

A Synthesis of Perceptions About Physical Activity Among Older African American and American Indian Women

Karla A. Henderson, PhD, and Barbara E. Ainsworth, PhD, MPH

Limited leisure research exists on minorities^{1,2} and particularly women of color.^{3,4} Researchers in leisure studies^{1,5-8} and in physical, activity, and exercise areas⁹⁻¹² have begun to examine activity participation among ethnic groups more extensively than in the past. Yet, researchers and practitioners are only beginning to uncover the complexities and the sociocultural contexts that may affect involvement in, attitudes toward, and commitment to active lifestyles.

Research from the Centers for Disease Control and Prevention shows that fewer than 30% of minority women in the United States obtain moderate activity in amounts sufficient to derive health benefits.¹³ More than half of all women lead sedentary lives, and among women of color this percentage is even higher. Being at risk for premature death, some chronic diseases, and obesity is associated with physical inactivity. Therefore, it is important to understand physical activity patterns and how they occur so that effective interventions might be devised and encouraged.¹⁴ If behavioral changes, health improvement, and an enhanced quality of life are to be achieved, researchers must understand how individuals perceive physical activities.

Because of the dearth of information about women of color and their health needs, the Centers for Disease Control and Prevention funded several projects in the 1990s to examine minority racial groups and their physical activity involvement. One project was initiated through the Prevention Research Center of the University of South Carolina School of Public Health. The Cross-Cultural Activity Participation Study (CAPS) was designed to measure the physical activity habits in a sample of African American and American Indian women and to develop and validate a set of surveys to measure moderate physical activity. Part of the study was focused on measuring physical activity patterns through surveys, daily physical activity records, and mechan-

Objectives. In this review of qualitative data from the Cross-Cultural Activity Participation Study (CAPS), we synthesize the major findings of studies designed to identify minority women's perceptions of physical activity.

Methods. We interviewed 30 African American and 26 American Indian women with constant comparison techniques. We analyzed the data with a coding system developed from the data.

Results. The women led active, busy lives. Most perceived physical activity as being good for them, identified constraints to time and space for physical activity, and wanted social support for physical activity. Sociocultural issues also were related to physical activity.

Conclusions. Both personal and cultural values influenced the women's physical activity behaviors. (*Am J Public Health.* 2003;93:313-317)

cal devices (e.g., Caltrac™ energy expenditure measurement equipment, pedometers).¹⁵ In addition, 56 women participated in in-depth qualitative interviews. This qualitative component was included as part of the larger study to obtain additional information about the psychosocial context and sociocultural meanings of physical activity and leisure.¹⁶

The purpose of this article is to retrospectively summarize and synthesize the broad findings discussed in more detail in other publications¹⁶⁻²¹ related to the CAPS qualitative data. As researchers, we were not necessarily concerned with drawing conclusions, but rather with discovering perspectives that could shed light on the physical activity attitudes, behaviors, and experiences of these women. The data collection, analyses, and reporting of the qualitative findings, as well as the development and validation of quantitative measurement instruments, raised methodological issues and theoretical concerns for future research.

METHODS

One challenge in examining how race, ethnicity, and culture relate to physical activity behavior was that no consistent definitions existed for the variables of race, ethnicity, culture, socioculture, and minority. We defined race as a group of people who share certain

physical characteristics. Ethnicity referred to a group's customs, language, or social views related to the country of origin. Culture and socioculture referred to the customary beliefs and social forms of a racial, religious, or social group. The sociocultural environment of a group also related to why some activities were unique to the group and some might be considered taboo. Evidence indicates that African Americans and American Indians have a higher incidence of cardiovascular disease than European Americans, and no biological link has been found to explain the data.¹³ Therefore, race and ethnicity, with their sociocultural implications, seem to be plausible indicators of whether and how an individual engages in physical activity.

