNDERTAKEN *WITH OTHERS FROM YOUR OWN RACIAL/ETHNIC GROUP*?







OF YOUR VISITS IN THE LAST 12 MONTHS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS, HOW MANY OF THESE WERE UNDERTAKEN *DURING WEEKDAYS*?

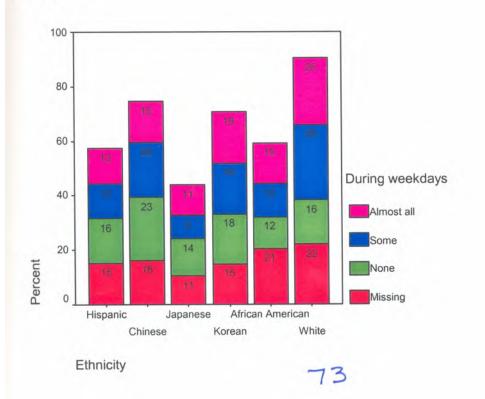
For the Atlanta sample, the percentage of respondents who reported undertaking almost all of their visits to park areas during weekdays, in the last 12 months ranged from less than 5% for Korean Americans to 40% for Anglo or White respondents. The percentage of respondents who reported undertaking some of their visits to park areas during weekdays, in the last 12 months ranged from 12% for Hispanic Americans and Japanese Americans to 33% for Anglo or White respondents. The percentage of respondents who reported undertaking none of their visits to park areas during weekdays, in the last 12 months ranged from 10% for African Americans to 25% for Japanese American respondents.

For the Philadelphia sample, the percentage of respondents who reported undertaking almost all of their visits to park areas during weekdays, in the last 12 months ranged from 11% for Japanese Americans to 25% for Anglo or White respondents. The percentage of respondents who reported undertaking some of their visits to park areas during weekdays, in the last 12 months ranged from 9% for Japanese Americans to 28% for Anglo or White respondents. The percentage of respondents who reported undertaking none of their visits to park areas during weekdays, in the last 12 months ranged from 9% for Japanese Americans to 28% for Anglo or White respondents. The percentage of respondents who reported undertaking none of their visits to park areas during weekdays, in the last 12 months ranged from 12% for African Americans to 23% for Chinese American respondents.

OF YOUR VISITS IN THE LAST 12 MONTHS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS, HOW MANY OF THESE WERE UNDERTAKEN *DURING WEEKDAYS*?

Atlanta 120 100 80 60 During weekdays 24 Almost all 40 25 12 Some 15 10 14 20 Percent None 0 Missing African American Hispanic Japanese Chinese Korean White

Ethnicity

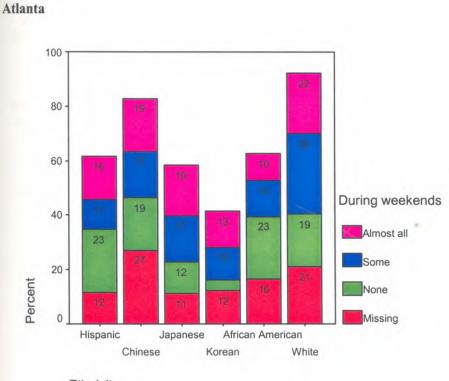


OF YOUR VISITS IN THE LAST 12 MONTHS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS, HOW MANY OF THESE WERE UNDERTAKEN *DURING WEEKENDS*?

For the Atlanta sample, the percentage of respondents who reported undertaking almost all of their visits to park areas during weekends, in the last 12 months ranged from 10% for African Americans to 22% for Anglo or White respondents. The percentage of respondents who reported undertaking some of their visits to park areas during weekends, in the last 12 months ranged from 11% for Hispanic Americans to 30% for Anglo or White respondents. The percentage of respondents who reported undertaking none of their visits to park areas during weekends, in the last 12 months ranged from less than 7% for Korean Americans to 23% for Hispanic American and African American respondents.

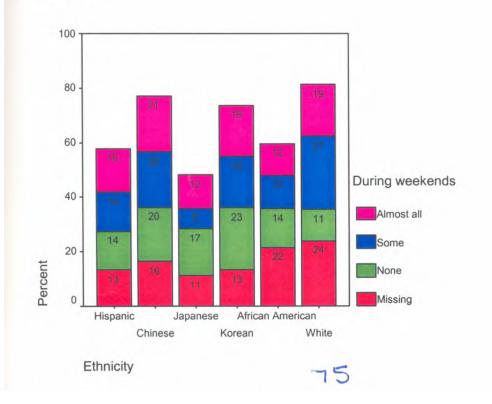
For the Philadelphia sample, the percentage of respondents who reported undertaking almost all of their visits to park areas during weekends, in the last 12 months ranged from 12% for African Americans to 21% for Chinese American respondents. The percentage of respondents who reported undertaking some of their visits to park areas during weekends, in the last 12 months ranged from 8% for Japanese Americans to 27% for Anglo or White respondents. The percentage of respondents who reported undertaking none of their visits to park areas during weekends, in the last 12 months ranged from 11% for Anglos or Whites to 23% for Korean American respondents.

OF YOUR VISITS IN THE LAST 12 MONTHS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS, HOW MANY OF THESE WERE UNDERTAKEN *DURING WEEKENDS?*



Ethnicity





OF YOUR VISITS IN THE LAST 12 MONTHS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS, HOW MANY OF THESE WERE UNDERTAKEN FOR LESS THAN 1 HOUR?

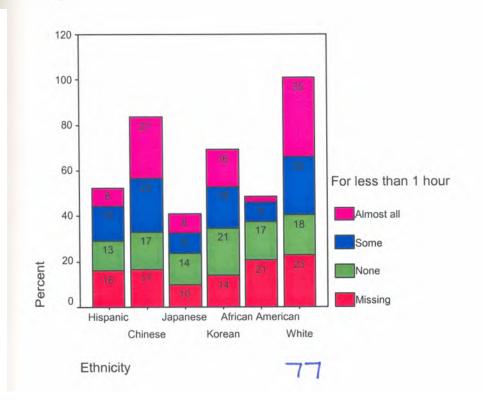
For the Atlanta sample, the percentage of respondents who reported undertaking almost all of their visits to park areas for less than 1 hour per visit, in the last 12 months ranged from 8% for Korean Americans to 28% for Japanese American respondents. The percentage of respondents who reported undertaking some of their visits to park areas for less than 1 hour per visit, in the last 12 months ranged from 8% for African Americans to 27% for Anglo or White respondents. The percentage of respondents who reported undertaking none of their visits to park areas for less than 1 hour per visit, in the last 12 months ranged from 12% for Korean Americans to 23% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who reported undertaking almost all of their visits to park areas for less than 1 hour per visit, in the last 12 months ranged from less than 5% for African Americans to 35% for Anglo or White respondents. The percentage of respondents who reported undertaking some of their visits to park areas for less than 1 hour per visit, in the last 12 months ranged from 8% for African Americans to 25% for Anglo or White respondents. The percentage of respondents. The percentage of respondents who reported undertaking none of their visits to park areas for less than 1 hour per visit, in the last 12 months ranged from 8% for African Americans to 25% for Anglo or White respondents. The percentage of respondents who reported undertaking none of their visits to park areas for less than 1 hour per visit, in the last 12 months ranged from 13% for Hispanic Americans to 21% for Korean American respondents.

OF YOUR VISITS IN THE LAST 12 MONTHS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS, HOW MANY OF THESE WERE UNDERTAKEN *FOR LESS THAN 1 HOUR?*

Atlanta 120 100 80 60 For less than 1 hour 23 40 Almost all 18 16 Some 16 16 20 12 Percent None Missing 0 Hispanic African American Japanese Chinese Korean White Ethnicity





OF YOUR VISITS IN THE LAST 12 MONTHS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS, HOW MANY OF THESE WERE UNDERTAKEN FOR 1 TO 2 HOURS?

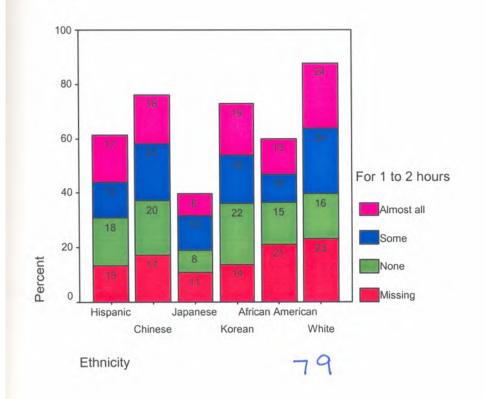
For the Atlanta sample, the percentage of respondents who reported undertaking almost all of their visits to park areas for 1 to 2 hours per visit, in the last 12 months ranged from 6% for African Americans to 39% for Anglo or White respondents. The percentage of respondents who reported undertaking some of their visits to park areas for 1 to 2 hours per visit, in the last 12 months ranged from 13% for Korean Americans to 24% for Anglo or White respondents. The percentage of respondents who reported undertaking none of their visits to park areas for 1 to 2 hours per visit, in the last 12 months ranged from 11% for Anglos or Whites to 26% for Japanese American respondents.

For the Philadelphia sample, the percentage of respondents who reported undertaking almost all of their visits to park areas for 1 to 2 hours per visit, in the last 12 months ranged from 8% for Japanese Americans to 24% for Anglo or White respondents. The percentage of respondents who reported undertaking some of their visits to park areas for 1 to 2 hours per visit, in the last 12 months ranged from 10% for African Americans to 24% for Anglo or White respondents. The percentage of respondents. The percentage of respondents who reported undertaking none of their visits to park areas for 1 to 2 hours per visit, in the last 12 months ranged from 10% for African Americans to 24% for Anglo or White respondents. The percentage of respondents who reported undertaking none of their visits to park areas for 1 to 2 hours per visit, in the last 12 months ranged from 8% for Japanese Americans to 22% for Korean American respondents.

OF YOUR VISITS IN THE LAST 12 MONTHS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS, HOW MANY OF THESE WERE UNDERTAKEN *FOR 1 TO 2 HOURS?*

120 100 80 60 -For 1 to 2 hours Almost all 40 16 26 18 11 Some 14 20 Percent None 0 Missing Hispanic Japanese African American Chinese Korean White Ethnicity





Atlanta

OF YOUR VISITS IN THE LAST 12 MONTHS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS, HOW MANY OF THESE WERE UNDERTAKEN FOR MORE THAN 2 HOURS?

For the Atlanta sample, the percentage of respondents who reported undertaking almost all of their visits to park areas for more than 2 hours per visit, in the last 12 months ranged from 12% for Japanese Americans to 21% for African American respondents. The percentage of respondents who reported undertaking some of their visits to park areas for more than 2 hours per visit, in the last 12 months ranged from 10% for African Americans to 28% for Anglo or White respondents. The percentage of respondents who reported undertaking none of their visits to park areas for more than 2 hours per visit, in the last 12 months ranged from 6% for African Americans to 30% for Anglo or White respondents.

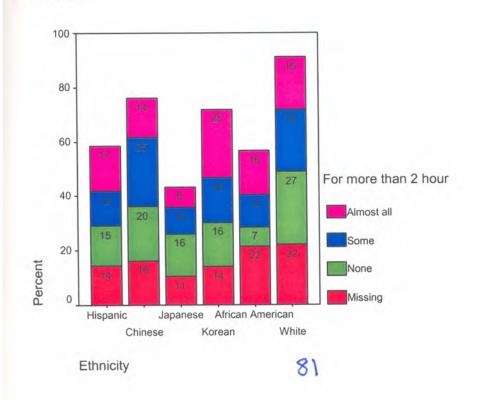
For the Philadelphia sample, the percentage of respondents who reported undertaking almost all of their visits to park areas for more than 2 hours per visit, in the last 12 months ranged from 8% for Japanese Americans to 25% for Korean American respondents. The percentage of respondents who reported undertaking some of their visits to park areas for more than 2 hours per visit, in the last 12 months ranged from 10% for Japanese Americans to 25% for Chinese American respondents. The percentage of respondents who reported undertaking none of their visits to park areas for more than 2 hours per visit, in the last 12 months ranged from 10% for Japanese Americans to 25% for Chinese American respondents. The percentage of respondents who reported undertaking none of their visits to park areas for more than 2 hours per visit, in the last 12 months ranged from 7% for African Americans to 27% for Anglo or White respondents.

OF YOUR VISITS IN THE LAST 12 MONTHS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS, HOW MANY OF THESE WERE UNDERTAKEN *FOR MORE THAN 2 HOURS?*

120 100 80 60 For more than 2 hour 30 Almost all 40 17 Some 14 20 Percent 6 10 None 0 Missing Hispanic Japanese African American Chinese Korean White

Ethnicity





Atlanta



Recreational Activity Participation in Urban Parks and Forests

The following charts compare the responses of the six population subgroups (Hispanics or Hispanic Americans, Chinese or Chinese Americans, Japanese or Japanese Americans, Korean or Korean Americans, African Americans, and Anglo or White respondents) to the items relating to recreational activity participation in urban parks and forests. The response categories (None/Once or Twice/Three or More Times/Missing) for each item are represented by color-coded boxes. For each item relating to recreational activity participation in urban parks and forests, the percentage of respondents indicating a specific response category, is shown in the respective color-coded box within each population subgroup.

Note: In some cases, the cumulative percentages for each population subgroup add up to more than 100 percent when respondents indicate more than one response category for the corresponding item relating to recreational activity participation in urban parks and forests.

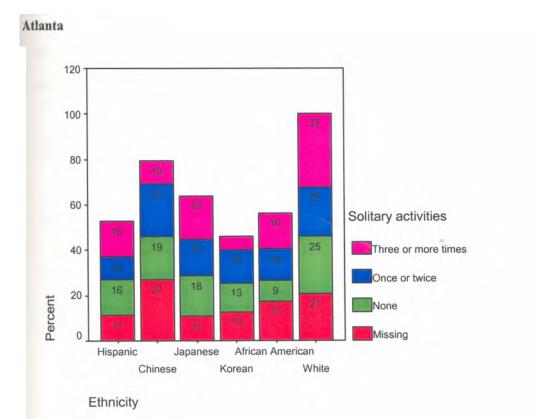


HOW MANY TIMES HAVE YOU ENGAGED IN *SOLITARY ACTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?

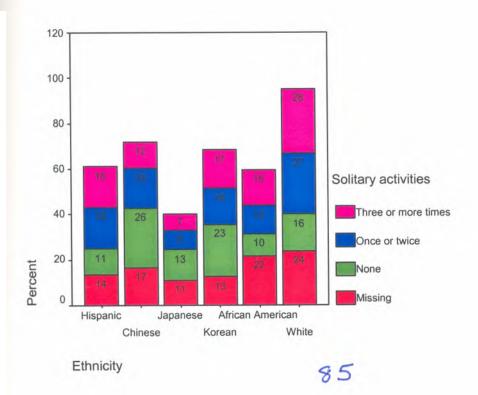
For the Atlanta sample, the percentage of respondents who engaged in solitary activities (being alone, reading, commuting through park, walking the dog, etc.) three or more times in the last 12 months, during their visits to park areas ranged from less than 7% for Korean Americans to 33% for Anglo or White respondents. The percentage of respondents who engaged in solitary activities once or twice in the last 12 months, during their visits to park areas ranged from 9% for Hispanic Americans to 23% for Chinese American respondents. The percentage of respondents who did not engage in solitary activities in the last 12 months, during their visits to park areas ranged from 9% for African Americans to 25% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who engaged in solitary activities three or more times in the last 12 months, during their visits to park areas ranged from 7% for Japanese Americans to 28% for Anglo or White respondents. The percentage of respondents who engaged in solitary activities once or twice in the last 12 months, during their visits to park areas ranged from 8% for Japanese Americans to 27% for Anglo or White respondents. The percentage of respondents. The percentage of respondents who did not engage in solitary activities in the last 12 months, during their visits to park areas ranged from 10% for African Americans to 26% for Chinese American respondents.

HOW MANY TIMES HAVE YOU ENGAGED IN *SOLITARY ACTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?





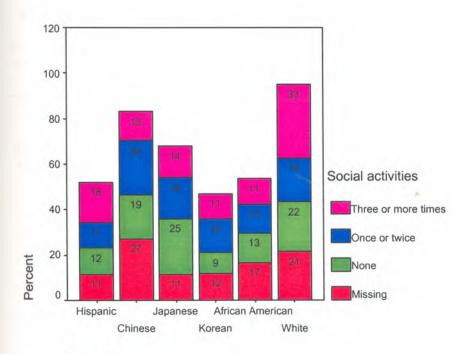


HOW MANY TIMES HAVE YOU ENGAGED IN *SOCIAL A CTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?

For the Atlanta sample, the percentage of respondents who engaged in social activities (playing with children, talking with friends, playing board games, etc.) three or more times in the last 12 months, during their visits to park areas ranged from 11% for Korean Americans and African Americans to 33% for Anglo or White respondents. The percentage of respondents who engaged in social activities once or twice in the last 12 months, during their visits to park areas ranged from 11% for Hispanic Americans to 24% for Chinese American respondents. The percentage of respondents who did not engage in social activities in the last 12 months, during their visits to park areas ranged from 9% for Korean Americans to 25% for Japanese American respondents.

For the Philadelphia sample, the percentage of respondents who engaged in social activities three or more times in the last 12 months, during their visits to park areas ranged from 10% for Japanese Americans to 20% for Anglo or White respondents. The percentage of respondents who engaged in social activities once or twice in the last 12 months, during their visits to park areas ranged from 10% for Hispanic Americans to 23% for Chinese American and Korean American respondents. The percentage of respondents who did not engage in social activities in the last 12 months, during their visits to park areas ranged from 7% for Japanese Americans to 32% for Anglo or White respondents.

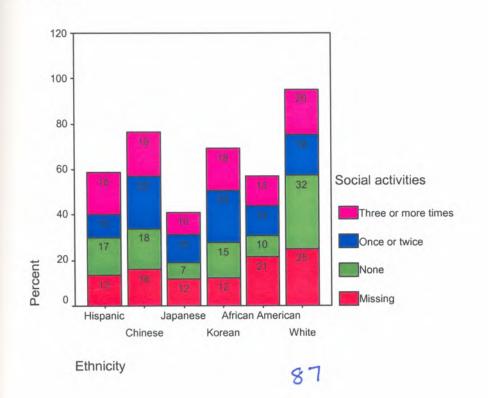
HOW MANY TIMES HAVE YOU ENGAGED IN *SOCIAL ACTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?



Atlanta

Ethnicity



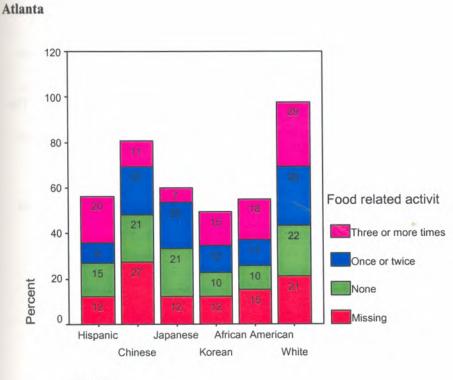


HOW MANY TIMES HAVE YOU ENGAGED IN *FOOD-RELATED A CTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?

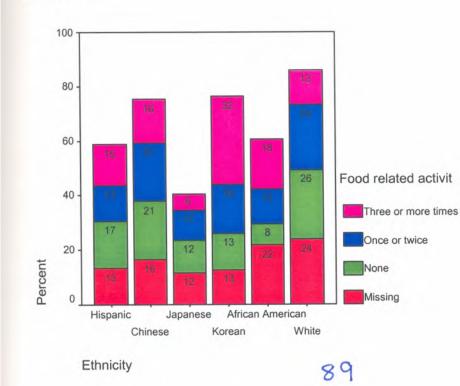
For the Atlanta sample, the percentage of respondents who engaged in food-related activities (picnicking, eating, barbecuing, etc.) three or more times in the last 12 months, during their visits to park areas ranged from 7% for Japanese Americans to 29% for Anglo or White respondents. The percentage of respondents who engaged in food-related activities once or twice in the last 12 months, during their visits to park areas ranged from 9% for Hispanic Americans to 26% for Anglo or White respondents. The percentage of respondents who did not engage in food-related activities in the last 12 months, during their visits to park areas ranged from 9% for Hispanic Americans to 26% for Anglo or White respondents. The percentage of respondents who did not engage in food-related activities in the last 12 months, during their visits to park areas ranged from 10% for Korean Americans and African Americans to 22% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who engaged in food-related activities three or more times in the last 12 months, during their visits to park areas ranged from 6% for Japanese Americans to 32% for Korean American respondents. The percentage of respondents who engaged in food-related activities once or twice in the last 12 months, during their visits to park areas ranged from 11% for Japanese Americans to 24% for Anglo or White respondents. The percentage of respondents who did not engage in food-related activities in the last 12 months, during their visits to park areas ranged from 8% for African Americans to 26% for Anglo or White respondents.

HOW MANY TIMES HAVE YOU ENGAGED IN *FOOD-RELATED A CTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?



Ethnicity



Philadelphia

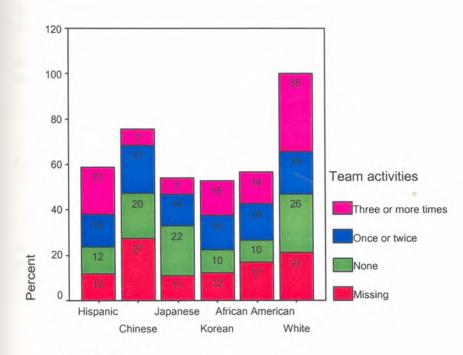
HOW MANY TIMES HAVE YOU ENGAGED IN *TEAM ACTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?

For the Atlanta sample, the percentage of respondents who engaged in team activities (soccer, basketball, softball/baseball, Frisbee, etc.) three or more times in the last 12 months, during their visits to park areas ranged from 7% for Chinese Americans and Japanese Americans to 35% for Anglo or White respondents. The percentage of respondents who engaged in team activities once or twice in the last 12 months, during their visits to park areas ranged from 14% for Hispanic Americans and Japanese Americans to 21% for Chinese American respondents. The percentage of respondents who did not engage in team activities in the last 12 months, during their visits to park areas ranged from 16% for Korean Americans and African Americans to 26% for Anglo or White respondents.

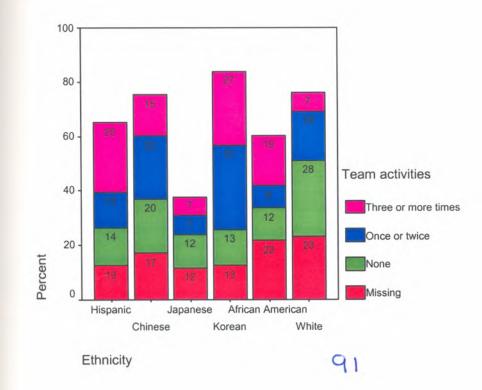
For the Philadelphia sample, the percentage of respondents who engaged in team activities three or more times in the last 12 months, during their visits to park areas ranged from 7% for Japanese Americans and Anglos or Whites to 27% for Korean American respondents. The percentage of respondents who engaged in team activities once or twice in the last 12 months, during their visits to park areas ranged from 7% for Japanese Americans to 31% for Korean American respondents. The percentage of respondents who did not engage in team activities in the last 12 months, during their visits to park areas ranged from 7% for Japanese Americans to 31% for Korean American respondents. The percentage of respondents who did not engage in team activities in the last 12 months, during their visits to park areas ranged from 12% for Japanese Americans and African Americans to 28% for Anglo or White respondents.

HOW MANY TIMES HAVE YOU ENGAGED IN *TEAM A CTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?

Atlanta



Ethnicity



Philadelphia

HOW MANY TIMES HAVE YOU ENGAGED IN *OUTDOOR LAND A CTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?

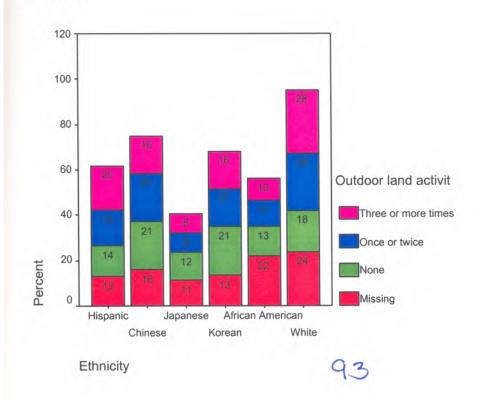
For the Atlanta sample, the percentage of respondents who engaged in outdoor land activities (backpacking/hiking, pleasure driving, camping, etc.) three or more times in the last 12 months, during their visits to park areas ranged from less than 5% for African Americans to 40% for Anglo or White respondents. The percentage of respondents who engaged in outdoor land activities once or twice in the last 12 months, during their visits to park areas ranged for Maglo or White respondents. The percentage of respondents. The percentage of respondents who engaged in outdoor land activities once or twice in the last 12 months, during their visits to park areas ranged from 8% for Japanese Americans to 29% for Anglo or White respondents. The percentage of respondents who did not engage in outdoor land activities in the last 12 months, during their visits to park areas ranged from 13% for Hispanic Americans, Chinese Americans, and Korean Americans to 25% for Japanese American respondents.

For the Philadelphia sample, the percentage of respondents who engaged in outdoor land activities three or more times in the last 12 months, during their visits to park areas ranged from 8% for Japanese Americans to 28% for Anglo or White respondents. The percentage of respondents who engaged in outdoor land activities once or twice in the last 12 months, during their visits to park areas ranged from 9% for Japanese Americans to 26% for Anglo or White respondents, The percentage of respondents who did not engage in outdoor land activities in the last 12 months, during their visits to park areas ranged from 9% for Japanese Americans to 26% for Anglo or White respondents, The percentage of respondents who did not engage in outdoor land activities in the last 12 months, during their visits to park areas ranged from 12% for Japanese Americans to 21% for Chinese American and Korean American respondents.

HOW MANY TIMES HAVE YOU ENGAGED IN *OUTDOOR LAND A CTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?

120 100 80 60 Outdoor land activit Three or more times 40 13 20 15 Once or twice 13 20 13 Percent None 0 Missing Hispanic Japanese African American Chinese Korean White Ethnicity

Philadelphia



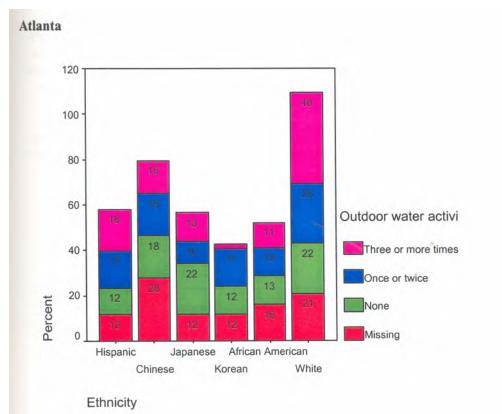
Atlanta

HOW MANY TIMES HAVE YOU ENGAGED IN *OUTDOOR WATER ACTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?

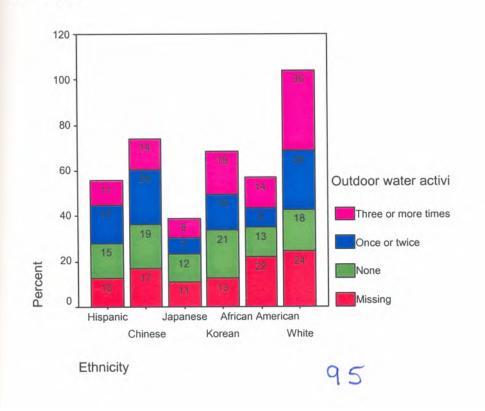
For the Atlanta sample, the percentage of respondents who engaged in outdoor water activities (boating/canoeing, fishing, swimming, etc.) three or more times in the last 12 months, during their visits to park areas ranged from less than 5% for Korean Americans to 40% for Anglo or White respondents. The percentage of respondents who engaged in outdoor water activities once or twice in the last 12 months, during their visits to park areas ranged from 10% for Japanese Americans to 26% for Anglo or White respondents. The percentage of respondents. The percentage of respondents who did not engage in outdoor water activities in the last 12 months, during their visits to park areas ranged from 10% for Japanese Americans to 26% for Anglo or White respondents. The percentage of respondents who did not engage in outdoor water activities in the last 12 months, during their visits to park areas ranged from 12% for Hispanic Americans and Korean Americans to 22% for Japanese American and Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who engaged in outdoor water activities three or more times in the last 12 months, during their visits to park areas ranged from 8% for Japanese Americans to 35% for Anglo or White respondents. The percentage of respondents who engaged in outdoor water activities once or twice in the last 12 months, during their visits to park areas ranged from 7% for Japanese Americans to 26% for Anglo or White respondents. The percentage of respondents who did not engage in outdoor water activities in the last 12 months, during their visits to park areas ranged from 7% for Japanese Americans to 26% for Anglo or White respondents. The percentage of respondents who did not engage in outdoor water activities in the last 12 months, during their visits to park areas ranged from 12% for Japanese Americans to 21% for Korean American respondents.