We were also aware of problems with the language and definitions concerning physical activity issues. Physical activity was defined broadly. Although the primary focus of the CAPS project was physical activity that might occur in all aspects of daily life, we were also interested in the relationship between perception of free time and involvement in activity. Exercise was defined as a subset of physical activity consisting of planned, structured, repetitive bodily movement done to improve or maintain 1 or more components of physical fitness. We wanted participants to acknowledge physical activity in its broadest definition, including any type of movement

TABLE 1—Demographics of Women Interviewed, by Race

	African American (n = 30)	American Indian (n = 26)
Mean age in years (SD)	57 (11)	56 (12)
Age group, %		
40–49 y	30	33
50–59 y	27	33
60–69 y	27	20
70–79 y	17	3
80–89 y	...	10
Marital status, %		
Married	50	47
Widowed	27	20
Single/divorced	20	33
Have responsibility for grandchild, %	37	50
Mean no. of people in household (SD)	2.5 (1.3)	4 (2.3)
Mean no. of bedrooms (SD)	3.2 (0.9)	2.7 (1.1)
Mean years of education (SD)	15.5 (3.8)	14.5 (4.4)
Average hours worked for pay per week (SD)	46.0 (26.7)	51.0 (34.0)
Annual income, %		
< \$11 999	30	30
\$12 000–\$15 999	7	10
\$16 000–\$24 999	10	27
\$25 000–\$34 999	17	10
> \$35 000	27	23

Note. Percentages do not always total 100 owing to rounding and missing data.

and not just structured exercise. Leisure was conceptually defined as a context in which physical activity might be undertaken during free time, resulting in fun and enjoyment.

All participants in the CAPS project were recruited purposively (see previous studies for a complete summary of the methods used for data collection and analyses^{17–19}). A total of 30 African American women and 26 American Indian women (half Pueblo, half Navajo) participated in the interviews. A summary of the characteristics of the women interviewed is included in Table 1.

We designed a semistructured interview guide approach to encourage women to talk about their lives and how they perceived the relative importance of physical activity. Data analyses for the in-depth interviews were conducted with constant comparison techniques. A coding system was established as the interviews were undertaken. We used NUD*IST 4 (QSR International, Melbourne, Australia) to categorize data with numerous codes that could then be retrieved and integrated later

in the analyses. We selected quotations and examples by the researchers to illustrate the emerging themes.

RESULTS

The purpose of the qualitative data component of the CAPS project was to obtain information about the psychosocial context and sociocultural meanings of physical activity for older African American and American Indian women. Many of the women in this study shared certain motivations and constraints with cohort members by virtue of being born at about the same time and sharing a cultural background. Yet each life was punctuated in diverse ways by idiosyncratic events and personal experiences. Details of the interpretations briefly described below can be found elsewhere.^{16–21}

Physical Activity Values

Most of the women interviewed believed that physical activity was important for physi-

cal and mental health reasons. Despite this attitude, many of the women indicated that they were not physically active on a regular basis.^{16–20} Problems arose from some of the women's misconceptions about the definitions of physical activity, although the in-depth interviews helped the women understand how the researchers defined and described physical activity and leisure. Still, although the researchers sought to define their terms broadly, the women most commonly associated exercise and structured activities with the concept of physical activity. An American Indian woman summarized this interpretation best when she answered, "I hardly do any physical activity. The only thing I can think of is walking."¹⁸

Both the African American and American Indian women associated being physically active with feeling good, being with others, being and feeling healthy, and experiencing spiritual and psychological benefits.¹⁹ For example, one African American woman stated, "I think that for me to be truly happy or satisfied, I'm going to have to be physically active." An American Indian woman described the spiritual benefits of activity by saying, "I love being outside. Mostly I love taking walks. I love the quietness with that."