HOW MANY TIMES HAVE YOU ENGAGED IN *OUTDOOR WATER ACTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?







HOW MANY TIMES HAVE YOU ENGAGED IN *PHYSICAL EXERCISES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?

For the Atlanta sample, the percentage of respondents who engaged in physical exercises (running/jogging/walking, bicycling, rollerblading/skateboarding, etc.) three or more times in the last 12 months, during their visits to park areas ranged from 9% for Korean Americans to 34% for Anglo or White respondents. The percentage of respondents who engaged in physical exercises once or twice in the last 12 months, during their visits to park areas ranged from 13% for Hispanic Americans and Korean Americans to 25% for Anglo or White respondents. The percentage of respondents who did not engage in physical exercises in the last 12 months, during their visits to park areas ranged from 11% for African Americans to 22% for Japanese American respondents.

For the Philadelphia sample, the percentage of respondents who engaged in physical exercises three or more times in the last 12 months, during their visits to park areas ranged from 7% for Japanese Americans to 27% for Anglo or White respondents. The percentage of respondents who engaged in physical exercises once or twice in the last 12 months, during their visits to park areas ranged from 8% for Japanese Americans to 23% for Korean American respondents. The percentage of respondents who did not engage in physical exercises in the last 12 months, during their visits to park areas ranged from 8% for Japanese Americans to 23% for Korean American respondents. The percentage of respondents who did not engage in physical exercises in the last 12 months, during their visits to park areas ranged from 12% for Hispanic Americans to 22% for Chinese American respondents.

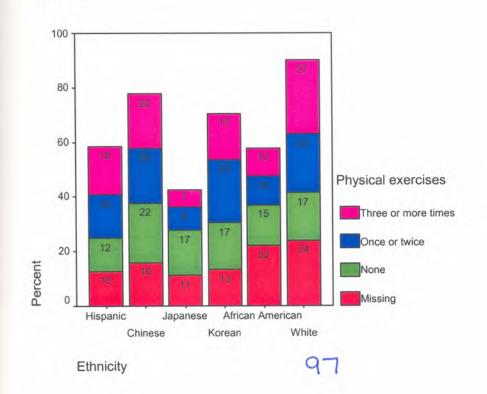
HOW MANY TIMES HAVE YOU ENGAGED IN *PHYSICAL EXERCISES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?

120 100 80 60 Physical exercises 21 Three or more times 40 18 22 Once or twice 14 14 11 20 Percent None Missing 0 Hispanic African American Japanese White Chinese Korean

Ethnicity



Atlanta

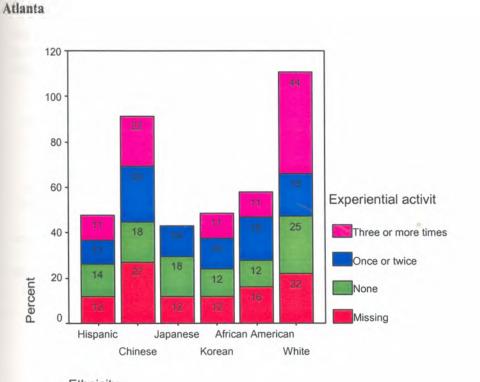


HOW MANY TIMES HAVE YOU ENGAGED IN *EXPERIENTIAL ACTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?

For the Atlanta sample, the percentage of respondents who engaged in experiential activities (aerobics, tai chi, qigong, yoga, etc.) activities three or more times in the last 12 months, during their visits to park areas ranged from less than I% for Japanese Americans to 44% for Anglo or White respondents. The percentage of respondents who engaged in experiential activities once or twice in the last 12 months, during their visits to park areas ranged from 11% for Hispanic Americans to 24% for Chinese American respondents. The percentage of respondents who did not engage in experiential activities in the last 12 months, during their visits to park areas ranged from 11% for Hispanic Americans to 24% for Chinese American respondents. The percentage of respondents who did not engage in experiential activities in the last 12 months, during their visits to park areas ranged from 12% for Korean Americans and African Americans to 25% for Anglo or White respondents.

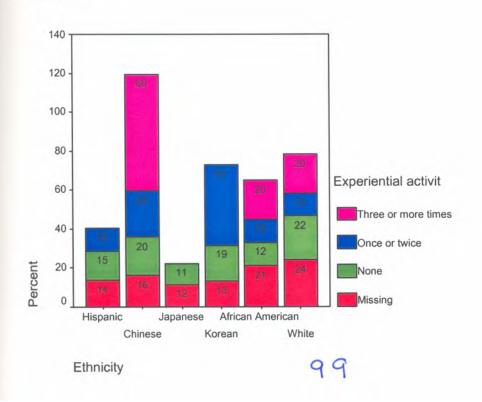
For the Philadelphia sample, the percentage of respondents who engaged in experiential activities three or more times in the last 12 months, during their visits to park areas ranged from less than 1% for Hispanic Americans, Japanese Americans, and Korean Americans to 60% for Chinese American respondents. The percentage of respondents who engaged in experiential activities once or twice in the last 12 months, during their visits to park areas ranged from less than 1% for Japanese Americans to 41% for Korean American respondents. The percentage of respondents who did not engage in experiential activities in the last 12 months, during their visits to park areas ranged from less to park areas ranged from 11% for Japanese Americans to 22% for Anglo or White respondents.

HOW MANY TIMES HAVE YOU ENGAGED IN *EXPERIENTIAL ACTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?



Ethnicity





HOW MANY TIMES HAVE YOU ENGAGED IN *SUBSISTENCE A CTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?

For the Atlanta sample, the percentage of respondents who engaged in subsistence activities (collecting plant/animal materials, hunting/trapping, etc.) three or more times in the last 12 months, during their visits to park areas ranged from 7% for Hispanic Americans and Japanese Americans to 40% for Anglo or White respondents. The percentage of respondents who engaged in subsistence activities once or twice in the last 12 months, during their visits to park areas ranged from 10% for Japanese Americans and Korean Americans to 30% for Anglo or White respondents. The percentage of respondents who did not engage in subsistence activities in the last 12 months, during their visits to park areas ranged from 10% for Japanese Americans and Korean Americans to 30% for Anglo or White respondents. The percentage of respondents who did not engage in subsistence activities in the last 12 months, during their visits to park areas ranged from 12% for Korean Americans and African Americans to 25% for Anglo or White respondents.

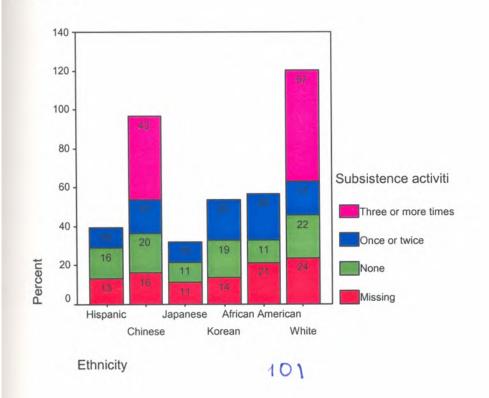
For the Philadelphia sample, the percentage of respondents who engaged in subsistence activities three or more times in the last 12 months, during their visits to park areas ranged from less than 1% for Hispanic Americans, Japanese Americans, Korean Americans, and African Americans to 57% for Anglo or White respondents. The percentage of respondents who engaged in subsistence activities once or twice in the last 12 months, during their visits to park areas ranged from 10% for Hispanic Americans and Japanese Americans to 24% for African American respondents. The percentage of respondents who did not engage in subsistence activities in the last 12 months, during their visits to park areas ranged from 11% for Japanese Americans and African Americans to 22% for Anglo or White respondents.

HOW MANY TIMES HAVE YOU ENGAGED IN *SUBSISTENCE A CTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?

Atlanta 140 120 100 80 Subsistence activiti 60 Three or more times 25 18 40 Once or twice 18 12 Percent 14 12 20 None 0 Missing Hispanic Japanese African American Chinese Korean White

Ethnicity



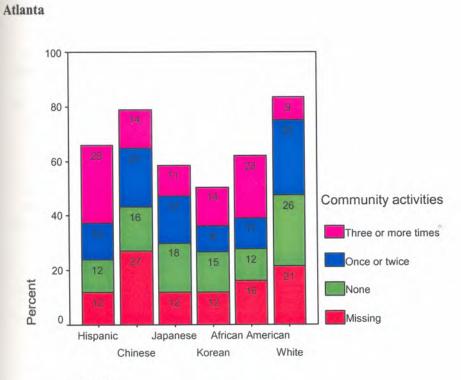


HOW MANY TIMES HAVE YOU ENGAGED IN *COMMUNITY ACTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?

For the Atlanta sample, the percentage of respondents who engaged in community activities (festivals, parties, etc.) three or more times in the last 12 months, during their visits to park areas ranged from 9% for Anglos or Whites to 29% for Hispanic American respondents. The percentage of respondents who engaged in community activities once or twice in the last 12 months, during their visits to park areas ranged from 9% for Korean Americans to 27% for Anglo or White respondents. The percentage of respondents who did not engage in community activities in the last 12 months, during their visits to park areas ranged from 9% for Korean Americans to 27% for Anglo or White respondents. The percentage of respondents who did not engage in community activities in the last 12 months, during their visits to park areas ranged from 12% for Hispanic Americans and African Americans to 26% for Anglo or White respondents.

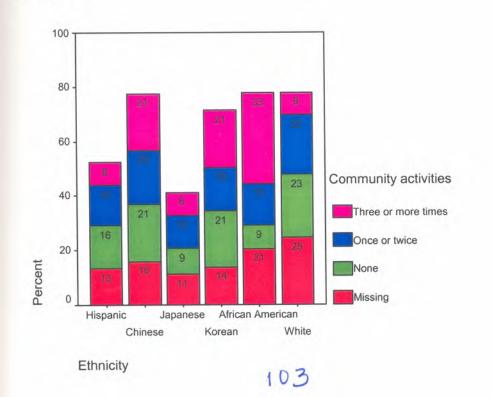
For the Philadelphia sample, the percentage of respondents who engaged in community activities three or more times in the last 12 months, during their visits to park areas ranged from 8% for Hispanic Americans, Japanese Americans, and Anglos or Whites to 33% for African American respondents. The percentage of respondents who engaged in community activities once or twice in the last 12 months, during their visits to park areas ranged from 12% for Japanese Americans to 22% for Anglo or White respondents. The percentage of respondents areas ranged from 12% for Japanese Americans to 22% for Anglo or White respondents. The percentage of respondents who did not engage in community activities in the last 12 months, during their visits to park areas ranged from 9% for Japanese Americans and African Americans to 23% for Anglo or White respondents.

HOW MANY TIMES HAVE YOU ENGAGED IN *COMMUNITY ACTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?



Ethnicity



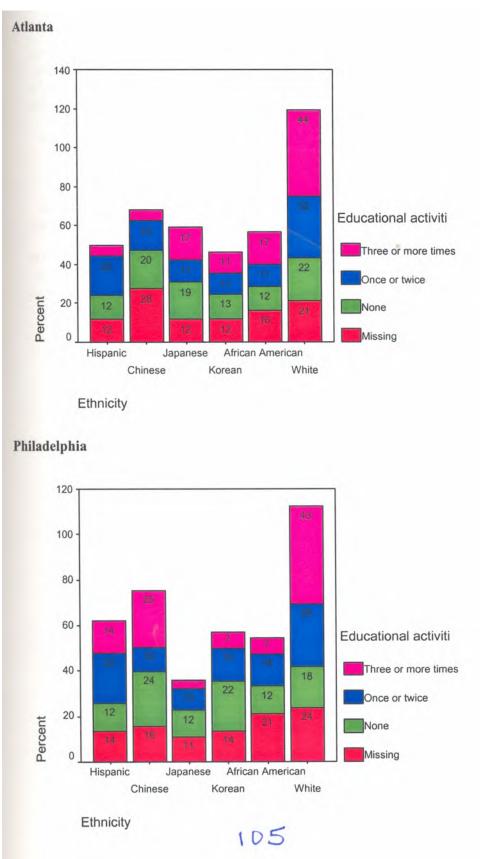


HOW MANY TIMES HAVE YOU ENGAGED IN *EDUCATIONAL ACTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?

For the Atlanta sample, the percentage of respondents who engaged in educational activities (animal/birdwatching, nature study, etc.) three or more times in the last 12 months, during their visits to park areas ranged from less than 5% for Hispanic Americans and Chinese Americans to 44% for Anglo or White respondents. The percentage of respondents who engaged in educational activities once or twice in the last 12 months, during their visits to park areas ranged from 11% for Japanese Americans, Korean Americans, and African Americans to 32% for Anglo or White respondents. The percentage of respondents who did not engage in educational activities in the last 12 months, during their visits to park areas ranged from 12% for Hispanic Americans to 22% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who engaged in educational activities three or more times in the last 12 months, during their visits to park areas ranged from less than 5% for Japanese Americans to 43% for Anglo or White respondents. The percentage of respondents who engaged in educational activities once or twice in the last 12 months, during their visits to park areas ranged from 10% for Chinese Americans and Japanese Americans to 28% for Anglo or White respondents. The percentage of respondents who did not engage in educational activities in the last 12 months, during their visits to park areas ranged from 12% for Hispanic Americans, Japanese Americans, and African Americans to 18% for Anglo or White respondents.

HOW MANY TIMES HAVE YOU ENGAGED IN *EDUCATIONAL ACTIVITIES* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?

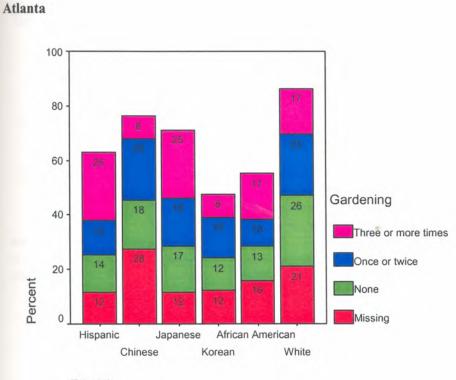


HOW MANY TIMES HAVE YOU ENGAGED IN *GARDENING* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?

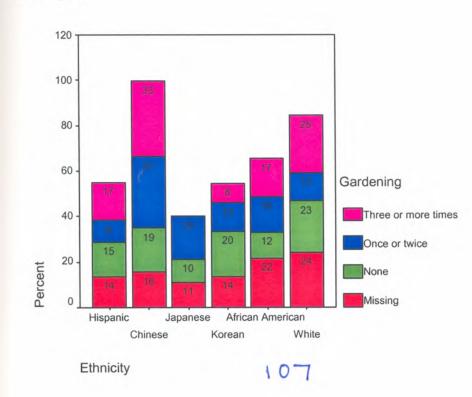
For the Atlanta sample, the percentage of respondents who engaged in gardening (vegetables, fruits, flowers, etc.) three or more times in the last 12 months, during their visits to park areas ranged from 8% for Chinese Americans and Korean Americans to 25% for Hispanic Americans and Japanese American respondents. The percentage of respondents who engaged in gardening once or twice in the last 12 months, during their visits to park areas ranged from 10% for African Americans to 23% for Chinese American and Anglo or White respondents. The percentage of respondents who did not engage in gardening in the last 12 months, during their visits to park areas ranged from 12% for Korean Americans to 26% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who engaged in gardening three or more times in the last 12 months, during their visits to park areas ranged from less than 1% for Japanese Americans to 33% for Chinese American respondents. The percentage of respondents who engaged in gardening once or twice in the last 12 months, during their visits to park areas ranged from 9% for Hispanic Americans to 31% for Chinese American respondents. The percentage of respondents who did not engage in gardening in the last 12 months, during their visits to park areas ranged from 10% for Japanese Americans to 23% for Anglo or White respondents.

HOW MANY TIMES HAVE YOU ENGAGED IN *GARDENING* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?



Ethnicity



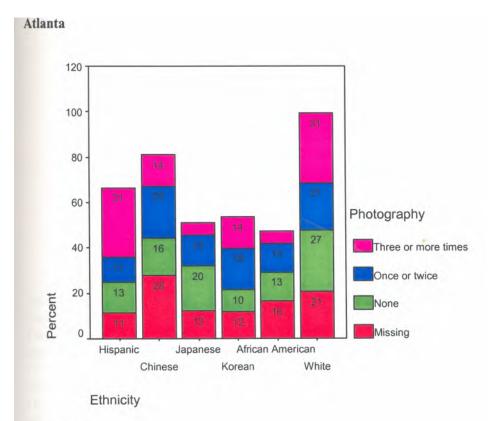
Philadelphia

HOW MANY TIMES HAVE YOU ENGAGED IN *PHOTOGRAPHY* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?

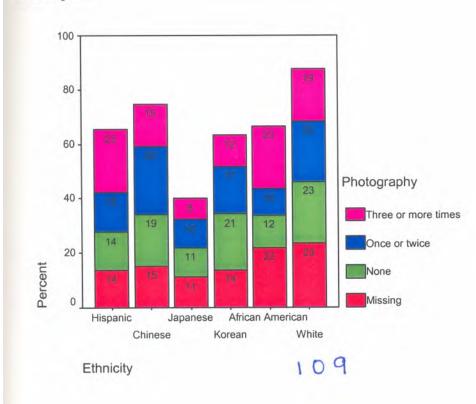
For the Atlanta sample, the percentage of respondents who engaged in photography (still photos, videos, etc.) three or more times in the last 12 months, during their visits to park areas ranged from less than 5% for Japanese Americans and African Americans to 31% for Hispanic American and Anglo or White respondents. The percentage of respondents who engaged in photography once or twice in the last 12 months, during their visits to park areas ranged from 11% for Hispanic Americans to 23% for Chinese American respondents. The percentage of respondents who did not engage in photography in the last 12 months, during their visits to park areas ranged from areas ranged from 10% for Korean Americans to 27% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who engaged in photography three or more times in the last 12 months, during their visits to park areas ranged from 8% for Japanese Americans to 23% for Hispanic American and African American respondents. The percentage of respondents who engaged in photography once or twice in the last 12 months, during their visits to park areas ranged from 10% for Japanese Americans and African Americans to 25% for Chinese American respondents. The percentage of respondents who did not engage in photography in the last 12 months, during their visits to park areas ranged from 11% for Japanese Americans to 23% for Anglo or White respondents.

HOW MANY TIMES HAVE YOU ENGAGED IN *PHOTOGRAPHY* DURING YOUR VISITS TO PARK AREAS SIMILAR TO THOSE IN THE PHOTOS IN THE LAST 12 MONTHS?



Philadelphia



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Constraints to Urban Park and Forest Visitation

The following charts compare the responses of the six population subgroups (Hispanics or Hispanic Americans, Chinese or Chinese Americans, Japanese or Japanese Americans, Korean or Korean Americans, African Americans, and Anglo or White respondents) to the items relating to constraints to urban park and forest visitation. The response categories [Checked ✓(Yes)/Unchecked (Missing)] for each item are represented by color-coded boxes. For each item relating to constraints to urban park and forest visitation, the percentage of respondents indicating a specific response category, is shown in the respective color-coded box within each population subgroup.

Note: In some cases, the cumulative percentages for each population subgroup do not add up to 100 percent when respondents do not indicate any response for the corresponding item relating to constraints to urban park and forest visitation.

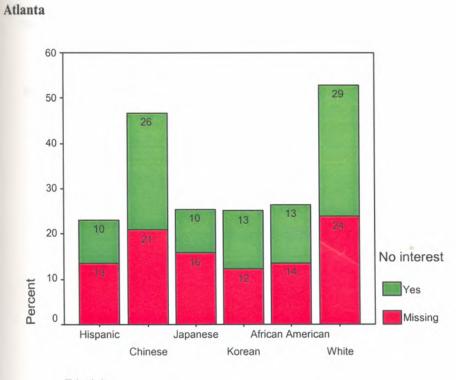


WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *NO INTEREST?*

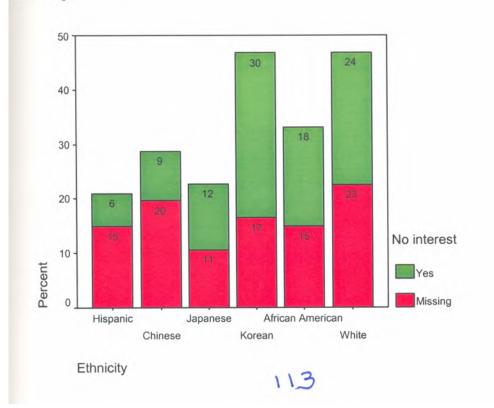
For the Atlanta sample, the percentage of respondents who did not visit park areas more often during the last 12 months owing to the lack of interest ranged from 10% for Hispanic Americans and Japanese Americans to 29% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who did not visit park areas more often during the last 12 months owing to the lack of interest ranged from 6% for Hispanic Americans to 30% for Korean American respondents.

WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *NO INTEREST*?



Ethnicity



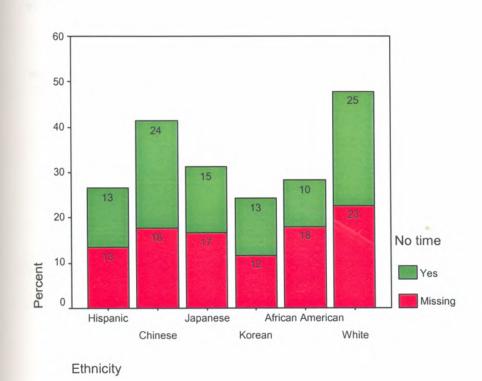
WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *NO TIME?*

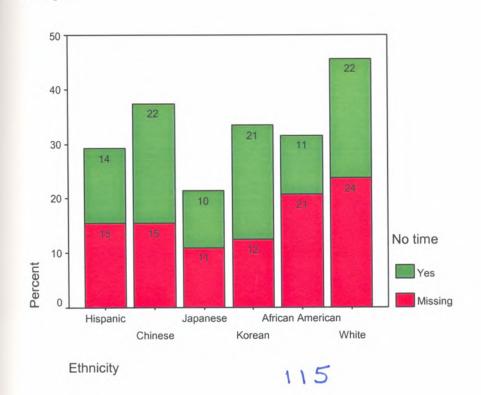
For the Atlanta sample, the percentage of respondents who did not visit park areas more often during the last 12 months owing to the lack of time ranged from 10% for African Americans to 25% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who did not visit park areas more often during the last 12 months owing to the lack of time ranged from 10% for Japanese Americans to 22% for Chinese American and Anglo or White respondents.

WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *NO TIME*?

Atlanta



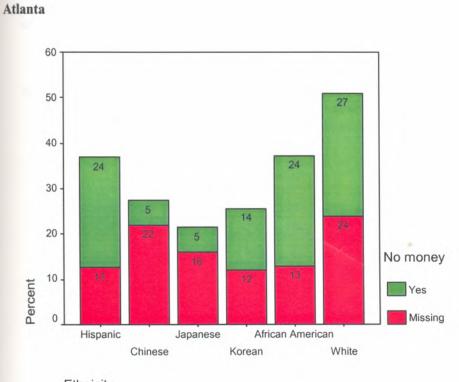


WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *NO MONEY*?

For the Atlanta sample, the percentage of respondents who did not visit park areas more often during the last 12 months owing to the lack of money ranged from 5% for Chinese Americans and Japanese Americans to 27% for Anglo or White respondents.

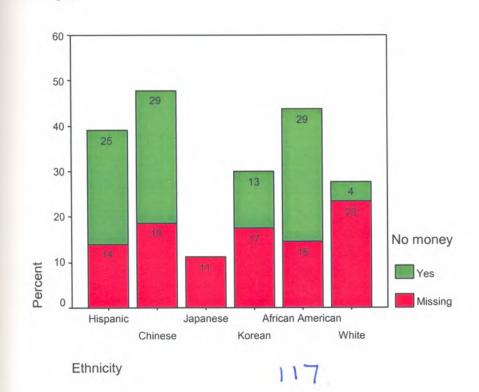
For the Philadelphia sample, the percentage of respondents who did not visit park areas more often during the last 12 months owing to the lack of money ranged from less than 1% for Japanese Americans to 29% for Chinese American and African American respondents.

WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *NO MONEY*?



Ethnicity



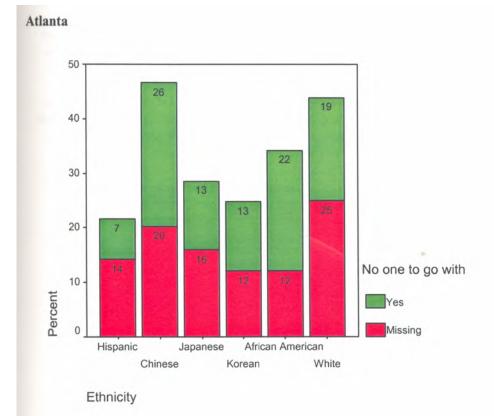


WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: NO ONE TO GO WITH?

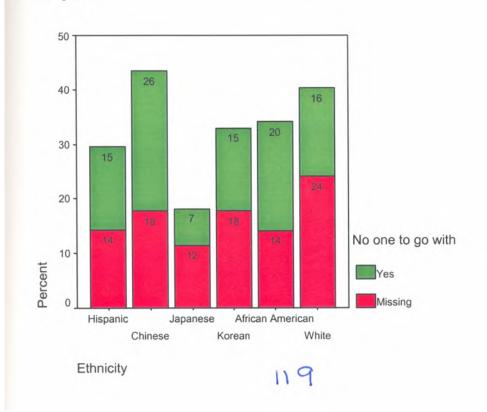
For the Atlanta sample, the percentage of respondents who did not visit park areas more often during the last 12 months owing to the lack of someone to go with ranged from 7% for Hispanic Americans to 26% for Chinese American respondents.

For the Philadelphia sample, the percentage of respondents who did not visit park areas more often during the last 12 months owing to the lack of someone to go with ranged from 7% for Japanese Americans to 26% for Chinese American respondents.

WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *NO ONE TO GO WITH?*



Philadelphia

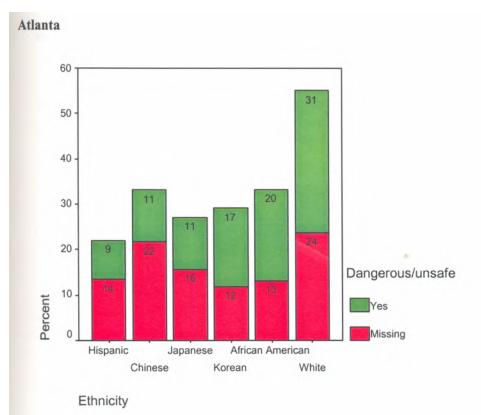


WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *DANGEROUS/UNSAFE*?

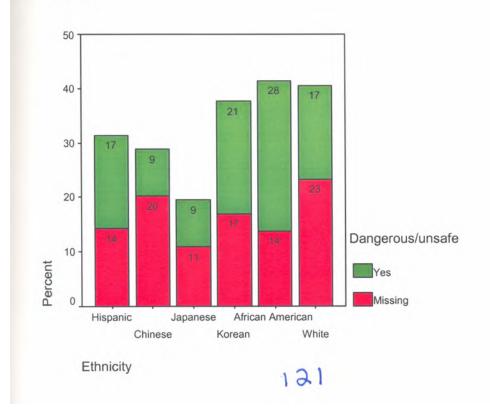
For the Atlanta sample, the percentage of respondents who did not visit park areas more often during the last 12 months owing to dangerous/unsafe conditions in parks ranged from 9% for Hispanic Americans to 31% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who did not visit park areas more often during the last 12 months owing to dangerous/unsafe conditions in parks ranged from 9% for Chinese Americans and Japanese Americans to 28% for African American respondents.

WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *DANGEROUS/UNSAFE*?



Philadelphia

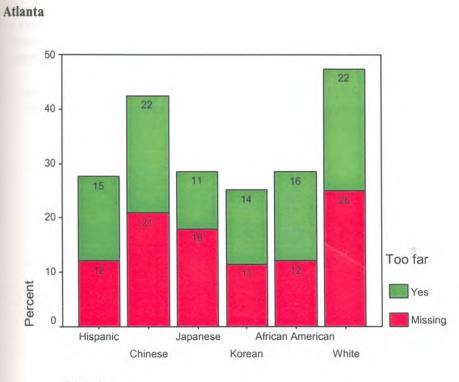


WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *TOO FAR*?

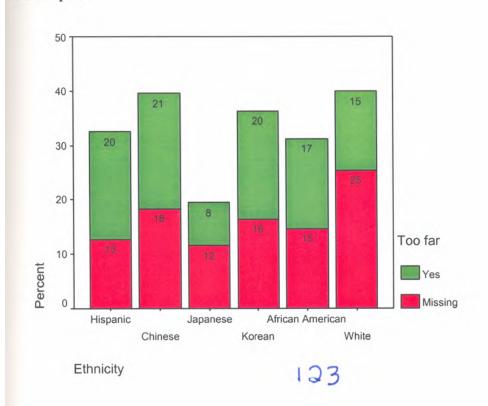
For the Atlanta sample, the percentage of respondents who did not visit park areas more often during the last 12 months since the parks were too far to get to ranged from 11% for Japanese Americans to 22% for Chinese American and Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who did not visit park areas more often during the last 12 months since the parks were too far to get to ranged from 8% for Japanese Americans to 21% for Chinese American respondents.

WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *TOO FAR*?



Ethnicity

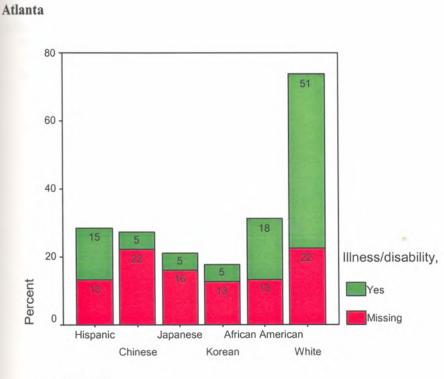


WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *ILLNESS/DISABILITY*, *OLD AGE*?

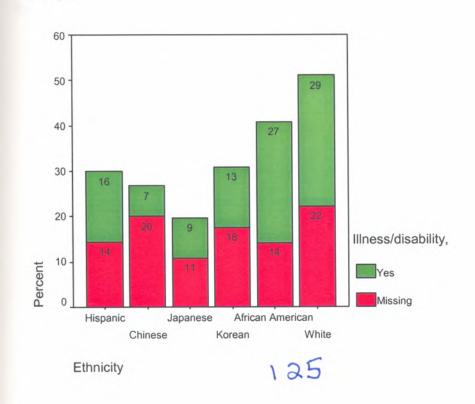
For the Atlanta sample, the percentage of respondents who did not visit park areas more often during the last 12 months owing to illness/disability or old age ranged from 5% for Chinese Americans, Japanese Americans, and Korean Americans to 51% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who did not visit park areas more often during the last 12 months owing to illness/disability or old age ranged from 7% for Chinese Americans to 29% for Anglo or White respondents.

WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *ILLNESS/DISABILITY*, *OLD AGE*?



Ethnicity

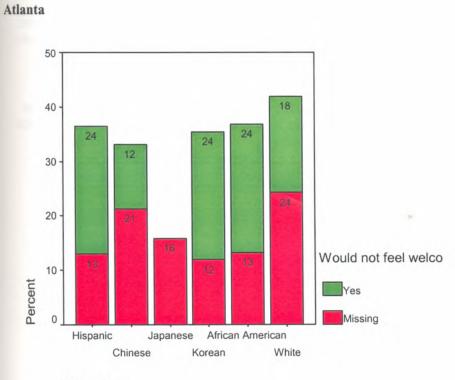


WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: WOULD NOT FEEL WELCOME, WOULD FEEL OUT OF PLACE?

For the Atlanta sample, the percentage of respondents who did not visit park areas more often during the last 12 months since they would not feel welcome or would feel out of place in parks ranged from less than 1% for Japanese Americans to 24% for Hispanic American, Korean American and African American respondents.

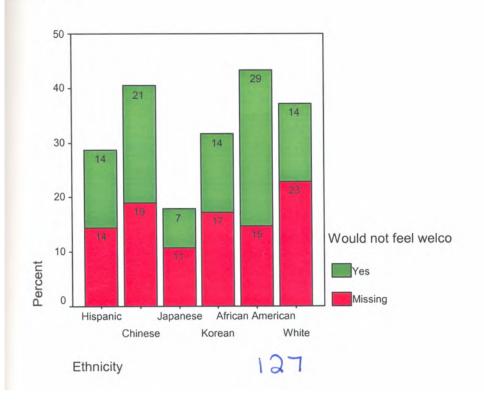
For the Philadelphia sample, the percentage of respondents who did not visit park areas more often during the last 12 months since they would not feel welcome or would feel out of place in parks ranged from 7% for Japanese Americans to 29% for African American respondents.

WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *WOULD NOT FEEL WELCOME, WOULD FEEL OUT OF PLACE*?



Ethnicity



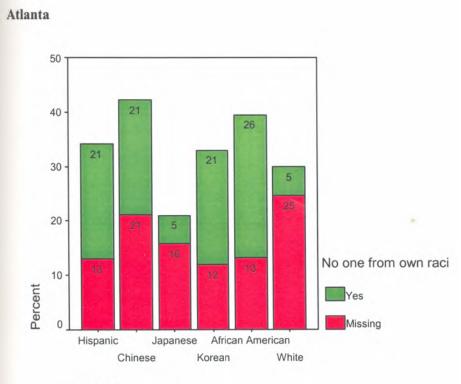


WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: NO ONE FROM OWN RACIAL/ETHNIC GROUP GOES THERE?

For the Atlanta sample, the percentage of respondents who did not visit park areas more often during the last 12 months since no one from their own racial/ethnic group went to the parks ranged from 5% for Japanese Americans and Anglos or Whites to 26% for African American respondents.

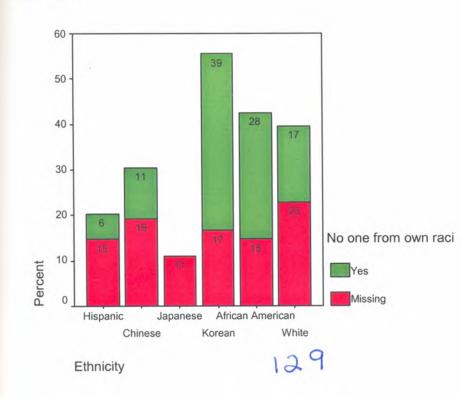
For the Philadelphia sample, the percentage of respondents who did not visit park areas more often during the last 12 months since no one from their own racial/ethnic group went to the parks ranged from less than 1% for Japanese Americans to 39% for Korean American respondents.

WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *NO ONE FROM OWN RACIAL/ETHNIC GROUP GOES THERE?*



Ethnicity



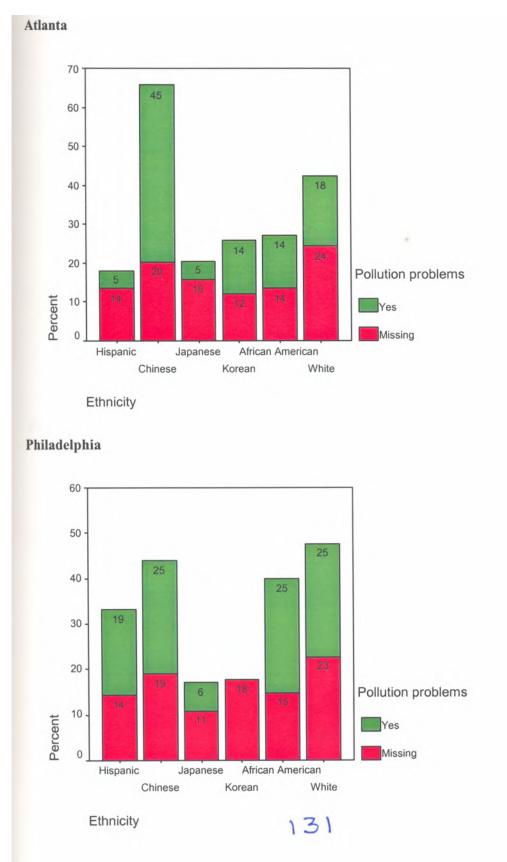


WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: POLLUTION PROBLEMS (POLLUTED AIR, STREAMS, PONDS)?

For the Atlanta sample, the percentage of respondents who did not visit park areas more often during the last 12 months owing to pollution problems in parks (polluted air, streams, ponds) ranged from 5% for Hispanic Americans and Japanese Americans to 45% for Chinese American respondents.

For the Philadelphia sample, the percentage of respondents who did not visit park areas more often during the last 12 months owing to pollution problems in parks (polluted air, streams, ponds) ranged from less than 1% for Korean Americans to 25% for Chinese American, African American and Anglo or White respondents.

WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *POLLUTION PROBLEMS (POLLUTED AIR, STREAMS, PONDS)?*

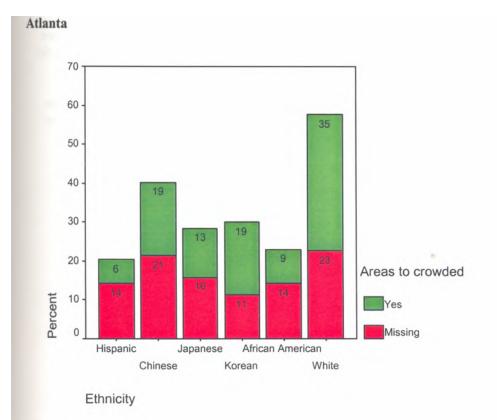


WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *AREAS TOO CROWDED*?

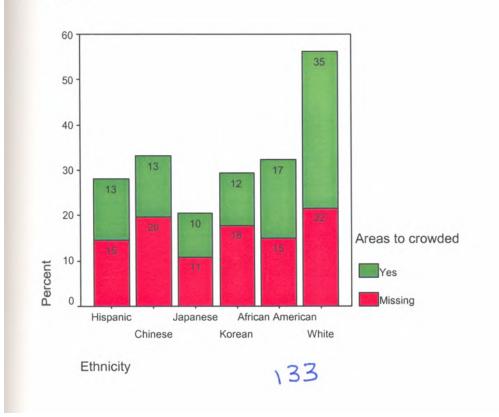
For the Atlanta sample, the percentage of respondents who did not visit park areas more often during the last 12 months because the park areas are too crowded ranged from 6% for Hispanic Americans to 35% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who did not visit park areas more often during the last 12 months because the park areas are too crowded ranged from 10% for Japanese Americans to 35% for Anglo or White respondents.

WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *AREAS TOO CROWDED*?



Philadelphia

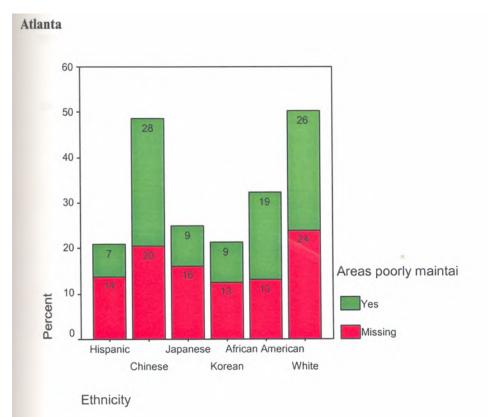


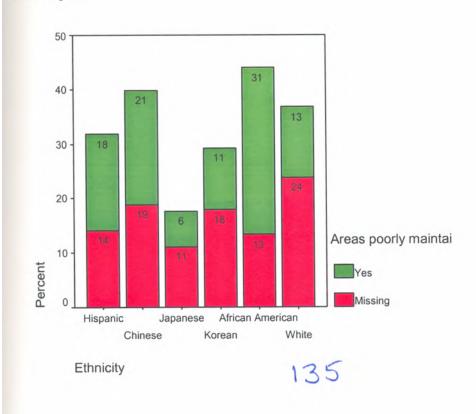
WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *AREAS POORLY MAINTAINED?*

For the Atlanta sample, the percentage of respondents who did not visit park areas more often during the last 12 months because the park areas are poorly maintained ranged from 7% for Hispanic Americans to 28% for Chinese American respondents.

For the Philadelphia sample, the percentage of respondents who did not visit park areas more often during the last 12 months because the park areas are poorly maintained ranged from 6% for Japanese Americans to 31% for African American respondents.

WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *AREAS POORLY MAINTAINED*?



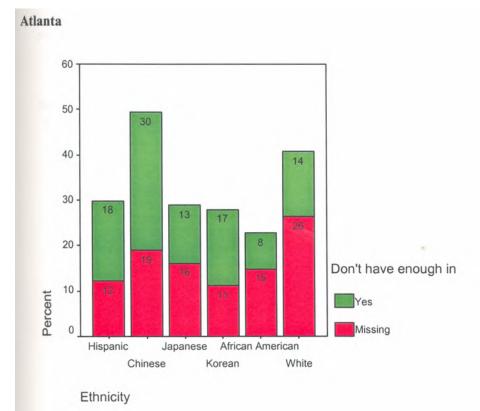


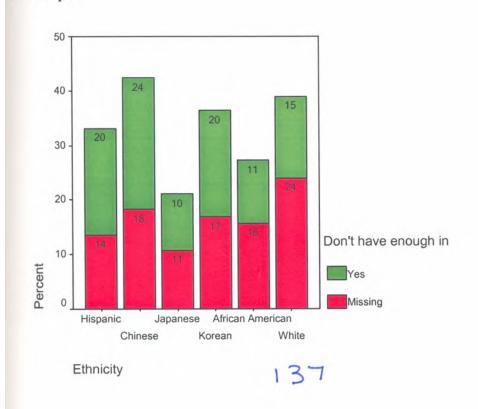
WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *DON'T HAVE ENOUGH INFORMATION?*

For the Atlanta sample, the percentage of respondents who did not visit park areas more often during the last 12 months owing to the lack of adequate information about parks ranged from 8% for African Americans to 30% for Chinese American respondents.

For the Philadelphia sample, the percentage of respondents who did not visit park areas more often during the last 12 months owing to the lack of adequate information about parks ranged from 10% for Japanese Americans to 24% for Chinese American respondents.

WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *DON'T HAVE ENOUGH INFORMATION?*



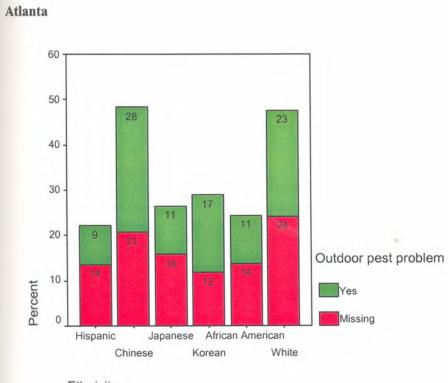


WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: OUTDOOR PEST PROBLEMS?

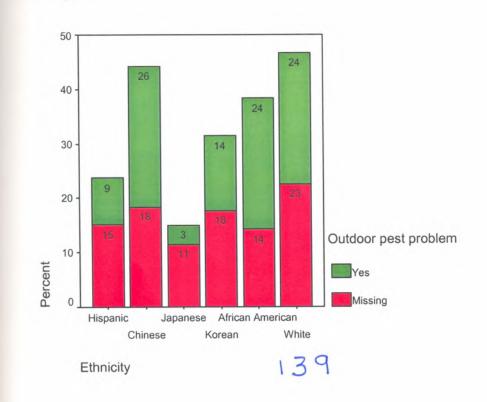
For the Atlanta sample, the percentage of respondents who did not visit park areas more often during the last 12 months owing to outdoor pest problems in parks ranged from 9% for Hispanic Americans to 28% for Chinese American respondents.

For the Philadelphia sample, the percentage of respondents who did not visit park areas more often during the last 12 months owing to outdoor pest problems in parks ranged from 3% for Japanese Americans to 26% for Chinese American respondents.

WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *OUTDOOR PEST PROBLEMS*?



Ethnicity



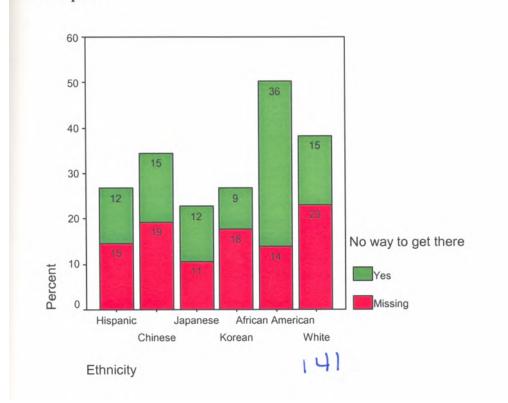
WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: NO WAY TO GET THERE?

For the Atlanta sample, the percentage of respondents who did not visit park areas more often during the last 12 months because they had no way to get there ranged from less than 1% for Japanese Americans to 36% for Hispanic American respondents.

For the Philadelphia sample, the percentage of respondents who did not visit park areas more often during the last 12 months because they had no way to get there ranged from 9% for Korean Americans to 36% for African American respondents.

WHY DID YOU NOT VISIT PARK AREAS SIMILAR TO THOSE IN THE PHOTOS DUE TO THE FOLLOWING REASON: *NO WAY TO GET THERE*?

Atlanta 60 50 40 14 21 21 30 20 No way to get there 10 Percent Yes 0 Missing Hispanic Japanese African American Chinese Korean White Ethnicity





Preferred Characteristics of Parks and Forests

The following charts compare the responses of the six population subgroups (Hispanics or Hispanic Americans, Chinese or Chinese Americans, Japanese or Japanese Americans, Korean or Korean Americans, African Americans, and Anglo or White respondents) to the items relating to preferred characteristics of parks and forests. The response categories (Not Important/Somewhat Important/Very Important/Missing) for each item are represented by color-coded boxes. For each item relating to preferred characteristics of parks and forests, the percentage of respondents indicating a specific response category, is shown in the respective color-coded box within each population subgroup.

Note: In some cases, the cumulative percentages for each population subgroup add up to more than 100 percent when respondents indicate more than one response category for the corresponding item relating to preferred characteristics of parks and forests.

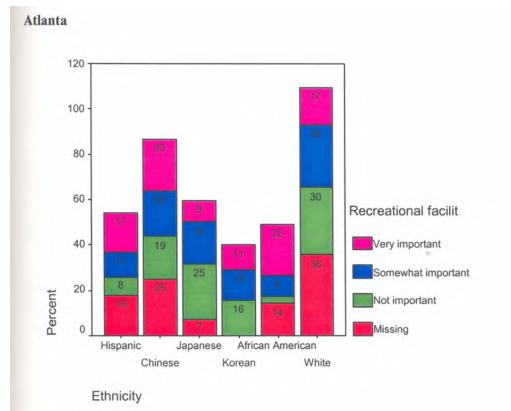


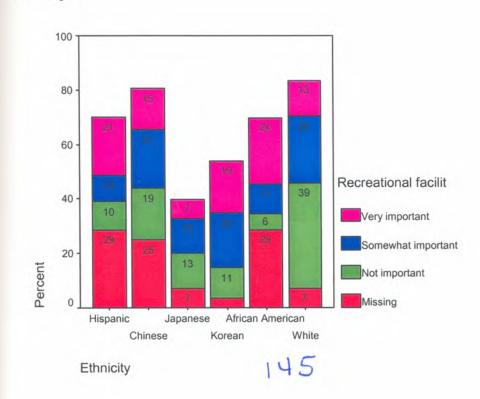
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE RECREATIONAL FACILITIES AND PROGRAMS?

For the Atlanta sample, the percentage of respondents who rated recreational facilities and programs as very important for park areas to have ranged from 9% for Japanese Americans to 23% for Chinese American respondents. The percentage of respondents who rated recreational facilities and programs as somewhat important for park areas to have ranged from 9% for African Americans to 28% for Anglo or White respondents. The percentage of respondents who rated recreational facilities and programs as not important for park areas to have ranged from less than 5% for Korean Americans to 30% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who rated recreational facilities and programs as very important for park areas to have ranged from 7% for Japanese Americans to 24% for African American respondents. The percentage of respondents who rated recreational facilities and programs as somewhat important for park areas to have ranged from 10% for Hispanic Americans to 24% for Anglo or White respondents. The percentage of respondents who rated recreational facilities and programs as not important for park areas to have ranged from 10% for African Americans to 39% for Anglo or White respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *RECREATIONAL FACILITIES AND PROGRAMS?*



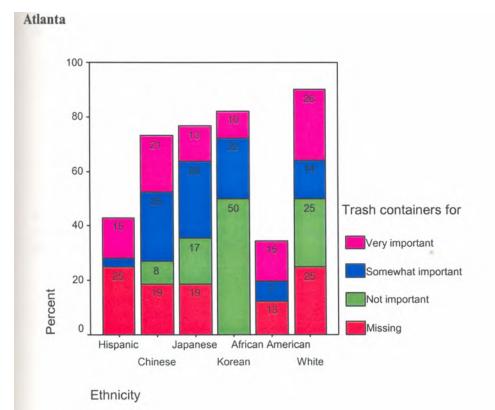


WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE TRASH CONTAINERS FOR GARBAGE DISPOSAL?

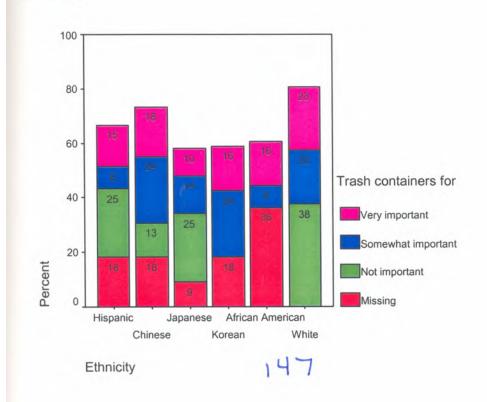
For the Atlanta sample, the percentage of respondents who rated trash containers for garbage disposal as very important for park areas to have ranged from 10% for Korean Americans to 26% for Anglo or White respondents. The percentage of respondents who rated trash containers for garbage disposal as somewhat important for park areas to have ranged from less than 5% for Hispanic Americans to 28% for Japanese American respondents. The percentage of respondents who rated trash containers for garbage disposal as not important for park areas to have ranged from less than 5% for Hispanic Americans to 28% for Japanese American respondents. The percentage of respondents who rated trash containers for garbage disposal as not important for park areas to have ranged from less than 1% for Hispanic Americans and African Americans to 50% for Korean American respondents.

For the Philadelphia sample, the percentage of respondents who rated trash containers for garbage disposal as very important for park areas to have ranged from 10% for Japanese Americans to 23% for Anglo or White respondents. The percentage of respondents who rated trash containers for garbage disposal as somewhat important for park areas to have ranged from 8% for Hispanic Americans and African Americans to 24% for Chinese American and Korean American respondents. The percentage of respondents who rated trash containers for garbage disposal as not important for park areas to have ranged from less than 1% for Korean Americans and African Americans to 38% for Anglo or White respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *TRASH CONTAINERS FOR GARBAGE DISPOSAL?*



Philadelphia

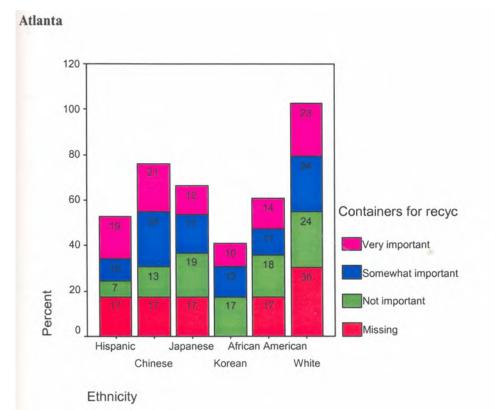


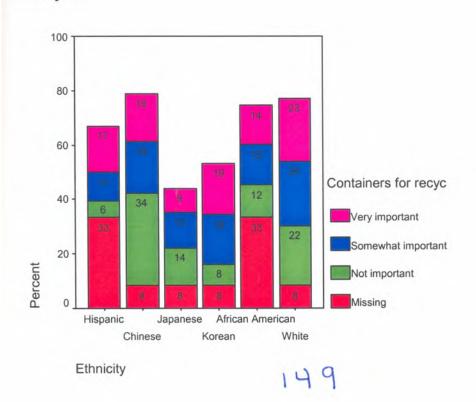
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE CONTAINERS FOR RECYCLING?

For the Atlanta sample, the percentage of respondents who rated containers for recycling as very important for park areas to have ranged from 10% for Korean Americans to 23% for Anglo or White respondents. The percentage of respondents who rated containers for recycling as somewhat important for park areas to have ranged from 10% for Hispanic Americans to 24% for Chinese American and Anglo or White respondents. The percentage of respondents who rated containers for recycling as not important for park areas to have ranged from 7% for Hispanic Americans to 24% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who rated containers for recycling as very important for park areas to have ranged from 9% for Japanese Americans to 23% for Anglo or White respondents. The percentage of respondents who rated containers for recycling as somewhat important for park areas to have ranged from 11% for Hispanic Americans to 24% for Anglo or White respondents. The percentage of respondents who rated containers for recycling as not important for park areas to have ranged from 6% for Hispanic Americans to 34% for Chinese American respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *CONTAINERS FOR RECYCLING*?



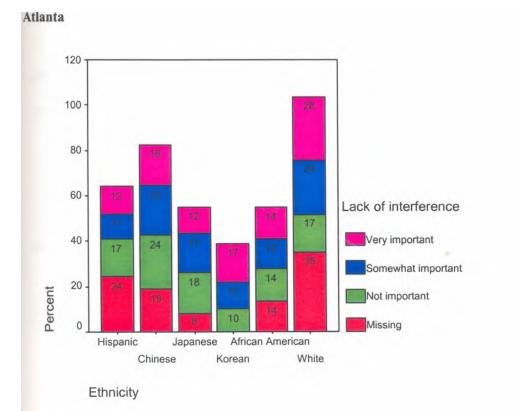


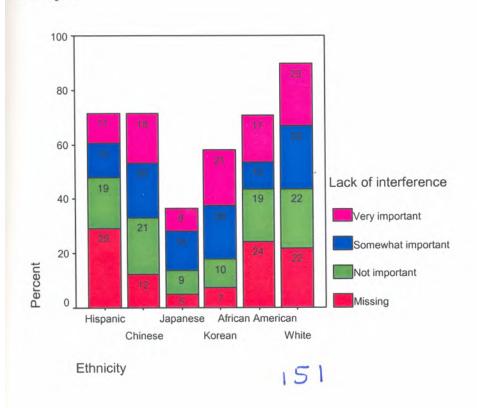
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *LACK OF INTERFERENCE FROM OTHER VISITORS*?

For the Atlanta sample, the percentage of respondents who rated lack of interference from other park visitors as very important ranged from 12% for Hispanic Americans and Japanese Americans to 28% for Anglo or White respondents. The percentage of respondents who rated lack of interference from other park visitors as somewhat important ranged from 11% for Hispanic Americans to 24% for Anglo or White respondents. The percentage of respondents who rated lack of interference from other park visitors as not important ranged from 10% for Korean Americans to 24% for Chinese American respondents.