Constraints

Because their attitudes toward physical activity were generally positive and because many of the women indicated that they would like to be physically active, it appeared that constraints or barriers were preventing some of the women from being as physically active as they wanted.¹⁸ A constraint is commonly defined as anything that inhibits a person's ability to participate in activities, to spend more time doing so, to take advantage of opportunities, or to achieve a desired level of satisfaction.⁴ The constraints to physical involvement that many of these women described included a range of perceptions, excuses, and problems encountered in finding time and space for engaging in physical activity. Lack of time was one of the biggest problems for all the women.^{3,23,24} Underlying the lack of time, however, were a myriad of other issues that influenced time. One African American woman vocalized this issue when she said, "I talk about lack of time, et cetera,

but you know, time is the sort of thing you can make available when you want.”¹⁸

The women cited several other perceived barriers to active physical involvement, including job demands, physical tiredness, physical illnesses and ailments, expectations and needs of the family and others in the community, economic constraints, major life changes or traumas, safety issues, weather and environment, the hassle of personal care (e.g., showering, keeping hair looking good), and a lack of facilities and opportunities. For example, an African American woman said, “I have to be careful what time I go walking, you know, ‘cause I don’t care what time of day it is, it’s still dangerous, everywhere.”

Perceiving that positive outcomes ensued from being physically active did not necessarily mitigate constraints. Many of the women we interviewed, however, were at least contemplating the value of physical activity in their lives. They seemed to understand the health message regarding the value of physical activity, but many of them had not yet taken the next step of regularly engaging in a physical activity they enjoyed. Yet the women seemed to be generally open to the possibilities of physical activity despite the constraints they perceived and encountered in reality.

Social Support

Social networks are the structural and interactional aspects of a support system, such as the number and type of network members and the frequency and intensity of those interactions. Social support in the CAPS project referred to the functional or behavioral aspects of the network, including the types of support received and given as they pertained, in this case, to physical activity. Although the amount and type of social support for physical activity varied, the majority of the women who undertook physical activity found empowerment through social networks.

The lives of people of color in US society generally are associated with close family ties and community affiliations. Social networks in the form of family and community connections existed and were important elements in the lives of most of these women. The amount and type of social support for physical activity varied among the women interviewed. The majority described social net-

works that offered positive support in the form of emotional support, companionship, reciprocity, or help in problem solving. Our analysis, as well as research by others, shows how the “ethic of care” results in both an enhancement and a constraint to physical activity.^{3,25} (An ethic of care refers to relationships with others in which women sometimes care more about the needs of others [e.g., spouse, children] than their own needs.) Always putting others first can constrain the time available for physical activity. On the other hand, having other people in one’s life can provide partners for physical activity.

The women’s social networks, particularly those related to the family, changed over time because of factors such as children growing up, grandchildren coming into their lives, care responsibilities for family members, and each woman’s own assessment of her needs for physical and mental health. Friendship and community networks tended to be more stable over time. Although social networks were not essential for every woman we interviewed, the vast majority found personal empowerment or a greater sense of control over their lives through those networks. Social networks were also a means of finding companions for physical activities (e.g., playing with children, walking with family members and friends).

Sedentary But Busy

As we listened to the African American and American Indian women talk about their lives, we noted the vast number of activities in which they were involved. These women may be defined as “sedentary” by physical activity standards, but they were certainly busy.²⁰ Most of the women in this study noted a clear differentiation between the weekend and the weekday as evidenced by the different activities—mostly pertaining to paid work—in their lives.

The women in this study could be divided into two typologies by the way they describe their typical weekdays. The first type saw their weekdays as usually “routine”; they had no problem indicating how their time was structured. The second type was the “it depends” group. These women suggested that every day was different, and their activities depended on what the particular day held.

Except for a handful of women who walked consistently or attended an aerobics class, most of the “it depends” women we interviewed did not describe a regular plan for physical activity, largely because they often did not know what their days might hold. Almost all the women described a variety of household tasks (i.e., fixing meals) that had to be done regardless of whether they organized their days with a perception of “routine” or “it depends.” Many of the women felt that their weekdays were much too busy.