For the Philadelphia sample, the percentage of respondents who rated lack of interference from other park visitors as very important ranged from 9% for Japanese Americans to 23% for Anglo or White respondents. The percentage of respondents who rated lack of interference from other park visitors as somewhat important ranged from 10% for African Americans to 23% for Anglo or White respondents. The percentage of respondents who rated lack of interference from other park visitors as not important ranged from 9% for Japanese Americans to 22% for Anglo or White respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *LACK OF INTERFERENCE FROM OTHER VISITORS?*





WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *PROPER SIGNS AND INSTRUCTION BOARDS?*

For the Atlanta sample, the percentage of respondents who rated proper signs and instruction boards as very important for park areas to have ranged from 11% for Korean Americans to 24% for Anglo or White respondents. The percentage of respondents who rated proper signs and instruction boards as somewhat important for park areas to have ranged from 8% for Hispanic Americans to 24% for Chinese American respondents. The percentage of respondents who rated proper signs and instruction boards as not important for park areas to have ranged from 8% for Korean Americans to 38% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who rated proper signs and instruction boards as very important for park areas to have ranged from 9% for Japanese Americans to 19% for Chinese American, Korean American and Anglo or White respondents. The percentage of respondents who rated proper signs and instruction boards as somewhat important for park areas to have ranged from 11% for Hispanic Americans to 30% for Anglo or White respondents. The percentage of respondents who rated proper signs and instruction boards as somewhat important for park areas to have ranged from 11% for Hispanic Americans to 30% for Anglo or White respondents. The percentage of respondents who rated proper signs and instruction boards as not important for park areas to have ranged from 5% for Japanese Americans to 26% for African American and Anglo or White respondents.

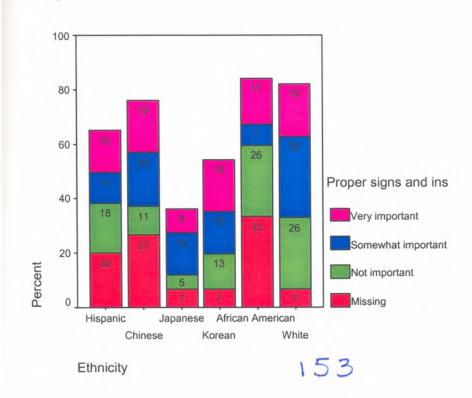
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *PROPER SIGNS AND INSTRUCTION BOARDS?*

140 120 100 80 38 Proper signs and ins 60 Very important 40 12 Somewhat important Percent 12 20 15 15 Not important 0 8 Missing African American Hispanic Japanese Chinese Korean White

Ethnicity

Philadelphia

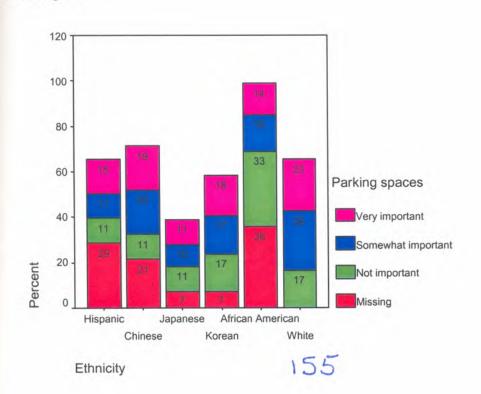
Atlanta



WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *PARKING SPACES?*

Atlanta 120 100 80 60 Parking spaces 15 Very important 40 23 Somewhat important 15 20 Percent 23 Not important 0 Missing Hispanic Japanese African American White Chinese Korean

Ethnicity

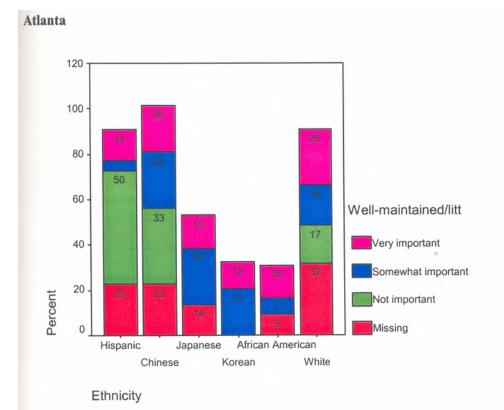


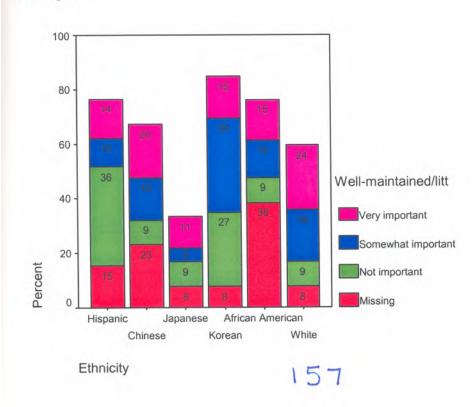
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE WELL MAINTAINED LITTER FREE FACILITIES?

For the Atlanta sample, the percentage of respondents who rated well-maintained/litterfree facilities as very important for park areas to have ranged from 12% for Korean Americans to 25% for Anglo or White respondents. The percentage of respondents who rated wellmaintained/litter-free facilities as somewhat important for park areas to have ranged from less than 5% for Hispanic Americans to 25% for Chinese American and Japanese American respondents. The percentage of respondents who rated well-maintained/litter-free facilities as not important for park areas to have ranged from less than 1% for Japanese Americans, Korean Americans, and African Americans to 50% for Hispanic American respondents.

For the Philadelphia sample, the percentage of respondents who rated wellmaintained/litter-free facilities as very important for park areas to have ranged from 11% for Japanese Americans to 24% for Anglo or White respondents. The percentage of respondents who rated well-maintained/litter-free facilities as somewhat important for park areas to have ranged from 5% for Japanese Americans to 34% for Korean American respondents. The percentage of respondents who rated well-maintained/litter-free facilities as not important for park areas to have ranged from 9% for Chinese Americans, Japanese Americans, African Americans, and Anglos or Whites to 36% for Hispanic American respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *WELL-MAINTAINED LITTER-FREE FACILITIES*?



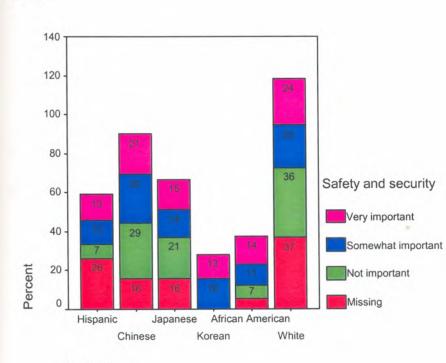


WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE SAFETY AND SECURITY AT THE AREA?

For the Atlanta sample, the percentage of respondents who rated safety and security as very important for park areas to have ranged from 13% for Hispanic Americans and Korean Americans to 24% for Anglo or White respondents. The percentage of respondents who rated safety and security as somewhat important for park areas to have ranged from 11% for African Americans to 25% for Chinese American respondents. The percentage of respondents who rated safety and security as not important for park areas to have ranged from less than 1% for Korean Americans to 36% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who rated safety and security as very important for park areas to have ranged from 11% for Japanese Americans to 22% for Anglo or White respondents. The percentage of respondents who rated safety and security as somewhat important for park areas to have ranged from 11% for Chinese Americans, Japanese Americans, and Korean Americans to 29% for Anglo or White respondents. The percentage of respondents who rated safety and security as not important for park areas to have ranged from less than 1% for Japanese Americans and Korean Americans to 56% for Anglo or White respondents.

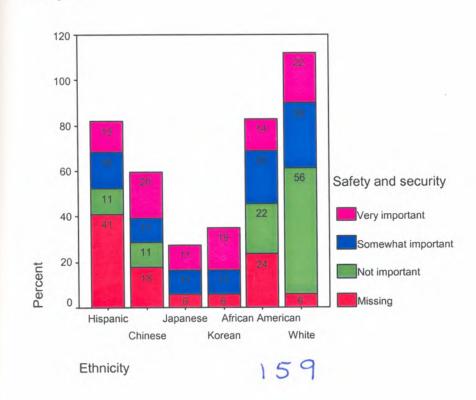
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE SAFETY AND SECURITY AT THE AREA?



Ethnicity



Atlanta



WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE OUTDOOR COOKING FACILITIES?

For the Atlanta sample, the percentage of respondents who rated outdoor cooking facilities as very important for park areas to have ranged from 10% for Japanese Americans to 24% for African American respondents. The percentage of respondents who rated outdoor cooking facilities as somewhat important for park areas to have ranged from 11% for Hispanic Americans to 26% for Anglo or White respondents. The percentage of respondents who rated outdoor cooking facilities as not important for park areas to have ranged from less than 5% for Hispanic Americans and African Americans to 29% for Anglo or White respondents.

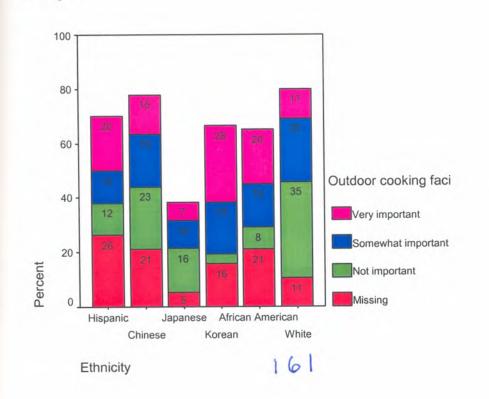
For the Philadelphia sample, the percentage of respondents who rated outdoor cooking facilities as very important for park areas to have ranged from 7% for Japanese Americans to 28% for Korean American respondents. The percentage of respondents who rated outdoor cooking facilities as somewhat important for park areas to have ranged from 10% for Japanese Americans to 23% for Anglo or White respondents. The percentage of respondents who rated outdoor cooking facilities as not important for park areas to have ranged from less than 5% for Korean Americans to 35% for Anglo or White respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *OUTDOOR COOKING FACILITIES*?

Atlanta 120 100 80 60 Outdoor cooking faci 29 26 Very important 40 . 28 Somewhat important 20 Percent Not important Missing 0 African American Hispanic Japanese White Korean Chinese

Ethnicity





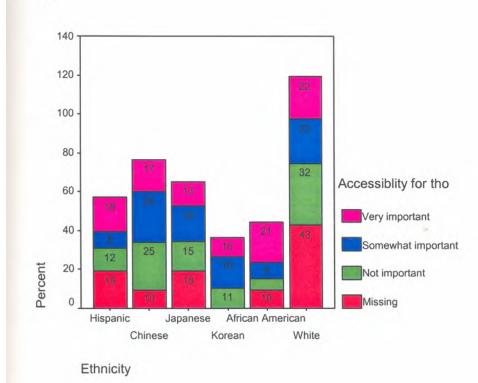
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE ACCESSIBILITY FOR THOSE WITH DISABILITIES?

For the Atlanta sample, the percentage of respondents who rated accessibility for those with disabilities as very important for park areas to have ranged from 10% for Korean Americans to 22% for Anglo or White respondents. The percentage of respondents who rated accessibility for those with disabilities as somewhat important for park areas to have ranged from 8% for Hispanic Americans and African Americans to 26% for Chinese American respondents. The percentage of respondents who rated accessibility for those with disabilities as not important for park areas to have ranged from less than 5% for African Americans to 32% for Anglo or White respondents.

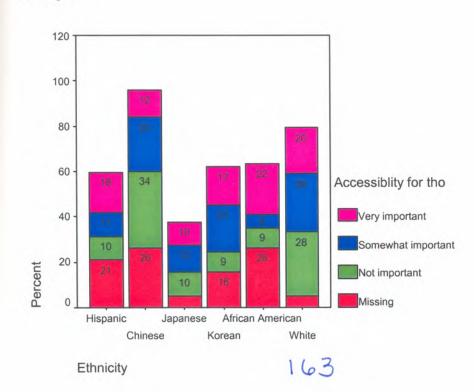
For the Philadelphia sample, the percentage of respondents who rated accessibility for those with disabilities as very important for park areas to have ranged from 10% for Japanese Americans to 22% for African American respondents. The percentage of respondents who rated accessibility for those with disabilities as somewhat important for park areas to have ranged from 6% for African Americans to 26% for Anglo or White respondents. The percentage of respondents who rated accessibility for those with disabilities as not important for park areas to have ranged from 9% for Korean Americans and African Americans to 34% for Chinese American respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE ACCESSIBILITY FOR THOSE WITH DISABILITIES?

Atlanta



Philadelphia



WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *NON-CROWDED AREAS?*

For the Atlanta sample, the percentage of respondents who rated non-crowded areas in parks as very important ranged from 10% for Hispanic Americans to 23% for Anglo or White respondents. The percentage of respondents who rated non-crowded areas in parks as somewhat important ranged from 12% for Hispanic Americans to 26% for Anglo or White respondents. The percentage of respondents who rated non-crowded areas in parks as not important ranged from 9% for Korean Americans to 28% for Chinese American respondents.

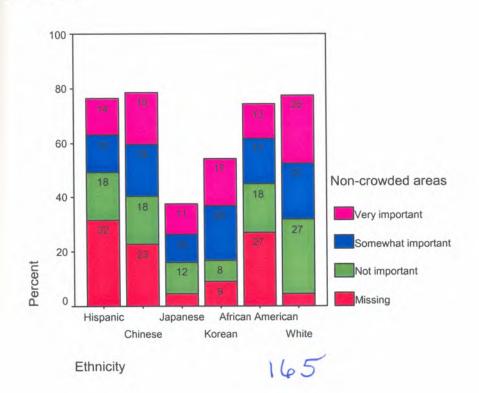
For the Philadelphia sample, the percentage of respondents who rated non-crowded areas in parks as very important ranged from 11% for Japanese Americans to 25% for Anglo or White respondents. The percentage of respondents who rated non-crowded areas in parks as somewhat important ranged from 10% for Japanese Americans to 21% for Anglo or White respondents. The percentage of respondents who rated non-crowded areas in parks as not important ranged from 8% for Korean Americans to 27% for Anglo or White respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *NON-CROWDED AREAS?*

Atlanta 120 100 80 60 Non-crowded areas 17 28 40 Very important 19 13 Somewhat important 20 Percent 15 Not important 9 0 Missing Hispanic Japanese African American Chinese Korean White

Ethnicity



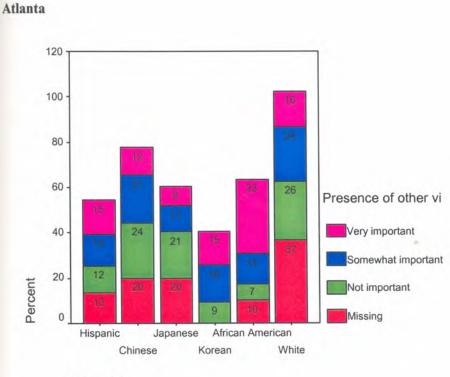


WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *PRESENCE OF OTHER VISITORS FROM YOUR RACIAL/ETHNIC GROUP*?

For the Atlanta sample, the percentage of respondents who rated the presence of other visitors from own racial/ethnic group as very important for park areas to have ranged from 8% for Japanese Americans to 33% for African American respondents. The percentage of respondents who rated the presence of other visitors from own racial/ethnic group as somewhat important for park areas to have ranged from 11% for Japanese Americans to 24% for Anglo or White respondents. The percentage of respondents who rated the presence of other visitors from own racial/ethnic group as not important for park areas to have ranged from 7% for African Americans to 26% for Anglo or White respondents.

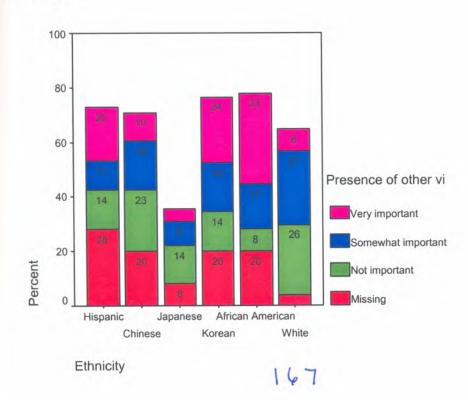
For the Philadelphia sample, the percentage of respondents who rated the presence of other visitors from own racial/ethnic group as very important for park areas to have ranged from less than 5% for Japanese Americans to 33% for African American respondents. The percentage of respondents who rated the presence of other visitors from own racial/ethnic group as somewhat important for park areas to have ranged from 9% for Japanese Americans to 27% for Anglo or White respondents. The percentage of respondents who rated the presence of other visitors from own racial/ethnic group as not important for park areas to have ranged from 8% for African Americans to 26% for Anglo or White respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *PRESENCE OF OTHER VISITORS FROM YOUR RACIAL/ETHNIC GROUP?*



Ethnicity



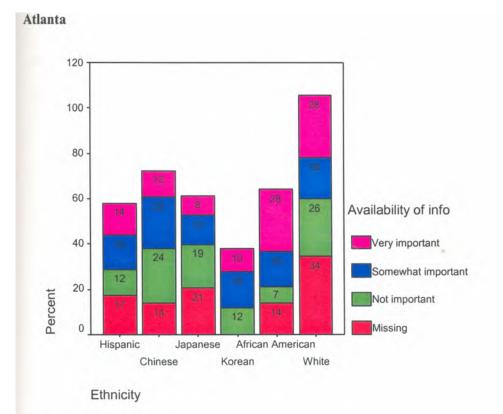


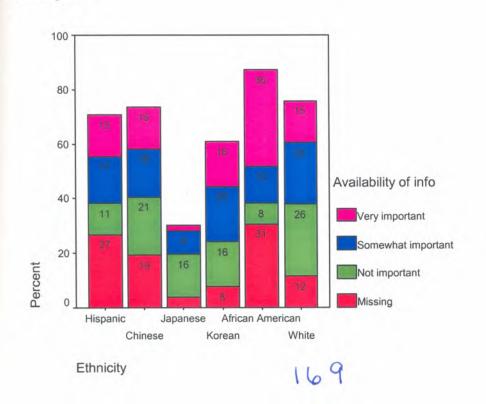
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *AVAILABILITY OF INFORMATION IN YOUR RACIAL/ETHNIC LANGUAGE?*

For the Atlanta sample, the percentage of respondents who rated the availability of information in own racial/ethnic language as very important for park areas to have ranged from 8% for Japanese Americans to 28% for African American and Anglo or White respondents. The percentage of respondents who rated the availability of information in own racial/ethnic language as somewhat important for park areas to have ranged from 13% for Japanese Americans to 23% for Chinese American respondents. The percentage of respondents who rated the availability of information in own racial/ethnic language as not important for park areas to have ranged from 7% for African Americans to 26% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who rated the availability of information in own racial/ethnic language as very important for park areas to have ranged from less than 5% for Japanese Americans to 36% for African American respondents. The percentage of respondents who rated the availability of information in own racial/ethnic language as somewhat important for park areas to have ranged from 9% for Japanese Americans to 22% for Anglo or White respondents. The percentage of respondents who rated the availability of information in own racial/ethnic language as somewhat important for park areas to have ranged from 9% for Japanese Americans to 22% for Anglo or White respondents. The percentage of respondents who rated the availability of information in own racial/ethnic language as not important for park areas to have ranged from 8% for African Americans to 26% for Anglo or White respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE AVAILABILITY OF INFORMATION IN YOUR RACIAL/ETHNIC LANGUAGE?





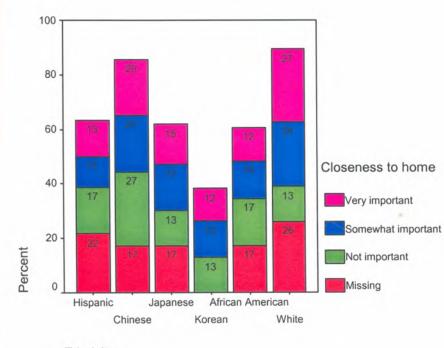
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *CLOSENESS TO HOME?*

For the Atlanta sample, the percentage of respondents who rated closeness of park areas to home as very important ranged from 12% for Korean Americans and African Americans to 27% for Anglo or White respondents. The percentage of respondents who rated closeness of park areas to home as somewhat important ranged from 11% for Hispanic Americans to 24% for Anglo or White respondents. The percentage of respondents who rated closeness of park areas to home as not important ranged from 13% for Japanese Americans, Korean Americans, and Anglos or Whites to 27% for Chinese American respondents.

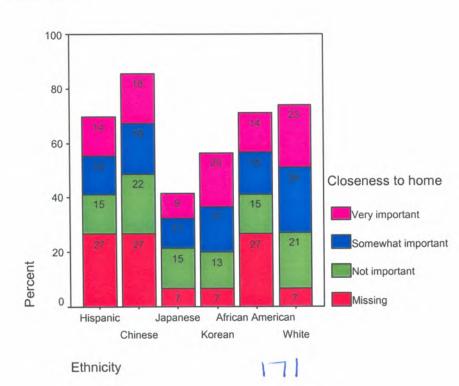
For the Philadelphia sample, the percentage of respondents who rated closeness of park areas to home as very important ranged from 9% for Japanese Americans to 23% for Anglo or White respondents. The percentage of respondents who rated closeness of park areas to home as somewhat important ranged from 11% for Japanese Americans to 24% for Anglo or White respondents. The percentage of respondents who rated closeness of park areas to home as not important ranged from 13% for Korean Americans to 22% for Chinese American respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *CLOSENESS TO HOME*?

Atlanta



Ethnicity

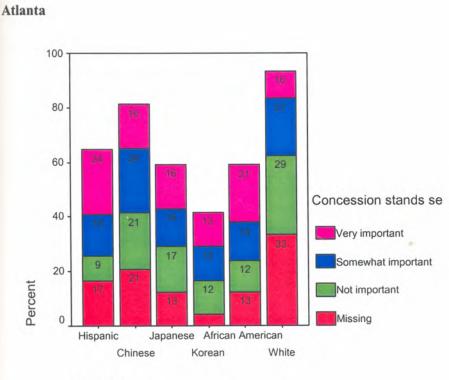


WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE CONCESSION STANDS SELLING FOOD AND BEVERAGES?

For the Atlanta sample, the percentage of respondents who rated concession stands selling food and beverages as very important for park areas to have ranged from 10% for Anglos or Whites to 24% for Hispanic American respondents. The percentage of respondents who rated concession stands selling food and beverages as somewhat important for park areas to have ranged from 13% for Korean Americans to 24% for Chinese American respondents. The percentage of respondents who rated concession stands selling food and beverages as not important for park areas to have ranged from 9% for Hispanic Americans to 29% for Anglo or White respondents.

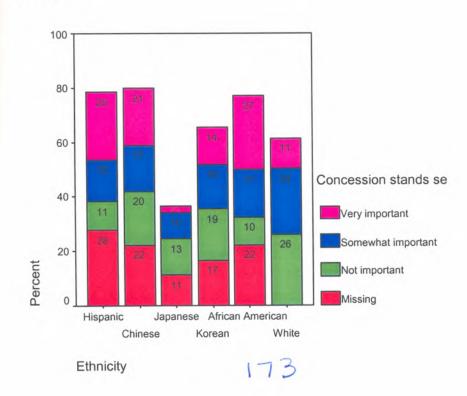
For the Philadelphia sample, the percentage of respondents who rated concession stands selling food and beverages as very important for park areas to have ranged from less than 5% for Japanese Americans to 27% for African American respondents. The percentage of respondents who rated concession stands selling food and beverages as somewhat important for park areas to have ranged from 10% for Japanese Americans to 24% for Anglo or White respondents. The percentage of respondents who rated concession stands selling food and beverages as not important for park areas to have ranged from 10% for Angle from 10% for African Americans to 26% for Anglo or White respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE CONCESSION STANDS SELLING FOOD AND BEVERAGES?



Ethnicity





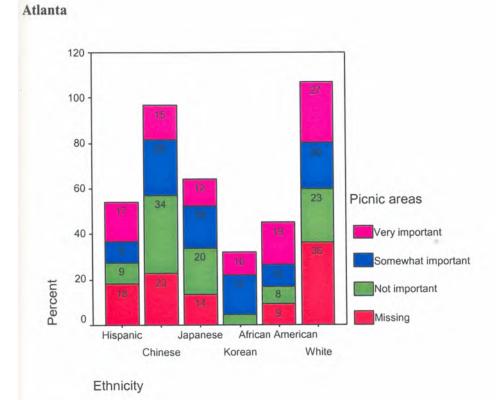
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *PICNIC AREAS?*

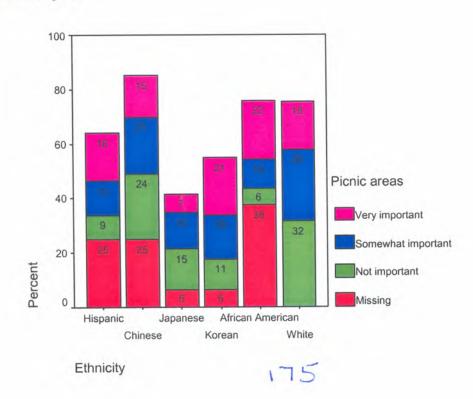
For the Atlanta sample, the percentage of respondents who rated park areas to have picnic areas as very important ranged from 10% for Korean Americans to 27% for Anglo or White respondents. The percentage of respondents who rated park areas to have picnic areas as somewhat important ranged from 9% for Hispanic Americans to 25% for Chinese American respondents. The percentage of respondents who rated park areas to have picnic areas as not important ranged from less than 5% for Korean Americans to 34% for Chinese American respondents.

For the Philadelphia sample, the percentage of respondents who rated park areas to have picnic areas as very important ranged from 7% for Japanese Americans to 22% for African American respondents. The percentage of respondents who rated park areas to have picnic areas as somewhat important ranged from 10% for African Americans to 26% for Anglo or White respondents. The percentage of respondents who rated park areas to have picnic areas as not important ranged from 6% for African Americans to 32% for Anglo or White respondents.

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WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *PICNIC AREAS?*



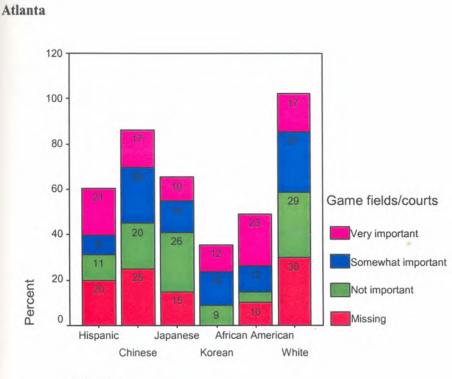


WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *GAME FIELDS/COURTS (BASEBALL, VOLLEY BALL, TENNIS, ETC.)?*

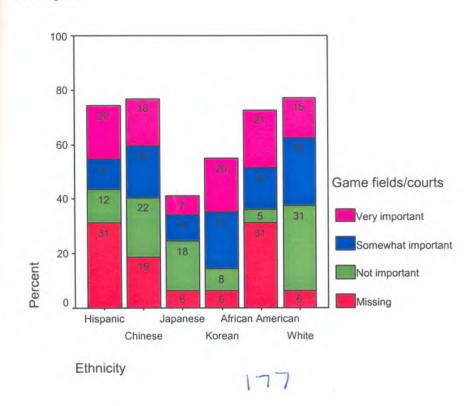
For the Atlanta sample, the percentage of respondents who rated game fields/courts (baseball, volleyball, tennis, etc.) as very important for park areas to have ranged from 10% for Japanese Americans to 23% for African American respondents. The percentage of respondents who rated game fields/courts as somewhat important for park areas to have ranged from 8% for Hispanic Americans to 27% for Anglo or White respondents. The percentage of respondents who rated game fields/courts as not important for park areas to have ranged from less than 5% for African Americans to 29% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who rated game fields/courts as very important for park areas to have ranged from 7% for Japanese Americans to 21% for African American respondents. The percentage of respondents who rated game fields/courts as somewhat important for park areas to have ranged from 10% for Japanese Americans to 25% for Anglo or White respondents. The percentage of respondents who rated game fields/courts as not important for park areas to have ranged from 5% for African Americans to 31% for Anglo or White respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *GAME FIELDS/COURTS (BASEBALL, VOLLEY BALL, TENNIS, ETC.)?*



Ethnicity

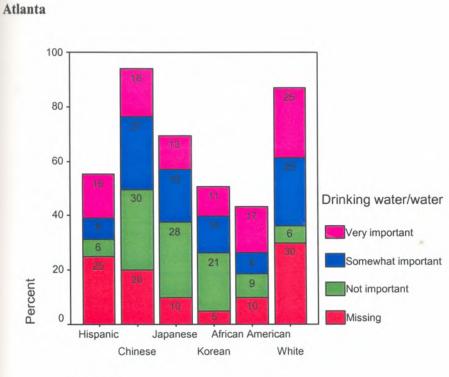


WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *DRINKING WATER/WATER FOUNTAINS*?

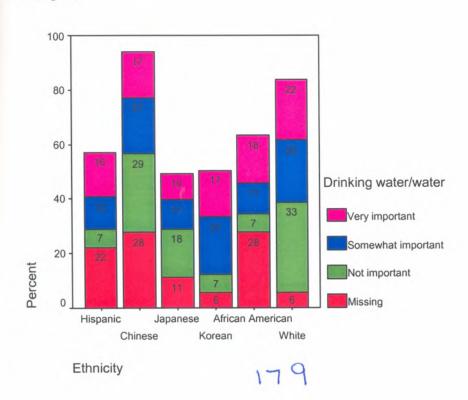
For the Atlanta sample, the percentage of respondents who rated drinking water/water fountains as very important for park areas to have ranged from 11% for Korean Americans to 25% for Anglo or White respondents. The percentage of respondents who rated drinking water/water fountains as somewhat important for park areas to have ranged from 8% for Hispanic Americans and African Americans to 27% for Chinese American respondents. The percentage of respondents who rated drinking water/water fountains as not important for park areas to have ranged from 6% for Hispanic Americans and Anglos or Whites to 30% for Chinese American respondents.

For the Philadelphia sample, the percentage of respondents who rated drinking water/water fountains as very important for park areas to have ranged from 10% for Japanese Americans to 22% for Anglo or White respondents. The percentage of respondents who rated drinking water/water fountains as somewhat important for park areas to have ranged from 11% for Japanese Americans and African Americans to 23% for Anglo or White respondents. The percentage of respondents who rated drinking water/water fountains as not important for park areas to have ranged from 7% for Hispanic Americans, Korean Americans, and African Americans to 33% for Anglo or White respondents.

WREN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *DRINKING WATER/WATER FOUNTAINS?*



Ethnicity



WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *FAMILY/GROUP RECREATIONAL AREAS AND FACILITIES?*

For the Atlanta sample, the percentage of respondents who rated family/group recreational areas and facilities as very important for park areas to have ranged from 8% for Japanese Americans to 22% for Chinese American and Anglo or White respondents. The percentage of respondents who rated family/group recreational areas and facilities as somewhat important for park areas to have ranged from 9% for Hispanic Americans and African Americans to 26% for Anglo or White respondents. The percentage of respondents who rated family/group recreational areas and facilities as not important for park areas to have ranged from less than 5% for African Americans to 28% for Japanese American respondents.

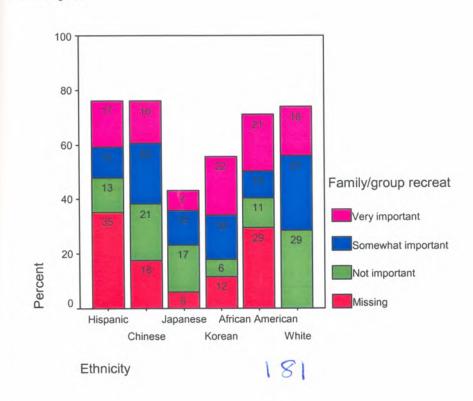
For the Philadelphia sample, the percentage of respondents who rated family/group recreational areas and facilities as very important for park areas to have ranged from 7% for Japanese Americans to 22% for Korean American respondents. The percentage of respondents who rated family/group recreational areas and facilities as somewhat important for park areas to have ranged from 10% for African Americans to 27% for Anglo or White respondents. The percentage of respondents who rated family/group recreational areas to 27% for Anglo or White respondents. The percentage of respondents who rated family/group recreational areas and facilities as not important for park areas to have ranged from 6% for Korean Americans to 29% for Anglo or White respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *FAMILY/GROUP RECREATIONAL AREAS AND FACILITIES?*

120 100 80 60 -Family/group recreat 26 28 Very important 40 Somewhat important 13 20 Percent Not important 13 0 Missing African American Hispanic Japanese Chinese White Korean Ethnicity

Philadelphia

Atlanta

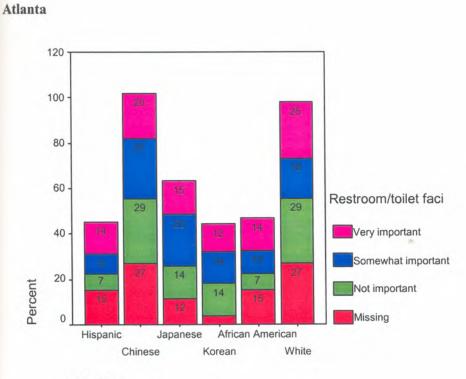


WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *RESTROOM/TOILET FACILITIES?*

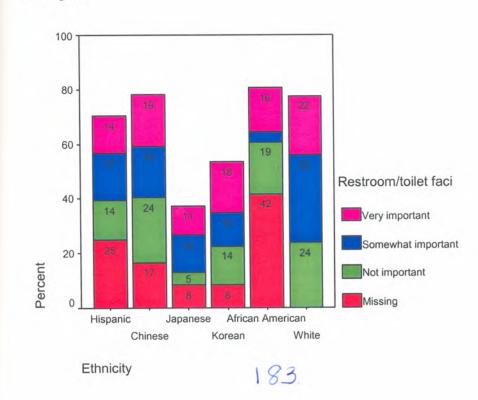
For the Atlanta sample, the percentage of respondents who rated restroom/toilet facilities as very important for park areas to have ranged from 12% for Korean Americans to 25% for Anglo or White respondents. The percentage of respondents who rated restroom/toilet facilities as somewhat important for park areas to have ranged from 9% for Hispanic Americans to 27% for Chinese American respondents. The percentage of respondents who rated restroom/toilet facilities facilities as not important for park areas to have ranged from 7% for Hispanic Americans and African Americans to 29% for Chinese American and Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who rated restroom/toilet facilities as very important for park areas to have ranged from 11% for Japanese Americans to 22% for Anglo or White respondents. The percentage of respondents who rated restroom/toilet facilities as somewhat important for park areas to have ranged from less than 5% for African Americans to 32% for Anglo or White respondents. The percentage of respondents who rated restroom/toilet facilities as not important for park areas to have ranged from 5% for Japanese Americans to 24% for Chinese American and Anglo or White respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *RESTROOM/TOILET FACILITIES?*



Ethnicity



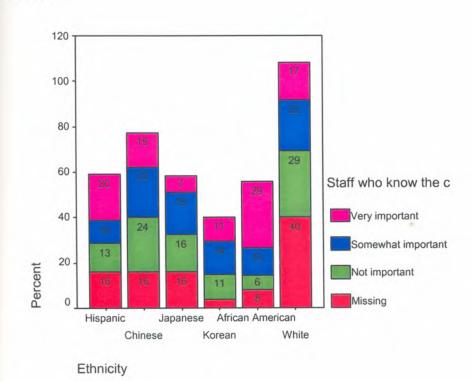
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE STAFF WHO KNOW THE CULTURES/CUSTOMS OF VISITORS?

For the Atlanta sample, the percentage of respondents who rated staff who know the cultures/customs of visitors as very important for park areas to have ranged from 7% for Japanese Americans to 29% for African American respondents. The percentage of respondents who rated staff who know the cultures/customs of visitors as somewhat important for park areas to have ranged from 10% for Hispanic Americans to 22% for Chinese American and Anglo or White respondents. The percentage of respondents who rated staff who know the cultures/customs of visitors as not important for park areas to have ranged from 6% for African Americans to 29% for Anglo or White respondents.

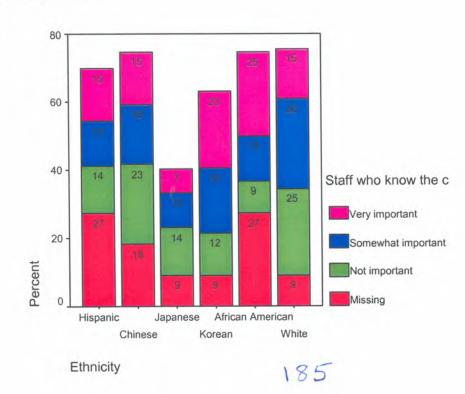
For the Philadelphia sample, the percentage of respondents who rated staff who know the cultures/customs of visitors as very important for park areas to have ranged from 7% for Japanese Americans to 25% for African American respondents. The percentage of respondents who rated staff who know the cultures/customs of visitors as somewhat important for park areas to have ranged from 10% for Japanese Americans to 26% for Anglo or White respondents. The percentage of respondents who rated staff who know the cultures/customs of visitors as not important for park areas to have ranged from 9% for African Americans to 25% for Anglo or White respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *STAFF WHO KNOW THE CULTURES/CUSTOMS OF VISITORS?*

Atlanta







WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *ALCOHOLIC BEVERAGES PERMITTED?*

For the Atlanta sample, the percentage of respondents who rated permission for alcoholic beverage consumption in parks as very important ranged from 9% for Korean Americans to 25% for Chinese American respondents. The percentage of respondents who rated permission for alcoholic beverage consumption in parks as somewhat important ranged from 10% for Korean Americans to 23% for Anglo or White respondents. The percentage of respondents who rated permission for alcoholic beverage consumption in parks as not important ranged from 12% for Hispanic Americans to 25% for Anglo or White respondents.

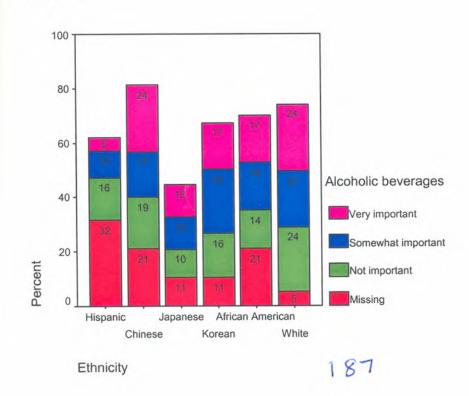
For the Philadelphia sample, the percentage of respondents who rated permission for alcoholic beverage consumption in parks as very important ranged from 5% for Hispanic Americans to 24% for Chinese American and Anglo or White respondents. The percentage of respondents who rated permission for alcoholic beverage consumption in parks as somewhat important ranged from 10% for Hispanic Americans to 24% for Korean American respondents. The percentage of respondents who rated permission for alcoholic beverage consumption in parks as somewhat important ranged from 10% for Hispanic Americans to 24% for Korean American respondents. The percentage of respondents who rated permission for alcoholic beverage consumption in parks as not important ranged from 10% for Japanese Americans to 24% for Anglo or White respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *ALCOHOLIC BEVERAGES PERMITTED*?

Atlanta 120 100 80 60 Alcoholic beverages 25 Very important 40 Somewhat important 14 12 13 20 Percent Not important 14 0 Missing Hispanic Japanese African American White Chinese Korean

Ethnicity





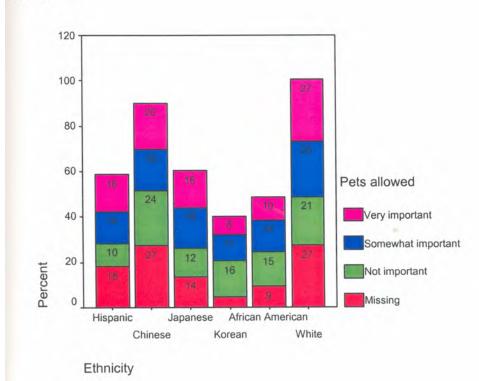
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *PETS ALLOWED?*

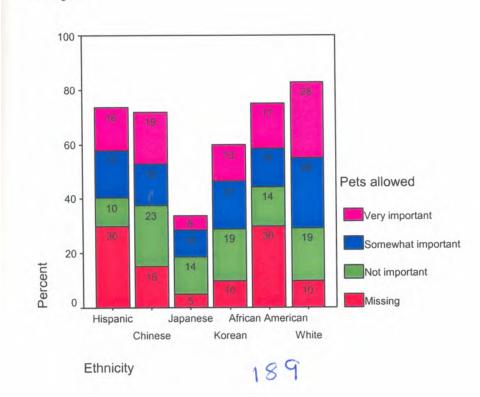
For the Atlanta sample, the percentage of respondents who rated permission for pets in parks as very important ranged from 8% for Korean Americans to 27% for Anglo or White respondents. The percentage of respondents who rated permission for pets in parks as somewhat important ranged from 11% for Korean Americans to 25% for Anglo or White respondents. The percentage of respondents who rated permission for pets in parks as not important ranged from 10% for Hispanic Americans to 24% for Chinese American respondents.

For the Philadelphia sample, the percentage of respondents who rated permission for pets in parks as very important ranged from 6% for Japanese Americans to 28% for Anglo or White respondents. The percentage of respondents who rated permission for pets in parks as somewhat important ranged from 10% for Japanese Americans to 26% for Anglo or White respondents. The percentage of respondents who rated permission for pets in parks as not important ranged from 10% for Hispanic Americans to 23% for Chinese American respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *PETS ALLOWED?*

Atlanta



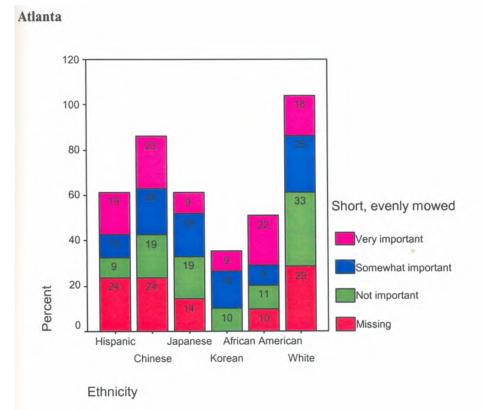


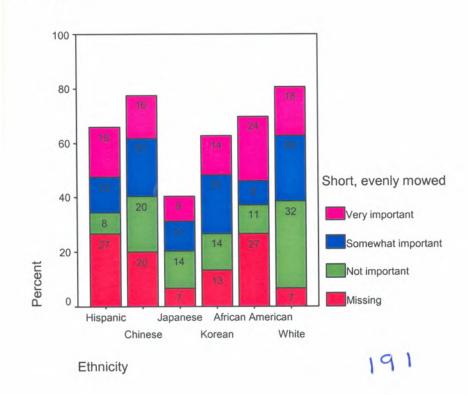
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *SHORT, EVENLY MOWED GRASS?*

For the Atlanta sample, the percentage of respondents who rated short, evenly mowed grass as very important for park areas to have ranged from 9% for Japanese Americans and Korean Americans to 23% for Chinese American respondents. The percentage of respondents who rated short, evenly mowed grass as somewhat important for park areas to have ranged from 9% for African Americans to 25% for Anglo or White respondents. The percentage of respondents who rated short, evenly mowed grass as not important for park areas to have ranged from 9% for Hispanic Americans to 33% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who rated short, evenly mowed grass as very important for park areas to have ranged from 9% for Japanese Americans to 24% for African American respondents. The percentage of respondents who rated short, evenly mowed grass as somewhat important for park areas to have ranged from 9% for African Americans to 24% for Anglo or White respondents. The percentage of respondents who rated short, evenly mowed grass as not important for park areas to have ranged from 8% for Hispanic Americans to 32% for Anglo or White respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *SHORT, EVENLY MOWED GRASS?*



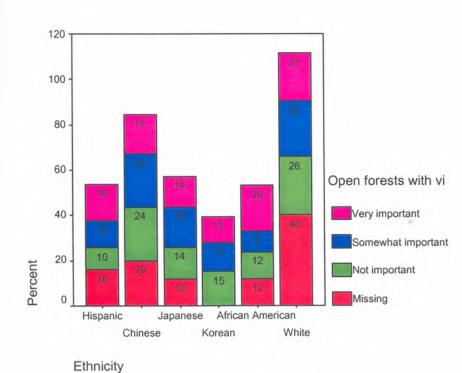


WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE OPEN FORESTS WITH VISIBILITY THROUGH TREES?

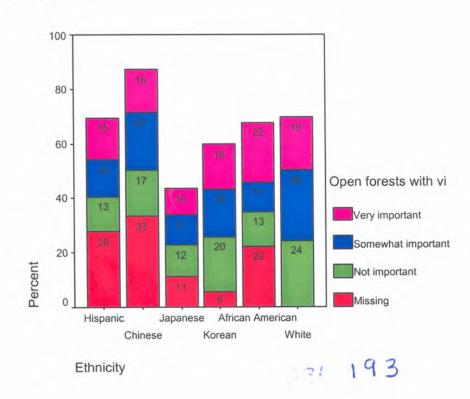
For the Atlanta sample, the percentage of respondents who rated open forests with visibility through trees as very important for park areas to have ranged from 11% for Korean Americans to 21% for Anglo or White respondents. The percentage of respondents who rated open forests with visibility through trees as somewhat important for park areas to have ranged from 9% for African Americans to 25% for Anglo or White respondents. The percentage of respondents who rated open forests with visibility through trees as not important for park areas to have ranged from 10% for Hispanic Americans to 26% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who rated open forests with visibility through trees as very important for park areas to have ranged from 10% for Japanese Americans to 22% for African American respondents. The percentage of respondents who rated open forests with visibility through trees as somewhat important for park areas to have ranged from 11% for Japanese Americans and African Americans to 26% for Anglo or White respondents. The percentage of respondents who rated open forests with visibility through trees as not important for park areas to have ranged from 12% for Japanese Americans to 24% for Anglo or White respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA **TO** HAVE *OPEN FORESTS WITH VISIBILITY THROUGH TREES?*



Atlanta

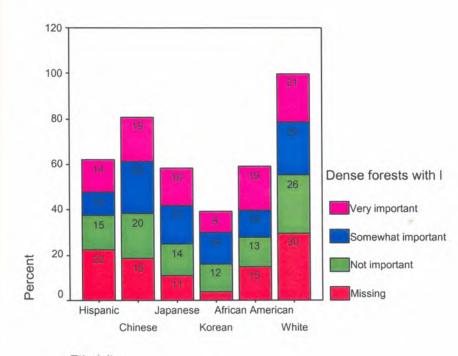


WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE DENSE FORESTS WITH LITTLE VISIBILITY THROUGH TREES?

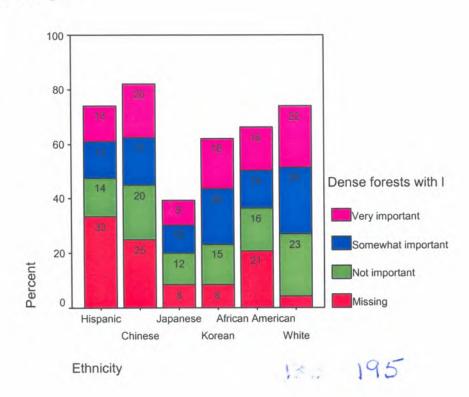
For the Atlanta sample, the percentage of respondents who rated dense forests with little visibility through trees as very important for park areas to have ranged from 9% for Korean Americans to 21% for Anglo or White respondents. The percentage of respondents who rated dense forests with little visibility through trees as somewhat important for park areas to have ranged from 10% for Hispanic Americans to 23% for Anglo or White respondents. The percentage of respondents who rated dense forests with little visibility through trees as not important for park areas to have ranged from 12% for Korean Americans to 26% for Anglo or White respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *DENSE FORESTS WITH LITTLE VISIBILITY THROUGH TREES?*

Atlanta



Ethnicity

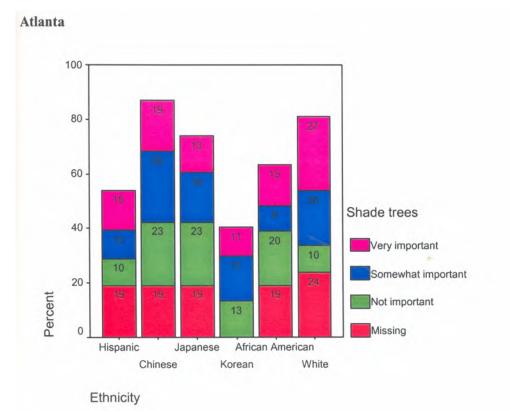


WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *SHADE TREES?*

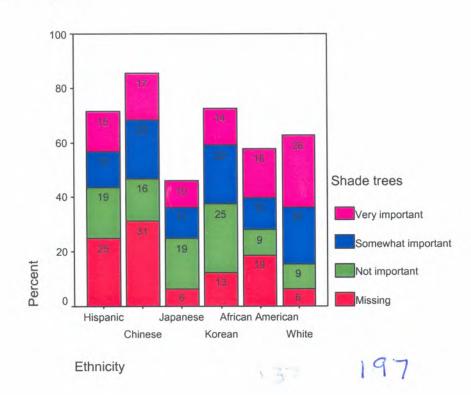
For the Atlanta sample, the percentage of respondents who rated shade trees as very important for park areas to have ranged from 11% for Korean Americans to 27% for Anglo or White respondents. The percentage of respondents who rated shade trees as somewhat important for park areas to have ranged from 9% for African Americans to 26% for Chinese American respondents. The percentage of respondents who rated shade trees as not important for park areas to have ranged from 10% for Hispanic Americans and Anglos or Whites to 23% for Chinese American and Japanese American respondents.

For the Philadelphia sample, the percentage of respondents who rated shade trees as very important for park areas to have ranged from 10% for Japanese Americans to 26% for Anglo or White respondents. The percentage of respondents who rated shade trees as somewhat important for park areas to have ranged from 11% for Japanese Americans to 22% for Chinese American and Korean American respondents. The percentage of respondents who rated shade trees as not important for park areas to have ranged from 9% for African Americans and Anglos or Whites to 25% for Korean American respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *SHADE TREES?*







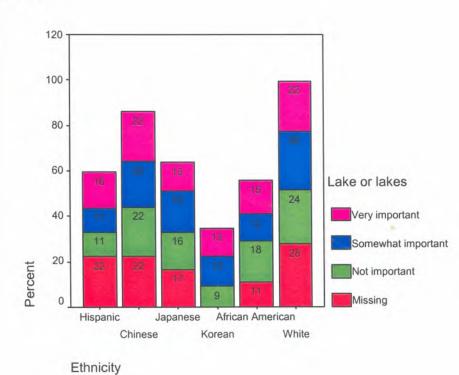
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE LAKE OR LAKES?

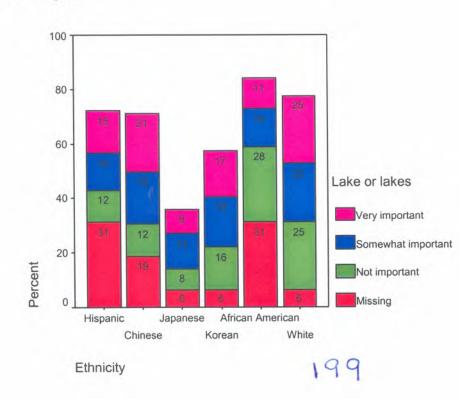
For the Atlanta sample, the percentage of respondents who rated lake or lakes as very important for park areas to have ranged from 13% for Japanese Americans and Korean Americans to 22% for Chinese American and Anglo or White respondents. The percentage of respondents who rated lake or lakes as somewhat important for park areas to have ranged from 11% for Hispanic Americans to 26% for Anglo or White respondents. The percentage of respondents who rated lake or lakes as not important for park areas to have ranged from 9% for Korean Americans to 24% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who rated lake or lakes as very important for park areas to have ranged from 9% for Japanese Americans to 25% for Anglo or White respondents. The percentage of respondents who rated lake or lakes as somewhat important for park areas to have ranged from 13% for Japanese Americans to 22% for Anglo or White respondents. The percentage of respondents who rated lake or lakes as not important for park areas to have ranged from 8% for Japanese Americans to 28% for African American respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *LAKE OR LAKES*?







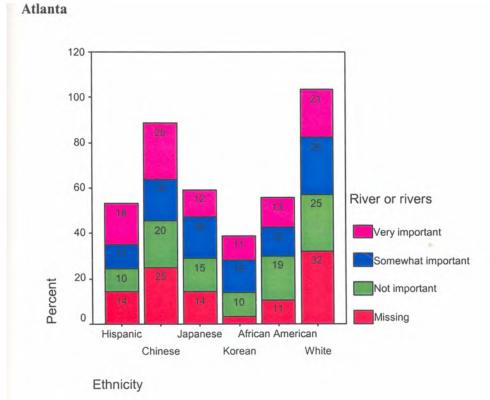
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE RIVER OR RIVERS?

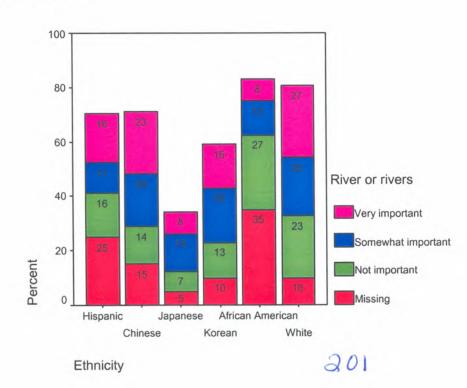
For the Atlanta sample, the percentage of respondents who rated river or rivers as very important for park areas to have ranged from 11% for Korean Americans to 25% for Chinese American respondents. The percentage of respondents who rated river or rivers as somewhat important for park areas to have ranged from 11% for Hispanic Americans to 25% for Anglo or White respondents. The percentage of respondents who rated river or rivers as not important for park areas to have ranged from 10% for Hispanic Americans and African Americans to 25% for Anglo or Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who rated river or rivers as very important for park areas to have ranged from 8% for Japanese Americans and African Americans to 27% for Anglo or White respondents. The percentage of respondents who rated river or rivers as somewhat important for park areas to have ranged from 11% for Hispanic Americans to 22% for Anglo or White respondents. The percentage of respondents who rated river or rivers as not important for park areas to have ranged from 7% for Japanese Americans to 27% for African Americans to 27% for African Americans.

200

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *RIVER OR RIVERS?*





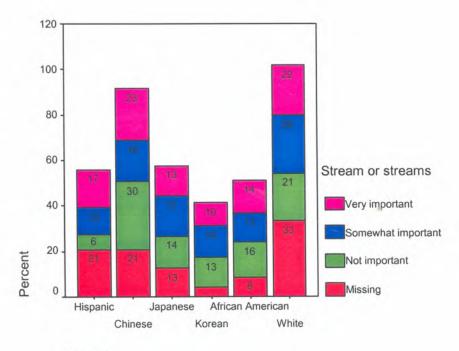
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *STREAM OR STREAMS?*

For the Atlanta sample, the percentage of respondents who rated stream or streams as very important for park areas to have ranged from 10% for Korean Americans to 23% for Chinese American respondents. The percentage of respondents who rated stream or streams as somewhat important for park areas to have ranged from 12% for Hispanic Americans to 26% for Anglo or White respondents. The percentage of respondents who rated stream or streams as not important for park areas to have ranged from 6% for Hispanic Americans to 30% for Chinese American respondents.

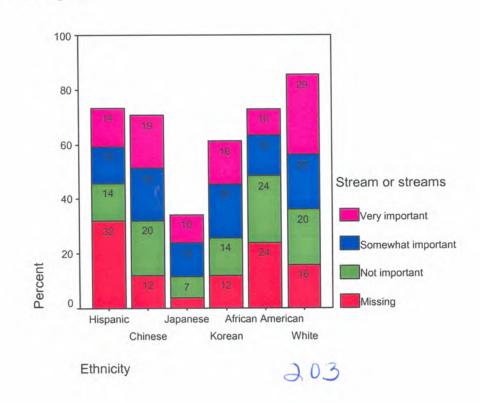
For the Philadelphia sample, the percentage of respondents who rated stream or streams as very important for park areas to have ranged from 10% for Japanese Americans and African Americans to 29% for Anglo or White respondents. The percentage of respondents who rated stream or streams as somewhat important for park areas to have ranged from 13% for Hispanic Americans and Japanese Americans to 20% for Korean American and Anglo or White respondents. The percentage of respondents who rated stream or streams as not important for park areas to have ranged from 7% for Japanese Americans to 24% for African American respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *STREAM OR STREAMS?*

Atlanta



Ethnicity

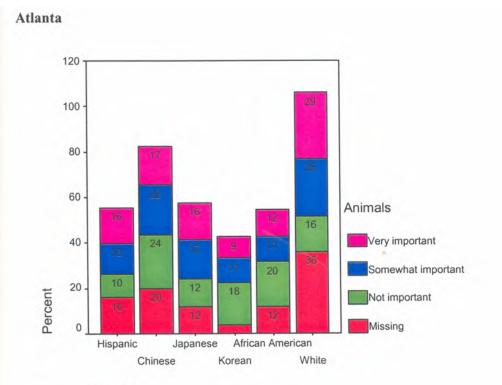


WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *ANIMALS?*

For the Atlanta sample, the percentage of respondents who rated animals as very important for park areas to have ranged from 9% for Korean Americans to 29% for Anglo or White respondents. The percentage of respondents who rated animals as somewhat important for park areas to have ranged from 11% for Korean Americans and African Americans to 25% for Anglo or White respondents. The percentage of respondents who rated animals as not important for park areas to have ranged from 10% for Hispanic Americans to 24% for Chinese American respondents.