Describing weekends was more complex for many of the women. Although some routines were evident on the weekends, such as doing laundry, fixing family meals, and going to church, the weekends generally provided a greater perception of variety than the weekdays. The weekends also seemed to be less stressful, with fewer perceived demands. Two primary undertakings emerged in the data regarding the weekend: getting “caught up” and “relaxing.” A number of women saw these undertakings as occurring in tandem. The former (getting “caught up”) was often a prerequisite for the latter (“relaxing”). Although the time seemed to be more flexible on the weekend than during the week, physical activity for the most part was not a planned aspect of the weekend. The older women in this study were physically sedentary (as the statistics proclaim and as their stories confirmed), but they were generally busy.

Sociocultural Concerns

The major focus of the CAPS project was to ascertain whether African American and American Indian women perceived physical activity in ways that previous measures with a Eurocentric bias had failed to uncover. Determining how race, ethnicity, culture, and minority status affected being physically active was not easy to discern.¹⁹ Some women responded that their racial or ethnic background did not matter. Others, however, indicated that they could identify some sociocultural factors as being linked to their physical activity. These perspectives related to history, marginality, and cultural pride. For example, the past history of oppression seemed to have an impact on the adults of today and their physical activity involvement, particularly in free time. One African Ameri-

can woman said that as a child she was active but she did not feel she ever knew adults who included involvement in physical activity as leisure, because they were working all the time.

Sociocultural influences related to marginality were generally seen as negative. For several American Indian women, marginality related to the lack of recreation facilities available and the amount of work for pay that had to be done. Marginality was mentioned more often among the American Indian women in this study, whereas African American women were more likely to mention history. Several American Indian women described how important physical activity was to them culturally, especially in the form of traditions and ceremonies, but how much their lives had changed as a result of their assimilation into the urban culture and the loss of some of their traditions. The African American women in this study generally did not identify anything in their culture that related to physical activity besides a history of physical work. The consistency and yet ambiguity of some of the differing perceptions held by these women of color underlined the intersection of personal and cultural values and the need to examine both their environment and their behavior.

Enjoyment as Reflected in Walking

Walking is an accessible activity that is readily available to most able-bodied people. In the quantitative portion of the CAPS project, walking was noted as an important physical activity undertaken by a range of women of different ages and from different economic backgrounds and family situations.¹⁵ In our analysis, we were interested in walking as a physical activity regardless of why or where it was done.¹⁸

The descriptive analysis that emerged from these walking data related to 3 dimensions: the context of walking, the conditions that enable walking, and constraints to walking more or achieving greater satisfaction with walking as a physical activity. The context of walking included dimensions of work-related walking, walking as necessity, walking for health, and walking for pleasure. The physiological value of the movement itself was the same across the contexts, but the

psychological motivations and implications varied.

Four subthemes emerged that were helpful in explaining how walking might be enabled: adaptability and availability (women could perform some form of walking virtually anywhere), social and/or solitary dimensions, identification with cultural traditions, and perceptions that walking was “not really exercise” (as exercise is often construed). Four salient constraints to walking were seasons and weather, safety, being physically and/or emotionally tired, and not having walking partners. Therefore, although its adaptability and availability made walking a great activity, the seasons and weather also sometimes served as a constraint.

Walking was an important activity in the lives of many of the African American and American Indian women because of the available contexts, the conditions that enabled it to happen, and the negotiability of many of the constraints. As many of these women stated, walking had value because it was “not really exercise.” This reflection seemed to relate to the idea that choice was involved in where, how, and with whom walking was undertaken. Choice was also involved regarding the intensity of the activity. Related to these intrinsic motivations was the underlying attitude that walking was enjoyable when these women perceived the activity to involve choices.