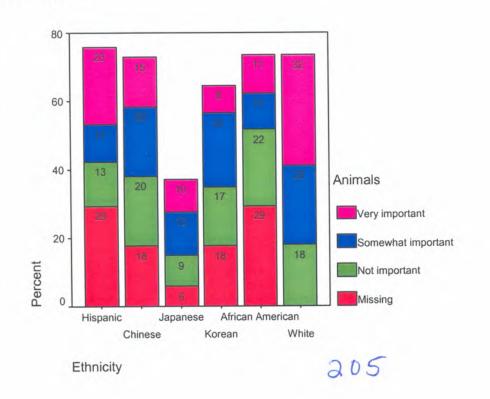
For the Philadelphia sample, the percentage of respondents who rated animals as very important for park areas to have ranged from 8% for Korean Americans to 32% for Anglo or White respondents. The percentage of respondents who rated animals as somewhat important for park areas to have ranged from 11% for Hispanic Americans and African Americans to 23% for Anglo or White respondents. The percentage of respondents who rated animals as not important for park areas to have ranged from 9% for Japanese Americans to 22% for African American respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE ANIMALS?



Ethnicity





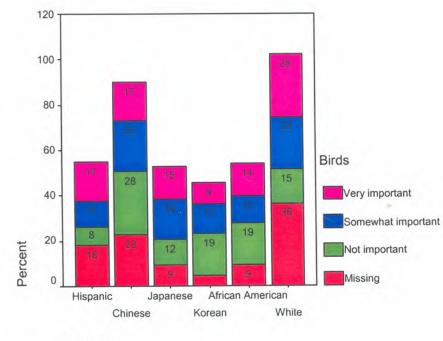
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE **BIRDS**?

For the Atlanta sample, the percentage of respondents who rated birds as very important for park areas to have ranged from 9% for Korean Americans to 28% for Anglo or White respondents. The percentage of respondents who rated birds as somewhat important for park areas to have ranged from 11% for Hispanic Americans to 23% for Anglo or White respondents. The percentage of respondents who rated birds as not important for park areas to have ranged from 8% for Hispanic Americans to 28% for Chinese American respondents.

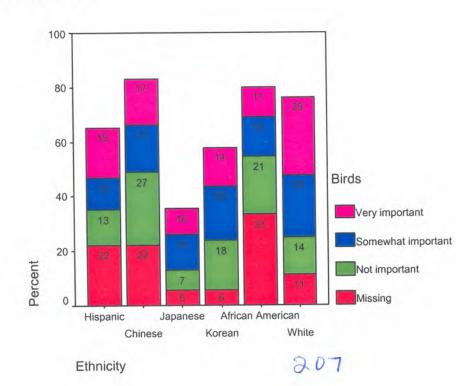
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WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *BIRDS*?

Atlanta



Ethnicity

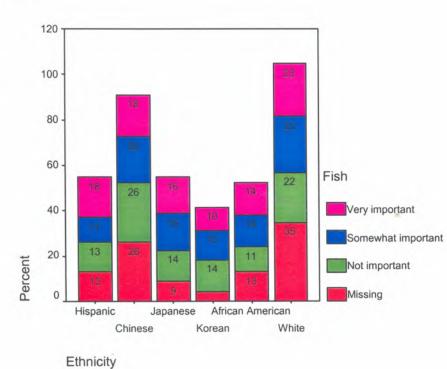


WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *FISH*?

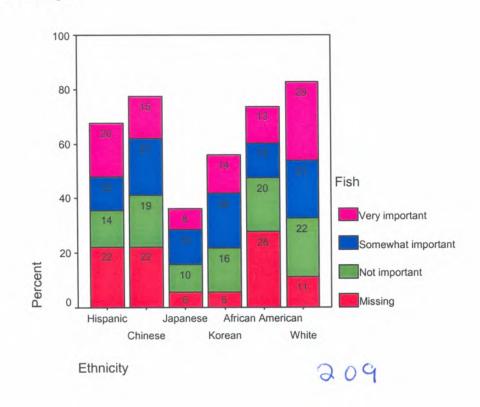
For the Atlanta sample, the percentage of respondents who rated fish as very important for park areas to have ranged from 10% for Korean Americans to 23% for Anglo or White respondents. The percentage of respondents who rated fish as somewhat important for park areas to have ranged from 11% for Hispanic Americans to 25% for Anglo or White respondents. The percentage of respondents who rated fish as not important for park areas to have ranged from 11% for African Americans to 26% for Chinese American respondents.

For the Philadelphia sample, the percentage of respondents who rated fish as very important for park areas to have ranged from 8% for Japanese Americans to 29% for Anglo or White respondents. The percentage of respondents who rated fish as somewhat important for park areas to have ranged from 12% for Hispanic Americans to 21% for Chinese American and Anglo or White respondents. The percentage of respondents who rated fish as not important for park areas to have ranged from 10% for Japanese Americans to 22% for Anglo or White respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *FISH?*



Philadelphia



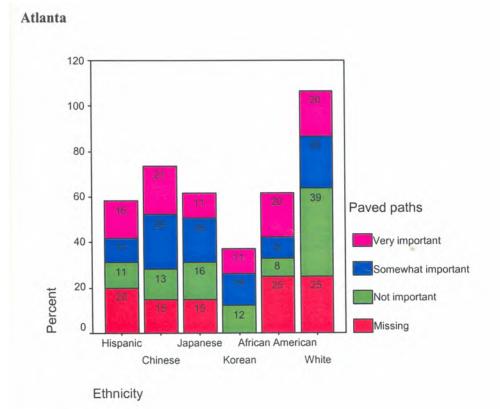
Atlanta

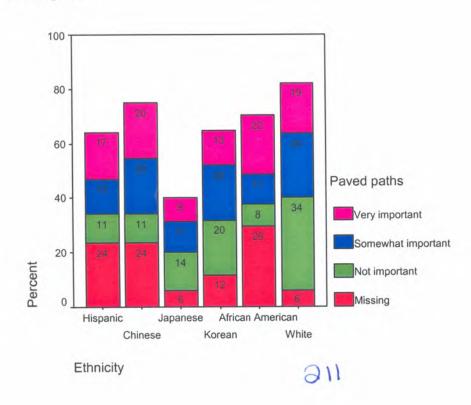
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *PAVED PATHS*?

For the Atlanta sample, the percentage of respondents who rated paved paths as very important for park areas to have ranged from 11% for Japanese Americans and Korean Americans to 21% for Chinese American respondents. The percentage of respondents who rated paved paths as somewhat important for park areas to have ranged from 9% for African Americans to 24% for Chinese American respondents. The percentage of respondents who rated paved paths as not important for park areas to have ranged from 8% for African Americans to 39% for Anglo or White respondents.

For the Philadelphia sample, the percentage of respondents who rated paved paths as very important for park areas to have ranged from 9% for Japanese Americans to 22% for African American respondents. The percentage of respondents who rated paved paths as somewhat important for park areas to have ranged from 11% for Japanese Americans and African Americans to 24% for Anglo or White respondents. The percentage of respondents who rated paved paths as not important for park areas to have ranged from 8% for African Americans to 34% for Anglo or White respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *PAVED PATHS*?





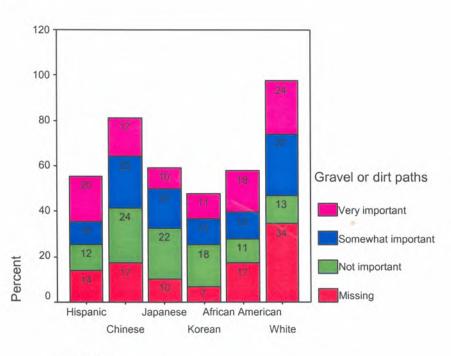
WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *GRAVEL OR DIRT PATHS*?

For the Atlanta sample, the percentage of respondents who rated gravel or dirt paths as very important for park areas to have ranged from 10% for Japanese Americans to 24% for Anglo or White respondents. The percentage of respondents who rated gravel or dirt paths as somewhat important for park areas to have ranged from 10% for Hispanic Americans to 27% for Anglo or White respondents. The percentage of respondents who rated gravel or dirt paths as not important for park areas to have ranged from 11% for African Americans to 24% for Chinese American respondents.

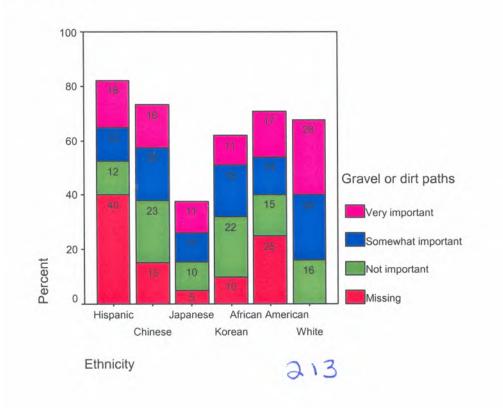
For the Philadelphia sample, the percentage of respondents who rated gravel or dirt paths as very important for park areas to have ranged from 11% for Japanese Americans and Korean Americans to 28% for Anglo or White respondents. The percentage of respondents who rated gravel or dirt paths as somewhat important for park areas to have ranged from 11% for Japanese Americans to 24% for Anglo or White respondents. The percentage of respondents who rated gravel or dirt paths as not important for park areas to have ranged from 10% for Japanese Americans to 23% for Chinese American respondents.

WHEN YOU VISIT A PARK, HOW IMPORTANT IS IT FOR THE AREA TO HAVE *GRAVEL OR DIRT PATHS*?

Atlanta



Ethnicity





Interest in Volunteering for Causes Related to Urban Parks and Forests

The following charts compare the responses of the six population subgroups (Hispanics or Hispanic Americans, Chinese or Chinese Americans, Japanese or Japanese Americans, Korean or Korean Americans, African Americans, and Anglo or White respondents) to the items relating to interest in volunteering for causes benefiting urban parks and forests. The response categories (Yes/No/Missing) for each item are represented by color-coded boxes. For each item relating to interest in volunteering for causes benefiting urban parks and forests, the percentage of respondents indicating a specific response category, is shown in the respective color-coded box within each population subgroup.

Note: In some cases, the cumulative percentages for each population subgroup do not add up to 100 percent when respondents do not indicate any response for the corresponding item relating to interest in volunteering for causes benefiting urban parks and forests.





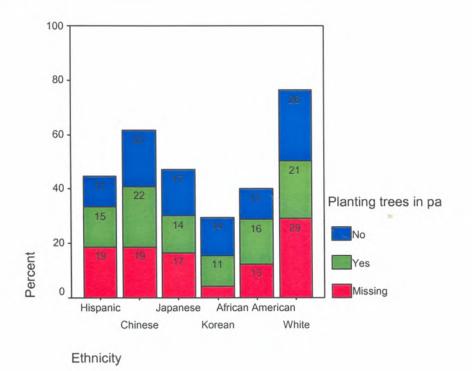
ARE YOU INTERESTED IN DOING THE FOLLOWING AS A VOLUNTEER (WITHOUT PAY) TO HELP PARKS IN YOUR AREA: *PLANTING TREES IN PARKS*?

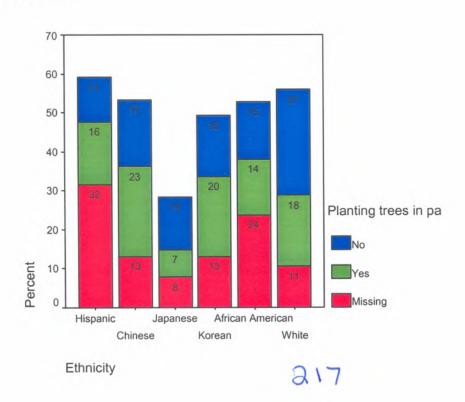
For the Atlanta sample, the percentage of respondents who were willing to plant trees in parks as a volunteer (without pay) to help parks in their area ranged from 11% for Korean Americans to 22% for Chinese American respondents. The percentage of respondents who were unwilling to do so ranged from 11% for Hispanic Americans and African Americans to 26% for Anglo or White respondents. The remaining respondents did not provide an answer to this question.

For the Philadelphia sample, the percentage of respondents who were willing to plant trees in parks as a volunteer (without pay) to help parks in their area ranged from 7% for Japanese Americans to 23% for Chinese American respondents. The percentage of respondents who were unwilling to do so ranged from 11% for Hispanic Americans to 27% for Anglo or White respondents. The remaining respondents did not provide an answer to this question.

ARE YOU INTERESTED IN DOING THE FOLLOWING AS A VOLUNTEER (WITHOUT PAY) TO HELP PARKS IN YOUR AREA: *PLANTING TREES IN PARKS*?

Atlanta





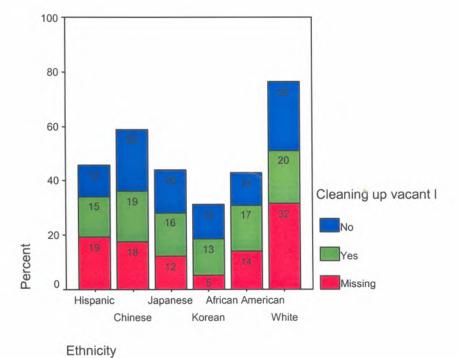
ARE YOU INTERESTED IN DOING THE FOLLOWING AS A VOLUNTEER (WITHOUT PAY) TO HELP PARKS IN YOUR AREA: *CLEANING-UP VACANT LOTS FOR PLANTING GARDENS?*

For the Atlanta sample, the percentage of respondents who were willing to clean-up vacant lots for planting gardens as a volunteer (without pay) to help parks in their area ranged from 13% for Korean Americans to 20% for Anglo or White respondents. The percentage of respondents who were unwilling to do so ranged from 12% for Hispanic Americans and African Americans to 25% for Anglo or White respondents. The remaining respondents did not provide an answer to this question.

For the Philadelphia sample, the percentage of respondents who were willing to clean-up vacant lots for planting gardens as a volunteer (without pay) to help parks in their area ranged from 5% for Japanese Americans to 29% for Korean American respondents. The percentage of respondents who were unwilling to do so ranged from 12% for Hispanic Americans to 27% for Anglo or White respondents. The remaining respondents did not provide an answer to this question.

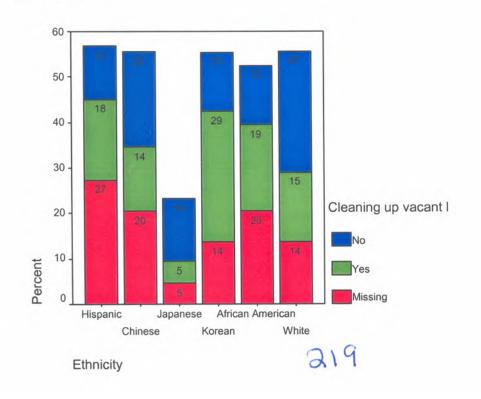
ARE YOU INTERESTED IN DOING THE FOLLOWING AS A VOLUNTEER (WITHOUT PAY) TO HELP PARKS IN YOUR AREA: *CLEANING-UP VACANT LOTS FOR PLANTING GARDENS?*

Atlanta



Lunno





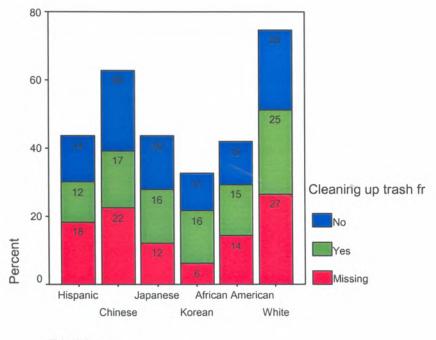
ARE YOU INTERESTED IN DOING THE FOLLOWING AS A VOLUNTEER (WITHOUT PAY) TO HELP PARKS IN YOUR AREA: *CLEANING-UP TRASH FROM PARKS*?

For the Atlanta sample, the percentage of respondents who were willing to clean-up trash from parks as a volunteer (without pay) to help parks in their area ranged from 12% for Hispanic Americans to 25% for Anglo or White respondents. The percentage of respondents who were unwilling to do so ranged from 11% for Korean Americans to 24% for Chinese American respondents. The remaining respondents did not provide an answer to this question.

For the Philadelphia sample, the percentage of respondents who were willing to clean-up trash from parks as a volunteer (without pay) to help parks in their area ranged from 6% for Japanese Americans to 25% for Korean American respondents. The percentage of respondents who were unwilling to do so ranged from 11% for Hispanic Americans to 25% for Anglo or White respondents. The remaining respondents did not provide an answer to this question.

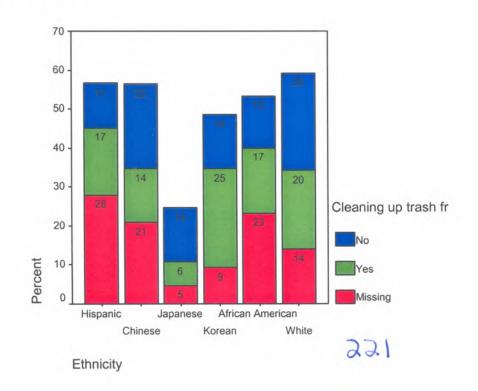
ARE YOU INTERESTED IN DOING THE FOLLOWING AS A VOLUNTEER (WITHOUT PAY) TO HELP PARKS IN YOUR AREA: *CLEANING-UP TRASH FROM PARKS*?

Atlanta



Ethnicity





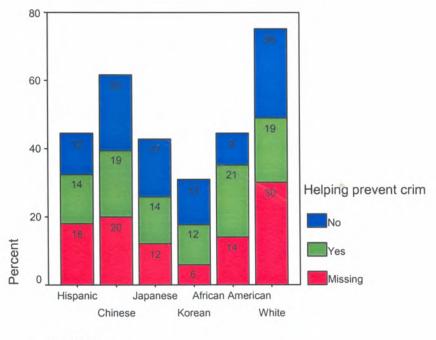
ARE YOU INTERESTED IN DOING THE FOLLOWING AS A VOLUNTEER (WITHOUT PAY) TO HELP PARKS IN YOUR AREA: *HELPING PREVENT CRIME IN PARKS*?

For the Atlanta sample, the percentage of respondents who were willing to help prevent crime in parks as a volunteer (without pay) to help parks in their area ranged from 12% for Korean Americans to 21% for African American respondents. The percentage of respondents who were unwilling to do so ranged from 9% for African Americans to 26% for Anglo or White respondents. The remaining respondents did not provide an answer to this question.

For the Philadelphia sample, the percentage of respondents who were willing to help prevent crime in parks as a volunteer (without pay) to help parks in their area ranged from 5% for Japanese Americans to 24% for Hispanic American respondents. The percentage of respondents who were unwilling to do so ranged from 9% for Hispanic Americans to 27% for Anglo or White respondents. The remaining respondents did not provide an answer to this question.

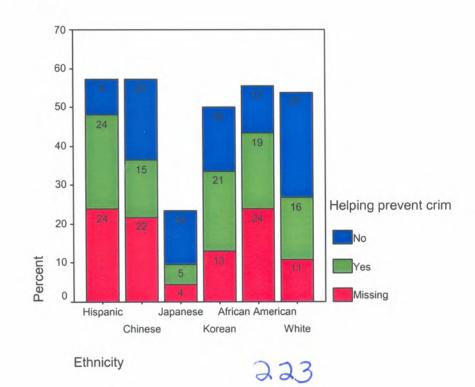
ARE YOU INTERESTED IN DOING THE FOLLOWING AS A VOLUNTEER (WITHOUT PAY) TO HELP PARKS IN YOUR AREA: *HELPING PREVENT CRIME IN PARKS*?

Atlanta



Ethnicity

Philadelphia



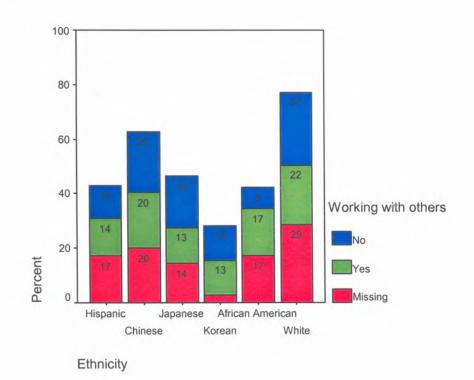
ARE YOU INTERESTED IN DOING THE FOLLOWING AS A VOLUNTEER (WITHOUT PAY) TO HELP PARKS IN YOUR AREA: *WORKING WITH OTHERS FOR IMPROVING THE QUALITY OF PARKS*?

For the Atlanta sample, the percentage of respondents who were willing to work, as a volunteer (without pay), with others for improving the quality of parks in their area ranged from 13% for Japanese Americans and Korean Americans to 22% for Anglo or White respondents. The percentage of respondents who were unwilling to do so ranged from 8% for African Americans to 27% for Anglo or White respondents. The remaining respondents did not provide an answer to this question.

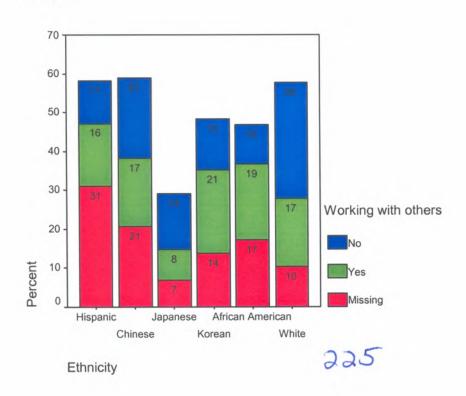
For the Philadelphia sample, the percentage of respondents who were willing to work, as a volunteer (without pay), with others for improving the quality of parks in their area ranged from 8% for Japanese Americans to 21% for Korean American respondents. The percentage of respondents who were unwilling to do so ranged from 10% for African Americans to 30% for Anglo or White respondents. The remaining respondents did not provide an answer to this question.

ARE YOU INTERESTED IN DOING THE FOLLOWING AS A VOLUNTEER (WITHOUT PAY) TO HELP PARKS IN YOUR AREA: *WORKING WITH OTHERS FOR IMPROVING THE QUALITY OF PARKS*?

Atlanta



Philadelphia





Summary of Findings



SUMMARY OF FINDINGS

Some of the key findings of the study are indicated below:

- 1. Access to Urban Parks and Forests: For the Atlanta and Philadelphia sample, the Anglo or White respondents visited urban and community forests and parks most frequently; followed by Chinese and Hispanic/Latino respondents, with more than half of the total respondents from each of the three subgroups indicating that they visited urban park and forests almost daily, weekly or three or more times a month; the frequency of urban park and forest visitation was lowest for African American respondents.
- 2. Attitudes Toward Socioeconomic and Environmental Aspects of Parks and Forests: For the Atlanta and Philadelphia sample, the social desirability (places to be alone, to take children, to exercise, to get away from traffic and noise, etc.) for urban and community forests and parks was higher among the Anglos or Whites than the other population subgroups; the Chinese respondents also indicated high social desirability for urban parks and forests, but generally lower than the Whites; the African Americans and Koreans found urban parks and forests to be least socially desirable compared to other population subgroups. For the Atlanta and Philadelphia sample, the Anglos or Whites had positive attitudes towards the socioeconomic and environmental aspects/benefits of urban and community forests and parks; the Chinese respondents also indicated positive attitudes, but generally lower than the Whites. Generally, the attitudes of African Americans, regarding the socioeconomic and environmental aspects/benefits of urban parks and forests, were not positive.
- 3. Patterns of Urban Park and Forest Visitation: For the Atlanta and Philadelphia sample, Anglos or Whites visited urban parks and forests alone as well as in groups; the Chinese were more likely to visit in larger groups rather than alone. For the Atlanta sample, Anglos or Whites almost always visited urban parks and forests with others from the same ethnic/racial group, followed by African Americans, and Chinese respondents; Japanese respondents were least likely to visit urban parks and forests with others from their own ethnic/racial group. For the Atlanta sample, Anglos or Whites almost always visited urban parks and forests with others from same ethnic/racial group, followed by Koreans, and Chinese respondents; Hispanic respondents were least likely to visit urban parks and forests with others from their own ethnic/racial group. For the Atlanta sample, the Anglos or Whites and Hispanics were most likely to visit urban parks and forests during both weekdays; for Philadelphia, the Anglos or Whites and Koreans were most likely to do so. For both samples, the Anglos or Whites and Chinese respondents were the most likely to visit urban parks and forests during weekends. For both samples, Anglos or Whites were most likely to spend shorter durations of time at urban parks and forests and the Chinese respondents were most likely to spend longer durations of time in these areas.
- 4. Recreational Activity Participation in Urban Parks and Forests: For the Atlanta sample, all types of activities were popular among the Anglos or Whites. Among the Chinese respondents, social activities, food-related activities, outdoor land and water activities, experiential activities, physical exercises, and subsistence activities were popular. Among the Hispanic respondents, team activities, community activities, gardening, and photography were popular. Among the Japanese respondents, gardening was a popular activity. Among the Koreans and African Americans, team activities were popular. For the Philadelphia sample, all types of activities were popular among the Anglos or Whites. Among the Chinese respondents, social activities, team activities, team activities, team activities, team activities, team activities, and the Anglos or Whites. Among the Chinese respondents, social activities, team activities, t

outdoor land and water activities, physical exercises, experiential activities, subsistence activities, community activities and gardening were popular. For the Korean respondents, social activities, food-related activities, team activities, and physical exercises were popular. For the Hispanic respondents, team activities, outdoor land activities, and physical exercises were popular. Among the African Americans, community activities were popular.

- 5. Constraints to Urban Park and Forest Visitation: With regard to the constraints to urban park and forest visitation for both samples, lack of time was a constraining factor for the Anglos or Whites and Chinese respondents, lack of money for Hispanics and African Americans, lack of someone to go with for Chinese and African Americans, dangerous/unsafe conditions for African Americans and Koreans (and Anglos or Whites, only for Atlanta sample). Distance to urban park and forests was a constraining factor for Chinese and Anglos or Whites in Atlanta and for Chinese, Koreans, Hispanics, and African Americans in Philadelphia; lack of interest among Chinese and Anglos or Whites in Atlanta and Koreans and Anglos or Whites in Philadelphia. Illness/disability and old age was a constraining factor for Anglos or Whites and African Americans; the fear of not feeling welcome for Koreans, Hispanics and African Americans in Atlanta and African Americans and Chinese in Philadelphia. The absence of others from own racial/ethnic group in urban parks and forests was a constraining factor for African Americans, Koreans, Hispanics, and Chinese in Atlanta and Koreans and African Americans in Philadelphia; pollution problems for Chinese in Atlanta and Chinese, African Americans and Anglos or Whites in Philadelphia; areas too crowded for Anglos or Whites in Atlanta and Philadelphia. Poor maintenance of urban parks and forests was a constraining factor for urban park and forest visitation for Chinese and Anglos or Whites in Atlanta, and Chinese and African Americans in Philadelphia; lack of information for Chinese in Atlanta and Chinese, Koreans, and Hispanics in Philadelphia; outdoor pest problems for Chinese and Anglos or Whites in Atlanta and Chinese, African Americans and Anglos or Whites in Philadelphia; lack of transportation for Hispanics, Koreans, and African Americans in Atlanta and African Americans in Philadelphia.
- Interest in Volunteering for Causes Related to Urban Parks and Forests: For the Atlanta sample, the percentage of respondents who were willing to plant trees in urban and community forests and parks as a volunteer (without pay), exceeded the percentage of those not willing to do so for Hispanics and African American respondents. In Philadelphia, the percentage of respondents who were willing to plant trees exceeded the percentage of those not willing to do so for Hispanics, Chinese and Korean respondents. In Atlanta, the percentage of respondents who were willing to clean-up vacant lots for planting gardens as a volunteer (without pay, exceeded the percentage of those not willing to do so for Hispanics and African American respondents. In Philadelphia, the percentage of respondents who were willing to clean-up vacant lots exceeded the percentage of those not willing to do so for Hispanics, Korean, and African American respondents. In Atlanta, the percentage of respondents who were willing to clean-up trash from urban and community forests and parks as a volunteer (without pay), exceeded the percentage of those not willing to do so for Koreans, African American, and whites respondents. In Philadelphia, the percentage of respondents who were willing to clean-up trash exceeded the percentage of those not willing to do so for Hispanics, Korean, and African American respondents. In Atlanta, the percentage of respondents who were willing to help prevent crime in urban and community forests and parks as a volunteer (without pay), exceeded the percentage of those not willing to do so for Hispanics and African American respondents. In Philadelphia, the percentage of respondents who were willing to help prevent crime exceeded the percentage of those not willing to do so for

Hispanics, Korean, and African American respondents. In Atlanta, the percentage of respondents who were willing to work with others for improving the quality of urban and community parks and forests as a volunteer (without pay), exceeded the percentage of those not willing to do so for Hispanics and African American respondents. In Philadelphia, the percentage of respondents who were willing to work with others exceeded the percentage of those not willing to do so for Hispanics, Korean, and African American respondents.

The most important findings of this study deal with the very large gap(s) between the Anglo or White population and other ethnic populations with regard to numerous variables examined. The Anglos or Whites were considerably more likely to use urban parks and forests, have access to them, value them greatly, and believe they were socioeconomically and environmentally beneficial. This disparity between the Anglos or Whites and other ethnic populations has great implications for all aspects of the management of urban parks and forests. A second major finding was the disparity among ethnic groups and between ethnic groups and the Anglo or White reference group. Generally, for example, Koreans were least likely to value or use urban parks and forests; the Chinese respondents were sometimes closer in attitude toward urban parks and forests to Anglos or Whites than to other "Asian" ethnic groups; African Americans displayed a distinct pattern of use and attitudes toward urban parks and forests, not like Anglos or Whites and not like Hispanics or "Asian" groups. A third finding of this study is that variation in urban parkand forest-related attitudes and use patterns by city was considerable. That is, while there were some central tendencies of each ethnic group in both cities, inter-city variation was considerable, perhaps indicating that it is not possible to make generalizations about the relationship between ethnicity and urban parks and forests devoid of place.



Environmental Education Framework



ENVIRONMENTAL EDUCATION FRAMEWORK

The purpose of this environmental education framework is to educate urban and community forestry practitioners regarding cross-cultural variations in park and forest visitation characteristics, based upon the findings of the study. The environmental education framework presents the key findings of the examination of the relationship between ethnicity, acculturation and outdoor recreation.

This section is divided into the following sections: (1) summary of procedures, (2) research question and hypotheses testing, (3) summary of findings, (4) discussion, (5) conclusions and implications, and (6) recommendations for future research.

Summary of Procedures

Selection of Study Populations

Household members belonging to five ethnic population subgroups - Hispanic/Latino (e.g., Cuban, Mexican, Puerto Rican, Dominican, etc.) or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, Korean or Korean American, African American, and members of Anglo or White households residing in two urban centers, Philadelphia, PA and Atlanta, GA were surveyed. Mailing addresses of the respondents were obtained from Survey Sampling, Inc., Fairfield, CT. Five hundred households each of Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, Korean or Korean American, African American, and Anglo or White origin were identified from each of the 2 cities, producing an initial sample of 6000 households (500 households X 6 population subgroups X 2 cities).

Following Dillman's (2000) Tailored Design Approach, each phase of the survey was tailor-made for the respective ethnic group being contacted. All elements of the survey (letters, postcards, questionnaires, stationery, etc.) were made available to the respondent in his or her desired language version - English or non-English. A prenotice letter was mailed out to all 6000 respondents informing them about their selection for the study and requesting their cooperation; this precontact phase was instrumental in identifying bad addresses (post-office rejects, incorrect ethnicity, and business listings) so that they could be eliminated from the next phase of the survey process.

An extremely high proportion of bad (or incorrect) addresses resulted in the loss of almost 2000 respondents, reducing the initial sample of 6000 to approximately 4088 respondents. The root of this problem was traced back to the sampling company and its failure to generate a sample with updated addresses. There is reason to believe that the final number of bad addresses is much higher than what has been recorded since 'non-deliverable' pre-notice letters with bad addresses were being returned even during the final contact phase of the survey, indicating that several such mail-out packages may have been lost or misplaced by postal authorities. The majority of bad addresses belonged to households of Hispanic, Chinese, Japanese, and Korean origin. Thus, owing to the considerable reduction of sample size due to bad addresses, the overall response rate (taking all population subgroups into account) was approximately 31%, i.e., approx. 29% and 33% for Philadelphia, PA and Atlanta, GA, respectively. Collectively, the total usable sample from both cities was 1269 respondents.

Profile of Subjects

The final sample had a fairly representative gender distribution, with 55% male and 45% female respondents. The respondents belonged to a wide range of age categories, with 11%



below 30 years of age, 25% between 30 and 39 years, 27% between 40 and 49 years, and 37% over 50 years. Respondents were heterogeneous in terms of race/ethnicity with 29% White or Anglos, 14% African Americans, 12% Hispanic/Latino or Hispanic Americans, 20% Chinese or Chinese American, 12% Japanese or Japanese American, and 12% Korean or Korean American. The United States was the place of birth for almost 52% of the respondents, with the rest (48%) born in other countries. Approximately 57% of the respondents' indicated their fathers' place of birth as being outside the United States and 56% indicated their mothers' place of birth as being outside the United States. Almost 61% of the respondents were generally well-educated with 28% holding Bachelor's degrees, 23% with Advanced College Degrees, and 10% had some Post-Graduate Education. Almost 65% of the respondents were Employed Full-Time and a large proportion (68%) reported their annual household income, before taxes, as being \$35,000 or more. A large proportion of the respondents were Christians (67%), almost 23% of the respondents reported no religious affiliation while the others identified themselves as Buddhists (7%), Jews (1%), and others, including Hindus and Moslems (2%).

The majority of respondents were highly acculturated (53%), while 24% and 23% reported medium and low levels of acculturation, respectively. The most acculturated ethnic groups, in decreasing order of acculturation level, included the Japanese or Japanese American respondents, Hispanic/Latino or Hispanic American respondents and Chinese or Chinese American respondents. The Korean or Korean American respondents were the least acculturated group. The respondents of African American and Hispanic/Latino or Hispanic American origins had a lower socioeconomic status standing compared to respondents from Chinese or Chinese American, Japanese or Japanese American, Korean or Korean American, and Anglo or White racial/ethnic backgrounds.

The respondents generally visited parks and recreational areas in groups (rather than by themselves) consisting of members who were likely to be of the same ethnic/racial origin as that of the respondent. The respondents visited parks, forests and recreational areas mainly during weekends and their visits usually lasted for more than an hour. Social activities involving the consumption of food were the most frequent engagements of the respondents during their visits to parks and forests. Most park and recreational area characteristics relating to *natural resources and wildlife, recreational facilities, park management, landscaping,* and *ethnic interaction* were rated by the respondents as being important.

Research Question and Hypotheses Testing

The research question was analyzed by testing 6 hypotheses. The first three hypotheses, Hypotheses 1, 2, and 3, were tested using analysis of covariance (significance measured at the .05 level, 2-tail significance) to determine the differences in means for recreational characteristics among the six population subgroups (Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, Korean or Korean American, African American, and Anglo or White groups), controlling for socioeconomic status. The items relating to patterns of park and forest visitation (9 items), recreational activity participation in parks and forests (13 items), and the factors for preferred characteristics of parks and forests (5 factors) were used as the dependent variables, while ethnicity (Hispanic/Latino or Hispanic American, Chinese or Chinese or Chinese American, Japanese or Japanese American, Korean or Korean American, African American, African American, and Anglo or White groups) was the independent variable and socioeconomic status was the control variable.



The last three hypotheses, Hypotheses 4, 5, and 6 were also tested using analysis of covariance (significance measured at the .05 level, 2-tail significance) to determine the differences in means for recreational characteristics among the six population subgroups (Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, Korean or Korean American, African American and Anglo or White groups) based on acculturation levels of the ethnic groups while controlling for socioeconomic status. The items relating to patterns of park and forest visitation (9 items), recreational activity participation in parks and forests (13 items), and the factors for preferred characteristics of parks and forests (5 factors) were used as the dependent variables, while ethnicity (Hispanic/Latino or Hispanic American, African American, Japanese or Japanese American, Korean or Korean American, African American, Japanese or Japanese American, Chinese or Chinese American, Japanese or Japanese American, Korean or Korean American, African American, and Anglo or White groups) combined with levels of acculturation (high, medium, and low) was the independent variable and socioeconomic status was the control variable.

Summary of Findings

Research Question 1:

Are there differences in outdoor recreation characteristics (recreation patterns, activity participation, and preferences) among the identified population subgroups (Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, Korean or Korean American, African American, and Anglo or White groups) depending upon levels of acculturation of the ethnic groups while controlling for (or adjusting for) socioeconomic status (educational level and household income)?

Overall, increasing or decreasing levels of acculturation of the ethnic respondents were not likely to change most outdoor recreation characteristics. Only 46% of the outdoor recreation characteristics of the ethnic groups changed with changes in acculturation levels when compared with the Anglo or White group while less than 38% of the outdoor recreation characteristics changed when compared with the African American group. But, analyses also indicated that acculturation-related changes did occur in some outdoor recreation characteristics of the ethnic groups. Upon comparison with the Anglo or White group, increasing or decreasing levels of acculturation produced most changes in the preferred characteristics of parks, forests and recreational areas among the ethnic groups, while changes in visitation patterns were most prevalent among the ethnic groups, when compared to the African American group. The Korean or Korean American group was the most likely to exhibit acculturation related changes in outdoor recreation characteristics when compared to both Anglo or White and African American groups. The Hispanic/Latino or Hispanic American group was the least likely to indicate acculturation related changes in outdoor recreation characteristics when compared to the Anglo or White. Both Chinese or Chinese American and Japanese or Japanese American groups were least likely to exhibit changes in characteristics when compared to the African American group.

Hypothesis 1:

There will be significant differences in patterns of park and forest visitation between the identified population subgroups (Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, Korean or Korean American, African American, and Anglo or White groups) while controlling for (or adjusting for) socioeconomic status (educational level and household income).

The ethnic respondents (excluding Japanese or Japanese Americans) were more likely to visit parks and forests in large groups, during weekends, and for longer durations than Anglo or White respondents. Overall, Anglo or White respondents more frequently visited parks and forests on their own (alone) or in groups with one or two other persons than the other population subgroups, while the African American, Hispanic/Latino or Hispanic American, Korean or Korean American, and Chinese or Chinese American respondents mostly visited parks and forests in groups of two or more people. Additionally, the groups in which the Anglo or White, African American, and Korean or Korean American respondents visited parks and forests usually consisted of others from their own racial/ethnic group. While the respondents of Anglo or White and African American origins more frequently visited parks and forests during weekdays, the other groups were less likely to do so. The duration of visit for the Anglo or White and Chinese or Chinese American respondents usually lasted for one to two hours while African American, Korean or Korean American, and Hispanic/Latino or Hispanic American respondents spent an average of two or more hours per visit to parks and forests. Among the six population subgroups, the Japanese respondents generally exhibited lower frequencies for all aspects of group composition, days of visitation, and length of visit pertaining to visits to parks and forests than the other population subgroups. Based on these results, hypothesis 1 was not rejected.

Hypothesis 2:

There will be significant differences in recreational activity participation in parks and forests between the identified population subgroups (Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, Korean or Korean American, African American, and Anglo or White groups) while controlling for (or adjusting for) socioeconomic status (educational level and household income).

The ethnic respondents (excluding Japanese or Japanese Americans) were more likely to engage in group activities and social activities during their visits to parks and forests, than Anglo or White respondents. Overall, Anglo or White and Hispanic/Latino or Hispanic American respondents more frequently participated in activities requiring fewer group members, including *solitary activities, outdoor land activities, outdoor water activities, physical exercises,* and *educational activities* than the other population subgroups. Respondents of African American, Hispanic/Latino or Hispanic American, Korean or Korean American, and Chinese or Chinese American origins more frequently participated in group activities such as *team activities, community activities* and *food-related activities* than the other population subgroups. Based on these results, hypothesis 2 was not rejected.

Hypothesis 3:

There will be significant differences in preferred characteristics of parks and forests between the identified population subgroups (Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, Korean or Korean American, African American, and Anglo or White groups) while controlling for (or adjusting for) socioeconomic status (educational level and household income).

A clear pattern was not observed with regard to ethnic respondents' preferences for characteristics related to parks and forests, when compared to Anglo or White respondents. Overall, African American and Hispanic/Latino or Hispanic American respondents were more likely to indicate the importance of park and recreational area characteristics related to *recreational facilities, park management, landscaping,* and *ethnic interaction* when they visited park and recreational areas than the other population subgroups. While respondents of Anglo or White and Hispanic/Latino or Hispanic American origins gave higher ratings for characteristics



related to *natural resources and wildlife* than other groups, those of African American and Korean or Korean American origin gave higher ratings for characteristics related to *ethnic interaction*. African American respondents also gave higher ratings for characteristics related to *recreational facilities, park management,* and *landscaping* than other groups. In general, Chinese or Chinese American respondents gave moderate ratings for all park and recreational area characteristics while Japanese or Japanese American respondents gave lower ratings compared to the other population subgroups. Thus hypothesis 3 was not rejected.

Hypothesis 4:

There will be significant differences in patterns of park and forest visitation between the identified population subgroups (Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, Korean or Korean American, African American, and Anglo or White groups) depending upon levels of acculturation of the ethnic groups while controlling for (or adjusting for) socioeconomic status (educational level and household income).

In terms of *group composition*, it may be inferred that, with increasing levels of acculturation the Hispanic/Latino or Hispanic American, Chinese or Chinese American, and Korean or Korean American groups exhibit lower frequencies for visitation to parks and forests in groups of three or more persons than the Anglo or White and African American groups. A similar pattern was observed for these three groups and the Japanese or Japanese American groups in relation to visiting parks with others from the same racial/ethnic group. Increasing levels of acculturation for the Hispanic/Latino or Hispanic American, Chinese or Chinese American, Korean or Korean American, and Japanese or Japanese American groups were associated with higher frequencies for weekdays as *days of visitation*, than Anglo or White and African American groups. Moreover, in terms of *length of visit*, increasing levels of acculturation or Hispanic American, Chinese or Chinese American or Korean American groups indicated lower frequencies for visitation to parks for a duration of more than two hours, than Anglo or White and African American groups; a reversed pattern was exhibited by the Japanese or Japanese American groups. Based on these results, hypothesis 4 was not rejected.

Hypothesis 5:

There will be significant differences in recreational activity participation in parks and forests between the identified population subgroups (Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, Korean or Korean American, African American, and Anglo or White groups) depending upon levels of acculturation of the ethnic groups while controlling for (or adjusting for) socioeconomic status (educational level and household income).

With increasing levels of acculturation, the Chinese or Chinese American and Korean or Korean American groups exhibited high frequency of participation in *solitary activities* compared to the Anglo or White and African American respondents. For the Hispanic/Latino or Hispanic American and Korean or Korean American groups, increasing levels of acculturation indicated decreasing frequency of participation in *food-related activities* and *team activities* compared to the Anglo or White and African American respondents. The Japanese or Japanese American groups exhibited a reverse pattern in terms *of food-related activities* and *team activities*. For the Hispanic/Latino or Hispanic American and Japanese or Japanese American groups, increasing levels of acculturation indicated increasing frequency of participation in *outdoor land activities* compared to the Anglo or White and African American and Japanese or Japanese American groups, increasing levels of acculturation indicated increasing frequency of participation in *outdoor land activities* compared to the Anglo or White and African American American respondents. For the Chinese or Chinese

American and Japanese or Japanese American groups, increasing levels of acculturation indicated increasing frequency of participation in *educational activities* compared to the Anglo or White and African American respondents. Based on these results, hypothesis 5 was not rejected.

Hypothesis 6.

There will be significant differences in preferred characteristics of parks and forests between the identified population subgroups (Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, Korean or Korean American, African American, and Anglo or White groups) depending upon levels of acculturation of the ethnic groups while controlling for (or adjusting for) socioeconomic status (educational level and household income).

In terms of *natural resources and wildlife* characteristics, it may be inferred that, with increasing levels of acculturation the Hispanic/Latino or Hispanic American groups gave higher preference ratings than Anglo or White respondents, but generally lower than African American respondents. A reverse pattern was observed for the Chinese or Chinese American groups in relation to their preference ratings for *natural resources and wildlife* characteristics. In terms of recreational facilities characteristics, it may be inferred that with increasing levels of acculturation the Hispanic/Latino or Hispanic American, Chinese or Chinese American, and Korean or Korean American respondents gave lower preference ratings than Anglo or White and African American respondents. In terms of *park management* characteristics, the *medium* acculturated Chinese or Chinese American and Japanese or Japanese American groups gave higher preference ratings than the *high* and *low* acculturated groups. In terms of landscaping, it may be inferred that with increasing levels of acculturation the Chinese or Chinese American groups gave lower ratings than Anglo or White respondents, but generally higher than African American respondents. A reverse pattern was observed for the Korean or Korean American and Japanese or Japanese American groups in relation to their preference ratings for landscaping characteristics. In terms of *ethnic interaction* (presence of visitors and park personnel from same ethnic background, availability of information in ethnic language, etc.) characteristics, it may be inferred that, with increasing levels of acculturation the Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, and Korean or Korean American groups indicated lower preference ratings than Anglo or White respondents, but generally higher than African American respondents. Based on these results, hypothesis 6 was not rejected.

Discussion

This environmental education framework presents the findings of the examination of inter-ethnic differences in outdoor recreation characteristics (patterns, activity participation, and preferences) across six population subgroups residing in two urban centers in the northeast and southern U.S.. Patterns of park and forest visitation, recreational activity participation in parks and forests, and preferred characteristics of parks, forests, and recreational areas among Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, and Korean or Korean American groups were compared with corresponding outdoor recreation characteristics of Anglo or White and African American groups. Results highlighted the existence of inter-ethnic variations in outdoor recreation characteristics as these groups differed significantly in terms of group composition, days of visitation, length of visitation, participation in certain types of activities, and preferences for natural resources, recreational facilities, landscaping, and ethnic interaction in relation to their visit to parks, forests, and recreational areas.

Recognizing the importance of the process of cultural change and its influence on behavioral and attitudinal variables, the concept of acculturation was introduced to differentiate among subgroups of the first four racial/ethnic groups and to examine intra-ethnic differences in outdoor recreation characteristics. Drawing from past studies on acculturation-related change (Cuellar, Arnold & Maldonado, 1995; Damji, Clement & Noels, 1996; Kang & Kim, 1998; Laroche et al., 1998; Magana et al., 1996; Stephenson, 2000; Tsai, 2000; Tropp et al., 1999; Yu & Berryman, 1996) language use was used as the acculturation indicator following the assumption that an individual's understanding of the English language facilitates interaction with the Englishdominant culture (Kang & Kim, 1998). Marin et al's (1987) Language Use sub-scale, which treats language use and preference as an important indicator of level of acculturation, was used to categorize the Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, and Korean or Korean American groups respondents into three groups - high acculturated, medium acculturated, or low acculturated. The outdoor recreation characteristics of these racial/ethnic subgroups (based on acculturation levels) were examined in juxtaposition with the Anglo or White and African American groups. Distinct differences were observed among the racial/ethnic groups in relation to visitation patterns, activity participation, and preferred recreation area characteristics, depending upon the levels of acculturation of respondents.

Inter-Ethnic Variations In Outdoor Recreation Characteristics

The primary focus of this study was the influence of ethnicity on outdoor recreation characteristics. Results indicated that African American, Hispanic/Latino or Hispanic American, Korean or Korean American, and Chinese or Chinese American respondents were more likely to visit parks and forests in groups of two or more people than Anglo or White respondents who frequently visited parks and forests on their own (alone) or in groups with one or two other persons. These results are in congruence with the literature in that members of ethnic groups tend to visit parks and recreational areas in groups that are larger than the traditional Anglo or White recreation groups. For example, Can and Chavez (1993) found that individuals of Central American origin visited parks and forests in large groups (averaging seven adults and eight children). Similarly, Pizzini. Latoni, and Rodriguez (1993) noted than Puerto Ricans visited recreational areas in larger groups of families and friends. Gobster and Delgado (1993) reported that families and organized groups were the most important social units of participation for minority visitors to urban parks. While Anglos or Whites visited parks on their own or as couples with an average group size of 1.6, African Americans, Latinos, and Asians usually visited parks with families with an average group size of 3.7, 4.4 and 5.0 respectively (Gobster & Delgado, 1993).

The findings of this study also suggest that the groups in which the African American, Korean or Korean American and Chinese or Chinese American respondents visited parks and forests usually consisted of others from their own racial/ethnic group. This pattern was also observed for the Anglo or White respondents, but was not very evident for the Hispanic/Latino or Hispanic American and Japanese or Japanese American respondents. In the case of the Korean or Korean American and Chinese or Chinese American respondents, the argument of the 'centrality' of family and friends in recreation outings (Can & Williams, 1993) may be a compelling factor for such a pattern. Similar to the findings of this study, Yu and Berryman (1996)'s study of Chinese immigrants reported that Chinese or Chinese Americans most often recreated with family friends and Chinese friends, or else preferred to be alone during their leisure time. Additionally, the strong Protestant church affiliation of the Korean or Korean American respondents may suggest that their visits to parks and forests may be part of church group visits with other churchgoers from the same racial/ethnic background. This conclusion may be drawn from findings of Can and Chavez (1993) who reported that park visitors of certain ethnic (Central American) descent frequently visited recreational areas as part of a church group. For African American respondents, the feeling of safety associated with being with other Blacks, the need to

see other Blacks recreating in parks and the importance of family recreation (Taylor, 1993) may explain the reason why they visit parks with others from the same racial/ethnic background. In the case of Anglo or White respondents, the lack of members from other racial/ethnic backgrounds within their close, social circles may explain the reason for underrepresentation of persons from other racial/ethnic backgrounds within their close, social circles may explain the recreational groups.

Although previous studies (Carr & Chavez, 1993; Can & Williams, 1993; Floyd & Gramann, 1993) have found that Hispanic/Latino or Hispanic American respondents also tend to visit parks with others from the same racial/ethnic group, this study failed to provide evidence in support of such findings. The reason for this discrepancy in findings may be geographically related, since the focus of previous studies were Hispanic/Latino or Hispanic American visitors to the forests in the southwest U.S.. The highly urbanized Hispanic/Latino or Hispanic American populations in the northeast and southern U.S. may have fewer opportunities to visit parks with others from the same racial/ethnic group since they are less well-established and networked with other ethnic members than those residing in the southwest U.S. with larger, tight knit family, kinship and friendship circles.

While the respondents of Anglo or White and African American origins frequently visited parks and forests during weekdays, the Hispanic/Latino or Hispanic American, Korean or Korean American, and Chinese or Chinese American groups were more likely to make recreational visits during weekends. The duration of visit for the Anglo or White and Chinese or Chinese American respondents usually lasted for one to two hours while African American, Korean or Korean American, and Hispanic/Latino or Hispanic American respondents spent an average of two or more hours per visit to parks and forests. Differences in the duration of visits to parks and forests undertaken by the identified population subgroups may be attributed to the socioeconomic status of the groups included in the study sample. The African American, Hispanic/Latino or Hispanic American, and Korean or Korean American groups included in this study were characterized by lower socioeconomic status, compared to the Anglo or White and Chinese or Chinese American respondents (with higher socioeconomic status). According to Robinson and Godbey (1999), upper socioeconomic status groups, generally, tend to be more busy and feel more rushed or time-pressured, compared to lower socioeconomic status groups. Therefore, the Anglo or White and Chinese or Chinese American respondents may be more inclined to visit parks and forests for shorter durations of time, than the other population subgroups. Among the ethnic groups, the higher frequency of visitation to parks and forests during weekends and for durations of two or more hours per visit may be explained in part by the types of recreational activities they engaged in during their visits. The Anglo or White and Hispanic/Latino or Hispanic Americans respondents frequently participated in activities requiring fewer group members, including *solitary activities* (being alone, reading, commuting through park, walking the dog, etc.), outdoor land activities (backpacking/hiking, pleasure driving, camping, etc.), outdoor water activities (boating/canoeing, fishing, swimming, etc.), physical exercises (running/jogging/walking, bicycling, rollerblading/skateboarding, etc.), and educational activities (animal/birdwatching, nature study, etc.). Other studies have also documented outdoor land activities (especially camping and hiking) as being an important part of Hispanics/Latinos or Hispanic Americans visits to parks and forests (Chavez, Larson & Winter, 1995; Hospodarsky & Lee, 1995; Taylor & Winter, 1995). In congruence with the findings of this study, *outdoor* water activities such as playing, wading, splashing, and 'stream walking,' alongside creeks were also found to be very popular among Hispanic visitors during their trips to parks and forests (Carr & Chavez, 1993). Similarly, Gobster and Delgado (1993) report that Hispanics/Latinos or Hispanic Americans are relatively more active in swimming than Asians and African Americans. The importance of water-based activities among Hispanic/Latino or Hispanic Americans may also be attributed to the fact that these respondents (and/or their family members) emigrated from

countries with warmer climates, where streams, creeks, and lakes are oftentimes used as places for cooling-off on warm days.

Respondents of African American, Hispanic/Latino or Hispanic American, Korean or Korean American, and Chinese or Chinese American origins frequently participated in grouporiented, weekend activities such as *social activities* (playing with children, talking with friends, playing board games, etc.), team activities (soccer, basketball, softball/baseball, Frisbee, etc.), community activities (festivals, parties, etc.) and food-related activities (picnicking, eating, barbecuing, etc.), usually requiring longer durations of time. Taylor (1993) noted that picnicking, recreating with children, and playing games such as football, soccer, and baseball were very common among African Americans during their visits to parks. Among Hispanics/Latinos or Hispanic Americans, a higher incidence of group or team sports (Hospodarsky & Lee, 1995) and picnicking and visiting with others (Chavez, Larson & Winter, 1995) have been evidenced by past studies. In Taylor and Winter's (1995) study, Asian visitors were most likely to indicate get-togethers with family and friends' as the reason for their visit to parks and forests. Zhang and Gobster's (1998) study of Chicago's Chinatown residents found that 'socially-relaxing' (including people-watching, sitting, and chatting) along with team sports such as basketball, baseball, volleyball, and tennis were among the top outdoor activities of Chinese or Chinese American respondents. Hutchison (1993) found team sports (such as soccer and volleyball) and community events and festivals to be major outdoor activities among the Hmong population residing in Green Bay, Minnesota. The prevalence of social activities, team activities, community activities and food-related activities during the recreational visits of the ethnic groups may be attributed to the cultural importance of 'celebrations and social events' to these groups (Carr & Williams, 1993) as well as the central focus of picnicking, playing and relaxing with family members (especially with children) during such visits (Carr & Chavez, 1993).

Park and recreational area characteristics related to *natural resources and wildlife*, *recreational facilities*, *park management*, *landscaping*, and *ethnic interaction* were considered as being important by all population subgroups when they visited parks and forests. In general, Chinese or Chinese American respondents gave moderate importance ratings for all park and recreational area characteristics while Japanese or Japanese American respondents gave low ratings. Specifically, respondents of Anglo or White and Hispanic/Latino or Hispanic American origins gave high ratings for *natural resources and wildlife* characteristics such as the presence of streams, lakes, rivers, animals, birds and fish in parks and forests. Chavez, Larson, and Winter's (1995) study indicated a high desire among Hispanic visitors for creeks, trees and other natural resources (rocks/boulders). The high preference ratings for natural resource characteristics among the Hispanic/Latino or Hispanic American population may be attributed to the importance of scenery and wildlife in enhancing their experience during outdoor activities such as hiking and camping.