CONCLUSIONS

These findings provide some descriptive information about the lives of African American and American Indian women and their physical activity. In some cases, the experiences of African American and American Indian women were similar; in other situations, ethnic as well as individual differences were evident. Each of the emerging conclusions had numerous implications for encouraging physical activity among these women. Many of the specific recommendations are given in the papers cited in Results,^{16–21} and a complete discussion of all possible applications is outside the scope of this paper. However, these qualitative data begin to provide some insight about physical activity patterns.¹⁸

As indicated in our findings, the women in this study had difficulty talking about the influence of their racial identity on their involvement in physical activity. We felt a tension between our desire to extract interpretations from the women and our asking them to speak on a highly personal and complex matter. Our data showed that race might serve both positive and negative functions within and between social groups. The problems with isolating race or cultural identity also related to the reality that all people have multiple identities concerning sex, age, class, race, religion, disability, sexuality, and a variety of factors that determine who an individual is. Thus, determining and measuring how race matters continues to be a challenge, but it is one that public health and physical activity researchers cannot ignore.

The ideas about physical activity contributed by the interviewees strongly reflected their personal identities. In our study, we were increasingly aware of how the women’s personal and cultural values intersected. These women’s stories were also punctuated by idiosyncratic events and personal experiences.²⁶ The results of the CAPS project suggested that individual behavioral choices seemed to be influenced by a combination of personal, cultural, and environmental factors.

This idea also pointed to the need to examine social and ecological perspectives of how personal, interpersonal, environmental, institutional, and policy indicators may influence people’s behaviors.²⁷ Researchers and educators will need to expand cultural and individual perspectives if the multiple dimensions of behavior are to be understood. West²⁸ offered that researchers might need to go beyond simple explanations to understand how environment and behavior are inseparable and how institutions and values go hand in hand. More research is needed to determine how these personal and cultural value systems affect behavior.

The challenge for future research lies in asking questions in a meaningful way and considering the complexity of the answers.²¹ If behavioral changes, health improvement, and an enhanced quality of life are to be achieved, researchers must continue to try to ascertain the perceptions that people hold about their lives and discover the most valid

ways to examine the meanings that individuals and groups attach to their lives and the role physical activity plays in them. ■

About the Authors

Karla A. Henderson is with the Department of Recreation and Leisure Studies, University of North Carolina at Chapel Hill. Barbara E. Ainsworth is with the School of Public Health, University of South Carolina, Columbia.

Please send requests for reprints to Karla A. Henderson, PhD, Department of Recreation and Leisure Studies, CB #3185 Evergreen, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-3185 (e-mail: karla@email.unc.edu).

This article was accepted May 21, 2002.

Contributors

Both authors participated in conceptualizing the project and writing the article. K.A. Henderson also analyzed and interpreted the data, and B.E. Ainsworth also collected the data.

Acknowledgments

The Cross-Cultural Activity Participation Study CAPS project was funded by the Women's Health Initiative of the National Institutes of Health (NIH WHI-SIP 22W-U48/CCU409664-03).

Human Participant Protection

Human subjects approval was granted by the institutional review boards for human subjects research at the University of South Carolina, the University of New Mexico, and the Indian Health Service—Albuquerque Area Office, US Department of Health and Human Services. Informed consent was provided by all participants.