Respondents of African American and Korean or Korean American origin gave high ratings for characteristics related to *ethnic interaction*, including the presence of other visitors from the same racial/ethnic group, availability of information in racial/ethnic language, and staff who know the cultures and customs of the visitors. In the case of African American respondents, higher preference ratings for characteristics related to *ethnic interaction* may be explained by their desire to visit parks and forests frequented by other Black recreationists (Taylor, 1993) and a heightened need for the presence of park personnel to prevent incidences of racial antagonisms, discrimination and violence from White or Anglo visitors targeted against Blacks (Blahna & Black, 1993; Johnson et al., 1998). Characteristics related to *ethnic interaction* may be important to the Korean or Korean American respondents due to their desire to be in recreational settings with other Korean or Korean American visitors so that they do not feel out of place and the need for information in the Korean language due to lack of English proficiency. Additionally, the

availability of staff who are familiar with the customs, traditions, and other cultural characteristics of Koreans may, to a lesser extent, help Korean or Korean American respondents to overcome language and cultural barriers during their visits to parks and forests, thus making this an important and desired aspect of their visit.

The African American respondents also gave higher preference ratings for characteristics related to recreational facilities (picnic areas, family/group recreational areas, outdoor cooking areas, game fields/courts, drinking water/water fountains, recreational facilities and programs, restroom/toilet facilities), park management (recycle bins, trash containers, accessibility for the disabled, proper signs and instruction boards, litter-free facilities, parking facilities), and *landscaping* (visibility through trees, open forests with visibility through trees, mowed grass, paved paths, shade trees). Similar to the findings of this study, Taylor (1993) also found a heightened preference among African Americans for well-equipped and well-maintained parks offering a variety of recreational facilities and opportunities, especially for team sports and children's games, as well as the availability of scenic landscapes with walkways for people to stroll. A high preference for 'open, spacious, smooth, ground-textured parks with paved paths, picnic shelters, benches, and park equipment' among African Americans was also reported in Talbot and Kaplan's (1993) study. African Americans often reside in low socioeconomic status urban areas, with deteriorated parks and recreational facilities. The higher importance ratings indicated by the African American respondents for park and recreational area characteristics may be attributed to the heightened concern among African Americans residing in urban areas, regarding the need for safe, well-maintained parks, with adequate recreational facilities and equipment, in and around their residential areas.

The findings of this study are highly consistent with existing literature. Results show that inter-ethnic differences in outdoor recreation characteristics exist, in terms of group composition, days of visitation, length of visitation, participation in certain types of activities, and preferences for natural resources, recreational facilities, park management, landscaping, and ethnic interaction in relation to visit to parks, forests, and recreational areas. Overall, the ethnic/racial origin of the respondent played an important role in influencing visitation patterns, recreational activity participation, park use as well as preferences for certain park and forest features.

Intra-Ethnic Variations in Outdoor Recreation Characteristics

Examination of acculturation levels within ethnic groups and its influence on outdoor recreation characteristics was another important focal point of this study. Acculturation can be described as a process during which immigrants incorporate the new, non-traditional values, language, and patterns of behavior of the dominant culture of the host community into their personal culture (Miyares, 1997). The process of acculturation is a resocialization process whereby immigrants and their descendants learn to function within the norms of the new cultural environment (Taft, 1985; 1986). The acculturation process involves changes along several dimensions including identification, social skills, attitudes, values, and behavioral norms (Rosenthal & Feldman, 1990) that develop through involvement and interaction within the new cultural system (Tropp et al., 1999). Language use and preference was used as the measure or indicator of level of acculturation in this study.

Previous ethnic recreation studies have predominantly focused on the recreation characteristics of Hispanics/Latinos or Hispanic Americans, depending on levels of acculturation, in comparison with Anglo or White groups (Carr & Williams, 1993; Floyd & Gramann, 1993; Gramann, Floyd & Saenz, 1993; Shaull & Gramann, 1998). Others (Yu & Berryman, 1996; Tsai, 2000) have examined the leisure and recreation characteristics of Chinese populations based on their acculturation levels (without reference to comparison groups). In this study, the outdoor recreation characteristics of Hispanic/Latino or Hispanic American, Chinese or Chinese

American, Korean or Korean American, and Japanese or Japanese American respondents, based on their acculturation levels, were compared to those of Anglo or White and African American respondents.

Results indicated that increasing or decreasing levels of acculturation were not likely to change most outdoor recreation characteristics of the identified ethnic groups. With changes in acculturation levels, only 46% and 38% of the outdoor recreation characteristics of the ethnic groups changed when compared with the Anglo or White group and African American group, respectively. But, analyses also indicated that some outdoor recreation characteristics of the ethnic groups were likely to be influenced by levels of acculturation. Upon comparison with the Anglo or White group, increasing or decreasing levels of acculturation produced most changes in the preferred characteristics of parks, forests and recreational areas among the ethnic groups followed by participation in onsite activities. Acculturation-related changes in visitation patterns and onsite activity participation were most prevalent among the ethnic groups, when compared to the African American group. When compared to both Anglo or White and African American groups, the Korean or Korean American group was the most likely to exhibit acculturation related changes in outdoor recreation characteristics and the Hispanic/Latino or Hispanic American group was the least likely to indicate such changes. When compared to the African American group, both Chinese or Chinese American and Japanese or Japanese American groups were least likely to exhibit acculturation-related changes in outdoor recreation characteristics.

In terms of *group composition*, results indicated that with increasing levels of acculturation the Hispanic/Latino or Hispanic American, Chinese or Chinese American, and Korean or Korean American groups exhibit lower frequencies for visitation to parks and forests in groups of three or more persons than the Anglo or White and African American groups. A similar pattern was observed for these three groups and the Japanese or Japanese American groups in relation to visiting parks with others from the same racial/ethnic group. The high propensity of the ethnic groups with lower acculturation levels to visit parks, forests and recreational areas in large groups consisting of members from the same ethnic/racial groups may be attributed to the collectivistic orientation of these cultural groups and the profound emphasis given to a closely integrated social framework. While collectivist cultures stress the importance of the 'rights and needs of the group,' individualistic cultures emphasize 'individual achievement and rights of the individual' (Rosenthal & Feldman, 1990). Thus, visitation to parks and forests in larger groups with members from the same ethnic/racial background may be an indication of the significance of 'group efforts' among the lower acculturated groups. The higher acculturated groups may have somewhat weaker collectivistic orientations (coupled with varying degrees of individualistic orientations) compared to the lower acculturated groups, thus exhibiting a lower propensity to visit parks and forests in groups with members from the same ethnic/racial background. While the higher acculturated groups are more likely to form social ties and friendships outside their own ethnic group (Floyd & Gramann, 1993), lower acculturated groups generally prefer to maintain a 'network of relatives and friends of the same ethnicity' (Padilla, 1980). However, both Anglo or White and African American groups indicated higher frequencies for visiting parks with others from the same racial/ethnic group, than the Hispanic/Latino or Hispanic American, Chinese or Chinese American, and Korean or Korean American groups regardless of their respective levels of acculturation.

Increasing levels of acculturation for the Hispanic/Latino or Hispanic American, Chinese or Chinese American, Korean or Korean American, and Japanese or Japanese American groups also indicated higher frequencies for weekdays as *days of visitation*, than Anglo or White and African American groups. Moreover, in terms of *length of visit*, increasing levels of acculturation for the Hispanic/Latino or Hispanic American, Chinese or Chinese American, and Korean or Korean American groups indicated lower frequencies for visitation to parks for a duration of

more than two hours, than Anglo or White and African American groups; a reversed pattern was exhibited by the Japanese or Japanese American groups. With increasing levels of acculturation, the Chinese or Chinese American and Korean or Korean American groups exhibited high frequency of participation in solitary activities compared to the Anglo or White and African American respondents. The importance of family life (and family cohesion) to the traditional Chinese and Korean cultures and the heightened dependence on the family in these cultures (Rosenthal & Feldman, 1990) may cause an aversion of solitary activities within these cultures, especially among lower acculturated groups.

For the Hispanic/Latino or Hispanic American and Korean or Korean American groups, increasing levels of acculturation indicated decreasing frequency of participation in food-related activities compared to the Anglo or White and African American respondents. The symbolic significance of food as a means of reinforcing ethnic identity (Gans, 1992) in traditional Hispanic and Korean cultures, especially during ethnic get-togethers, may explain the high incidence of food-related activities during visits by these groups to parks, forests, and recreational areas. Additionally, since the Hispanic/Latino or Hispanic American group included in this study was characterized by a low socioeconomic status, the respondents belonging to this group are less likely to have backyards for private picnics and barbecues. Hence, these respondents would be more likely to use outdoor cooking facilities (such as picnic areas and barbecue grills), offered in parks and forests, for food-related activities. Participation in team activities was also higher among the lower acculturated Hispanic/Latino or Hispanic American and Korean or Korean American groups compared to the Anglo or White and African American respondents. This pattern might suggest the possibility of using team activities as part of the ethnic identify reinforcement process among the Hispanic/Latino or Hispanic American and Korean or Korean American groups, whereby closer social networks (or ties) are established between ethnic members through group (recreational) activities (Shaull & Gramann, 1998). The Japanese or Japanese American groups exhibited a reverse pattern in terms of food-related activities and team activities.

For the Hispanic/Latino or Hispanic American and Japanese or Japanese American groups, increasing levels of acculturation indicated increasing frequency of participation in outdoor land activities compared to the Anglo or White and African American respondents. Similar to the findings of this study, Floyd and Gramann (1993) also observed high levels of participation in consumptive forms of recreation (fishing, hunting, camping, ORV/ATV driving) among Hispanic Americans, in general. For the Chinese or Chinese American and Japanese or Japanese American groups, increasing levels of acculturation indicated inecreasing frequency of participation in educational activities compared to the Anglo or White and African American respondents. Yu and Berryman (1996) report that the activities of Chinese recreationists' can be characterized as being 'less organized, less expensive, less physically active, less skill oriented, and more easily accessible' (p. 267). The relatively high degree of organization and skill levels required for educational activities (animal/birdwatching, nature study, etc.) in parks and forests might deter the low acculturated Chinese or Chinese Americans from engaging in activities of such nature.

In terms of *natural resources and wildlife* characteristics, results indicated that with increasing levels of acculturation the Hispanic/Latino or Hispanic American groups gave higher preference ratings than Anglo or White respondents, but generally lower than African American respondents. Considering nature as the central theme of natural resource based characteristics, this result was contrary to the findings of Shaull and Gramann (1998) who reported higher importance ratings among less-acculturated Hispanic Americans for nature-related benefits of park and forest visitation. However, the results were in congruence with Gramann, Floyd, and Saenz's (1993) study which reported that least acculturated Mexican Americans rated natural



resource characteristics ('being in a scenic area') as less important than did the other acculturated Mexican groups as well as the Anglo or White group. Similarly, Heywood and Engelke's (1995) study found that environmental or natural resource conditions did not greatly influence recreation site selection among Hispanic/Latino or Hispanic American park and forest visitors in general. A reverse pattern was observed for the Chinese or Chinese American groups in relation to their preference ratings for *natural resources and wildlife* characteristics. The higher preference for natural resources and wildlife among the low acculturated Chinese or Chinese American group may be attributed to the traditional views of the Chinese culture, which regards 'a sound natural environment as an extension of a decent human life' (Zhang & Gobster, 1998, p. 348).

In terms of *recreational facilities* characteristics, it may be inferred that with increasing levels of acculturation the Hispanic/Latino or Hispanic American, Chinese or Chinese American, and Korean or Korean American respondents gave lower preference ratings than Anglo or White and African American respondents. Higher preference ratings for characteristics related to *recreational facilities* among low acculturated groups indicates greater support from these groups for developed sites and facilities within parks and forests. In terms of *park management* characteristics, the *medium* acculturated Chinese or Chinese American and Japanese or Japanese American groups gave higher preference ratings than the *high* and *low* acculturated groups. In terms of landscaping, it may be inferred that with increasing levels of acculturation the Chinese or Chinese American groups gave lower ratings than Anglo or White respondents, but generally higher than African American respondents. A reverse pattern was observed for the Korean or Korean American and Japanese or Japanese American groups gave lower ratings than groups in relation to their preference ratings for *landscaping* characteristics.

In terms of *ethnic interaction* characteristics, it may be inferred that with increasing levels of acculturation the Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, and Korean or Korean American groups indicated lower preference ratings than Anglo or White respondents, but generally higher than African American respondents. Carr and Williams' (1993) study of forest recreation site visitors of Hispanic origin indicated that 'the most homogeneous sites (from an ancestral group composition standpoint) had the highest proportion of immigrant individuals, the lowest proportion of second generation individuals, and the lowest acculturation levels' (p. 32). Carr and Williams' (1993) findings provide support for the results of this study, indicating high preference ratings for ethnic interaction among low acculturated groups. These findings, taken together, highlight the importance given by low acculturated groups toward recreating in 'areas where other recreationists have compatible social definitions' (Carr & Williams, 1993, p. 33).

The results of this study indicate that acculturation-based intra-ethnic differences in outdoor recreation characteristics exist, in terms of group composition, days of visitation, length of visitation, participation in certain types of activities, and preferences for natural resources, recreational facilities, park management, landscaping, and ethnic interaction in relation to visit to parks, forests, and recreational areas. Overall, the acculturation level of the respondent played an important role in influencing visitation patterns, recreational activity participation, park use as well as preferences for certain park and forest features.

This study examined variations in outdoor recreation characteristics across six population subgroups residing in two U.S. cities. Although previous studies have investigated ethnic differences in recreation use and activity patterns (Carr & Williams, 1993; Floyd & Gramann, 1993; Gobster & Delgado, 1993; Shaull & Gramann, 1998; Talbot & Kaplan, 1993; Taylor, 1993) this study was the first of its kind owing to two reasons. First, this study systematically examined inter-ethnic differences in outdoor recreation characteristics among Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, and Korean or Korean

American groups in comparison with corresponding characteristics of Anglo or White and African American groups. Second, this study attempted to expand existing ethnic recreation research by investigating intra-ethnic differences in outdoor recreation characteristics among Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, and Korean or Korean American groups (or subgroups) by incorporating the acculturation component to compare these groups, based on their acculturation levels, with the Anglo or White and African American groups.

Results indicated that the Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, and Korean or Korean American groups were similar to Anglo or White and African American groups with respect to certain outdoor recreation characteristics. Moreover, several differences in outdoor recreation characteristics were also observed between the population subgroups. An examination of linguistic acculturation-based differences (based on individual's language-use on a daily basis — ethnic language vs. English) in recreation patterns, activity participation and preferences for certain park features within the Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, and Korean or Korean American groups (or subgroups) also revealed both similarities and dissimilarities between the (*high, medium* and *low*) acculturated ethnic groups and the Anglo or White and African American groups.

Collectively, these results suggest that although the Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, and Korean or Korean American groups may differ from the Anglo or White and African groups in terms of outdoor recreation characteristics, several similarities may also become apparent upon dissecting these ethnic groups on the basis of levels of acculturation, or vice versa. It may be concluded that members of *respective ethnic* groups *need* not be similar nor *different* from Anglos or Whites and/or African Americans with respect to outdoor recreation characteristics (Floyd & Gramann, 1998) such as recreation patterns, activity participation and preferences for certain park features.

Conclusions and Implications

As the ethnic make-up of the United States continues to change, especially in cities and towns, it becomes important to understand what implications ethnic and racial diversity in urban areas have for the management of urban parks and forests. Knowledge regarding the ways in which ethnic groups recreate in parks and forests is vital for providing necessary resources and facilities that meet the needs of urban populations with sizeable representations from ethnic and racial groups. Prior to the provision of outdoor recreational amenities for satisfying the needs of ethnic groups, an understanding of the recreational characteristics, interests and preferences of ethnic/racial groups is required. Social science researchers have previously examined differences in outdoor recreation characteristics of ethnic groups in comparison with Whites or Anglos. Prior studies have largely relied on general population samples, usually consisting of a larger proportion of White than non-White respondents. Although these studies have, to some extent, enabled leisure and recreation researchers to understand the recreation participation rates and participation patterns of specific ethnic minority groups, there exists a lack of knowledge regarding differences in outdoor recreation patterns, activity participation, and preferences for certain park and forests features both among and within a wider range of ethnic groups.

Since 'ethnicity' and 'marginality' theories serve as inadequate vantage points for addressing differences in racial and ethnic leisure patterns, additional theoretical explanations are required to gain a clearer understanding of their actual causes (Floyd & Gramann, 1993). Further research examining ethnic differences in outdoor recreation characteristics, involving a wide

range of ethnic groups, is required to alleviate the burden on recreation resource managers attempting to better understand their clientele. What implications does cultural and ethnic diversity have for recreation resource management in urban areas? Are there differences within ethnic groups in the ways they use parks and forests for recreational purposes? The argument is that, due to the continuous process of acculturation taking place among the individuals of any given ethnic group, a person's level of acculturation will, to some degree, influence his/her recreational preferences, behavior and participation patterns.

Although previous studies have investigated ethnic differences in recreation use and activity patterns (Carr & Williams, 1993; Floyd & Gramann, 1993; Gobster & Delgado, 1993; Shaull & Gramann, 1998; Talbot & Kaplan, 1993; Taylor, 1993) this study was the first of its kind owing to two specific reasons. First, this study systematically examined inter-ethnic differences in outdoor recreation characteristics among Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, and Korean or Korean American groups in comparison with corresponding characteristics of Anglo or White and African American groups. Second, this study attempted to expand existing ethnic recreation research by investigating intra-ethnic differences in outdoor recreation characteristics among Hispanic/Latino or Hispanic/Latino or Hispanic American, Chinese or Chinese or Chinese or Chinese American, Japanese or Japanese American groups. Second, this study attempted to expand existing ethnic recreation research by investigating intra-ethnic differences in outdoor recreation characteristics among Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, and Korean or Korean American groups (or subgroups) by incorporating the acculturation component to compare these groups, based on their acculturation levels, with the Anglo or White and African American groups.

The results of this study highlighted several similarities and differences in outdoor recreation characteristics between the population subgroups. African American, Hispanic/Latino or Hispanic American, Korean or Korean American, and Chinese or Chinese American respondents indicated higher propensities to visit parks and forests in larger groups consisting of members (usually with family and friends) from the same racial/ethnic group, than Anglos or Whites. These findings are in congruence with previous studies (Carr & Chavez, 1993; Gobster & Delgado, 1993; Pizzini, Latoni & Rodriguez, 1993) that reported greater tendencies among ethnic individuals to recreate in groups that are larger than the traditional Anglo or White recreation groups. The study results also revealed that most of these visits also took place during weekends and lasted for two or more hours. With respect to these findings, recreation resource managers of parks and forests serving ethnic populations should take measures to accommodate larger groups for long durations of time, especially during weekends. This may require the expansion of existing recreational facilities (e.g., pavilions, picnic areas, etc.) and services (e.g., extended timings for security personnel, concession stands, etc.). Increased visitation by large groups for extended durations of time could result in overuse of certain sites, accompanied by the deterioration of the recreational quality of such areas. In order to curb such impacts, urban parks and forests receiving use from ethnic groups would need to adopt 'crowd control' measures, especially during weekends, to regulate group size and activities (e.g., group and activity permits, restricted areas, etc.).

Similar to past studies (Chavez, Larson & Winter, 1995; Hospodarsky & Lee, 1995; Taylor & Winter, 1995), it was observed that outdoor land (backpacking/hiking, pleasure driving, camping) and outdoor water (boating/canoeing, fishing, swimming) activities were very popular among Hispanic/Latino or Hispanic Americans. The Hispanic/Latino or Hispanic American group also gave high ratings for *natural resources and wildlife* characteristics such as the presence of streams, lakes, rivers, animals, birds and fish in parks and forests. Parks and forests catering to the recreational needs of Hispanic/Latino or Hispanic Americans should focus their efforts on providing more opportunities for hiking and camping especially alongside water bodies such as lakes and streams. This would including the setting up of campsites and hiking trails as well as manmade ponds, lakes and fountains for meeting Hispanic visitors' outdoor recreation needs.

There was a higher incidence of group-oriented activities such as *social activities* (playing with children, talking with friends, playing board games, etc.), *team activities* (soccer, basketball, softball/baseball, Frisbee, etc.), *community activities* (festivals, parties, etc.) and *food-related activities* (picnicking, eating, barbecuing, etc.) among the ethnic groups compared to the Anglos or Whites. Other studies (Taylor, 1993; Taylor & Winter, 1995, Zhang & Gobster, 1998) also reported similar findings. Recreation resource managers in urban areas should consider the importance of social events and celebrations among groups of ethnic origin and the central focus of involving picnicking, playing and relaxing with family members (especially with children) among such groups. The high prevalence of group-oriented, social activities among ethnic groups would suggest the need for larger picnic areas (with more tables and barbecue pits), more game fields/courts for team activities, larger play areas for children, and roofed areas (pavilions and domes) for festivals and other social get-togethers, in parks and forests that receive use from ethnic groups.

Preference ratings for ethnic interaction (presence of others from same ethnic group, availability of staff who are familiar with the ethnic/racial group's customs and practices, and availability of information in ethnic language) during visits were very high among all ethnic groups, but the African American and Korean or Korean American respondents gave the highest ratings for characteristics related to *ethnic interaction*. These findings call for a greater level of cultural sensitivity from park and forest staff members towards members of all ethnic groups, especially for the African Americans and Koreans or Korean Americans. Parks and forests could consider an increased representation of African Americans among their on-site staff in order to increase cultural sensitivity toward African American visitors. Parks and forests that attract Korean or Korean American visitors should consider appropriate measures for disseminating information in Korean through brochures, pamphlets, and interpretation signs/boards as well as having on-site staff members who can converse in Korean.

The need for appropriate landscaping (visibility through trees, open forests with visibility through trees, mowed grass, paved paths, shade trees) were also given high preference ratings by all ethnic groups, in general. Urban parks that are frequented by African American visitors would need to consider their landscaping preferences for the continued patronage of this group. Managers of parks and forests located in areas with high proportions of African American residents would have to undertake concentrated efforts to keep these areas manicured and aesthetically pleasing for African American visitors.

The results of this study indicated that increasing or decreasing level of acculturation among the identified ethnic groups produced change in some outdoor recreation characteristics of the ethnic groups, in reference to Anglo or White and African American groups, but not in the majority of cases. With reference to the White or Anglo group, preferred characteristics of the identified ethnic groups regarding parks, forests, and recreational areas were most likely to be influenced by acculturation levels whereas the ethnic groups' visitation patterns were most likely to be influenced by acculturation levels, upon comparison with the African American respondents. Based on these results, it may be inferred that, although there are differences in the outdoor recreation characteristics among ethnic groups, with reference to non-ethnic groups, increasing or decreasing levels of acculturation of most ethnic visitors are not likely to produce many changes in their recreation characteristics.

In general, the low acculturated individuals with the ethnic groups were likely to visit parks and forests in larger groups with members from same racial/ethnic background. Visits by

these groups to parks and forests mostly took place during weekends and lasted for long durations of time. Within the Hispanic/Latino or Hispanic American and Korean or Korean American groups, low acculturated individuals participated in food-related activities and team activities more frequently compared to the Anglo or White and African American respondents. While the low acculturated Hispanics/Latinos or Hispanic Americans gave lower preference ratings for natural resources and wildlife than Anglo or White respondents, the low acculturated Chinese or Chinese American group gave higher preference ratings for natural resources and wildlife. Higher preference ratings for characteristics related to *recreational facilities* and ethnic interaction were indicated by almost all low acculturated groups. These findings indicate greater preference among these groups for developed sites and facilities, that support recreational activities and social events involving large groups, within parks and forests in addition to the existing need among such groups to recreate in areas where they would easily (culturally) blend in with other recreationists.

While the policy and practice implications of different acculturation levels among individuals within ethnic groups and its' influence on their outdoor recreation characteristics are not easily generalizable, it is important to understand that variations do exist within ethnic groups and the level of linguistic acculturation, in some cases, can influence an ethnic individual's participation in recreational activities and preferences for certain park features. The results of this study indicated that the level of acculturation of an ethnic individual did not have a profound impact on his/her outdoor recreation characteristics, in most cases. This finding suggests that managers of urban parks and forests need not be overly concerned about acculturation-based differences within a given ethnic group, with respect to outdoor recreation characteristics, while managing outdoor recreation resources. Although certain components of recreation resource management, such as site design, maintenance, and staffing, could be slightly impacted depending upon levels of acculturation of ethnic recreationists, overall, management guidelines, for an urban park or forest, are more likely to be determined by the ethnic break-up of its visitors, rather than the recreationists' levels of acculturation. As Can and Williams (1993) have pointed out, ethnic groups visiting parks and forests cannot be treated as individual, cultural monoliths; rather, varying degrees of intra-group diversity is highly prevalent among ethnic groups. While it would be impractical to cater to the recreational needs of all individuals of an ethnic group, management systems such as the Recreation Opportunity Spectrum and Benefits Based Management could be modified or adapted to include ethnic preferences in order to provide a range of recreation opportunities to both individual as well as group recreationists, depending on the experience(s) sought by the ethnic group (Shaull & Gramann, 1998).

Recommendations for Future Research

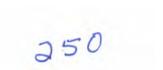
This study is one of the few studies examining the influence of respondents' acculturation levels on their park and forest visitation patterns, recreational activity participation, park use as well as preferences for certain park and forest features. However, it was the only study to examine linguistic acculturation-based differences in outdoor recreation characteristics within the Hispanic/Latino or Hispanic American, Chinese or Chinese American, Japanese or Japanese American, and Korean or Korean American groups (or subgroups), in comparison with the corresponding characteristics of Anglos or Whites and African Americans. Examination of an individual's linguistic acculturation is based on his/her language-use on a daily basis — ethnic language vs. English. Hence, future research is needed to verify the applicability of linguistic acculturation in explaining differences in outdoor recreation characteristics within ethnic groups. Perhaps, a more complex measure of acculturation levels consolidating the respondent's length of residence in the United States and generational status along with his/her language use and preference may be employed as an indicator of the ethnic individual's level of acculturation.



In this study, indices were developed to measure respondents' preferences for certain park and forests features such as natural resources and wildlife, recreational facilities, park management, landscaping, and ethnic interaction. Although these indices exhibited good reliability in terms of item constructs, future research should include more preference characteristics (or items) in order to develop additional indices (or constructs) while ensuring that reliability is not compromised. Additionally, ethnic differences in single item indicators of activity participation such as solitary activities, social activities, food-related activities, team activities, outdoor land activities, outdoor water activities, physical exercises, experiential activities, subsistence activities, community activities, educational activities, gardening, etc., should also be further explored by dissecting these indicators into individual activities, thereby avoiding the usage of umbrella terms that combine several activities of similar nature and character. A break-up of these activity groups into individual activities would allow for a more rigorous and detailed analysis of ethnic differences in participation levels for each activity, thereby enabling the researcher to determine specific ethnic differences in participation levels within each activity group.

Assuming that socioeconomic differences exists among population subgroups, socioeconomic status was used as the control variable in this study in order to examine the influence of ethnicity or subcultural effects on outdoor recreation characteristics while holding the respondent's socioeconomic status constant. The socio economic status variable was a consolidated index that included the respondent's income and educational level. Additional control variables such as the individual's employment status, age, and number of (young) children should be included in future studies in order to examine ethnic differences in recreation characteristics (Gramann, Floyd & Saenz, 1993). Moreover, future research should also consider the influence of household composition and length of residence at current address in accounting for both inter- and intra-ethnic differences. Although controlling for socioeconomic status is seldom provided (Floyd, 1998), as was the case in this study. Prior to controlling for socioeconomic status, future research should explore the factors responsible for socioeconomic differences between ethnic groups and the ways in which they condition leisure choices and constraints (Floyd, 1998, pp. 9-10).

Does the cultural and ethnic background of an individual influence his/her outdoor recreation participation patterns and preferences for certain park and forest features? What role does the level of acculturation of an ethnic individual play in shaping his/her outdoor recreation characteristics? Future social research should continue to probe interdisciplinary theories for answers to these fundamental questions. Owing to the existing inadequacy of explanations for ethnic differences in outdoor recreation patterns from broader sociopsychological perspectives, further theory-based research endeavors need to be undertaken to unravel reasons for such ethnic differences and/or similarities (Floyd, 1998; Johnson et al., 1997). Thus, the influence of cultural values and levels of acculturation on ethnic individuals' outdoor recreation patterns and preferences warrants in-depth examination in future research.



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