References

- Floyd MF. Race, ethnicity and use of the National Park System. *Soc Sci Res Rev.* 1999;1:1–24.
- McDonald D, McAvoy L. Native Americans and leisure: state of the research and future directions. *J Leis Res.* 1997;29:145–166.
- Eyler AA, Baker E, Cromer L, King AC, Brownson RC, Donatelle RJ. Physical activity and minority women: a qualitative study. *Health Educ Behav.* 1998;25:640–652.
- Henderson KA, Bialeschki MD, Shaw SM, Freysinger VJ. *Both Gains and Gaps: Feminist Perspectives on Women's Leisure.* State College, Pa: Venture Publishing; 1996.
- Floyd MF. Getting beyond marginality and ethnicity: the challenge for race and ethnic studies in leisure research. *J Leis Res.* 1998;30:3–22.
- Philipp SF. Race and leisure constraints. *Leis Sci.* 1995;17:109–120.
- Philipp SF. Race, gender, and leisure benefits. *Leis Sci.* 1997;19:191–207.
- Shaull SL, Gramann JH. The effect of cultural assimilation on the importance of family-related and nature-related recreation among Hispanic Americans. *J Leis Res.* 1998;30:47–63.
- Ainsworth BE. Issues in the assessment of physical activity in women. *Res Q Exerc Sport.* 2000;71(suppl):S37–S42.
- Heesch KC, Masse LC, Aday LA. Perceptions of sedentary African-American women about continuous versus intermittent walking. *Women Health.* 2000;30:43–59.
- King AC, Castro C, Wilcox S, Eyler AA, Sallis JF, Brownson RC. Personal and environmental factors associated with physical inactivity among different racial-ethnic groups of US middle-aged and older-aged women. *Health Psychol.* 2000;19:354–364.
- Sternfeld B, Cauley J, Harlow S, Liu G, Lee M. Assessment of physical activity with a single global question in a large, multiethnic sample of midlife women. *Am J Epidemiol.* 2000;152:678–687.
- US Dept of Health and Human Services. *Physical Activity and Health: A Report of the Surgeon General.* Atlanta, Ga: US Dept of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion; 1996.
- Young DR, Miller KW, Wilder LB, Yanek LR, Becker DM. Physical activity patterns of urban African Americans. *J Community Health.* 1998;23:99–112.
- Ainsworth BE, Irwin ML, Addy CL, Whitt MC, Stolarczyk LM. Moderate physical activity patterns of minority women: the Cross-Cultural Activity Participation Study. *J Womens Health Gend Based Med.* 1999;8:805–813.
- Henderson KA, Ainsworth BE, Stolarczyk L, Hootman JM, Levin S. Notes on linking qualitative and quantitative data: the Cross Cultural Physical Activity Participation Study. *Leis Sci.* 1999;21:247–255.
- Henderson KA, Ainsworth BE. The connections between social support and women's physical activity involvement: the Cultural Activity Participation Study. *Women Sport Phys Act J.* 2000;9:27–53.
- Henderson KA, Ainsworth BE. Enablers and constraints to walking for African American and American Indian women: the Cultural Activity Participation Study. *Res Q Exerc Sport.* 2000;71:313–321.
- Henderson KA, Ainsworth BE. Sociocultural perspectives on physical activity in the lives of older African American and American Indian women: a cross cultural activity participation study. *Women Health.* 2000;31:1–20.
- Henderson KA, Ainsworth BE. Sedentary and busy: physical activity and older women of color. In: Clough S, White J, eds. *Women's Leisure Experiences: Ages, Stages and Roles.* LSA Publications No. 70. Eastbourne, England: Leisure Studies Association; 2001:37–50.
- Henderson KA, Ainsworth BE. Researching leisure and physical activity with women of color: issues and emerging questions. *Leis Sci.* 2001;23:21–34.
- Henderson KA, Bialeschki MD. A sense of entitlement to leisure as constraint and empowerment for women. *Leis Sci.* 1991;12:51–65.
- Allen KR, Chin-Sang V. A lifetime of work: the context and meanings of leisure for aging black women. *Gerontologist.* 1990;30:734–740.
- Johnson CA, Corrigan SA, Dubbert PM, Gramling SE. Perceived barriers to exercise and weight control practices in community women. *Women Health.* 1990;16:177–191.
- King AC, Blair SN, Bild DE, et al. Determinants of physical activity and interventions in adults. *Med Sci Sports Exerc.* 1992;24(suppl):S221–S236.
- McLeroy KR, Bibeau D, Steckler A, Glanz K. An ecological perspective on health promotion programs. *Health Educ Q.* 1998;15:351–377.
- West C. *Race Matters.* Boston, Mass: Beacon Press; 1993.