

IPARC 2008-2009 Report

Investigating Places for Active Recreation in Communities (IPARC) is a research initiative (laboratory) sponsored by the Department of Parks, Recreation and Tourism in the College of Natural Resources at North Carolina State University. The initiative was funded for the 2nd year through the NC State Natural Resources Foundation.

Mission: IPARC exists to advance the science of how park, recreation and sport environments promote active living. It also seeks to facilitate the application of evidence-based policies and practices to enhance opportunities for physical activity in these environments to enhance quality of life.

Vision: IPARC aims to be the leading laboratory in the nation for providing research evidence on the contributions of parks, recreation, and sport to physical activity and an essential resource for evidence-based physical activity research from local, state, and national perspectives.

Summary of 2008-2009 Based on IPARC Goals:

Objectives 1:

To conduct research about opportunities for physical activity for all community residents through parks, recreation, schools, and other community settings.

Refereed Publications in 2008-2009:

- Baran, P. K., Smith, W. R., Turkoglu, H. D., Marans, R. W. & Bolen, F. (in press) Walking Behavior in Istanbul: Individual Attributes, Neighborhood Context and Perceived Safety. *AJZ ITU Journal of the Faculty of Architecture, special issue on Quality of Urban Life.*
- Baran, P. K., Rodriguez, D. A., & Khattak, A. J. (2008) Space syntax and walking in a new urbanist and suburban neighborhoods. *Journal of Urban Design, 13*(1), 5-28.
- Bocarro, J. N., & Kanters, M. (in press). Leisure, health, and physical activity. In G. Kassing (Eds.), *Dimensions of leisure for life*. Champaign, IL: Human Kinetics.
- Bocarro, J. N., & Wells, M.S., (in press). Introductory comments to the special issue on Physical Activity, Health, and Wellness. *Journal of Park and Recreation Administration.*
- Bocarro, J. N., Casper, J., Henderson, K.A., Floyd, M. F., Moore, R., Kanters, M.A., Laven, K., & Edwards, M. (2009). Physical activity promotion in North Carolina: Perceptions of public park and recreation directors. *Journal of Parks and Recreation Administration, 27*(1), 1-27.
- Bocarro, J. N., Floyd, M. F., Moore, R., Baran, P., & Danninger, T. (in press). Developing a reliable measure of physical activity among children in different age groups using the System for Observing Physical Activity and Recreation in Communities (SOPARC). *Journal of Physical Activity and Health.*
- Bocarro, J. N., Kanters, M., Casper, J., & Forrester, S. (2008). School Physical Education, extracurricular sports, and lifelong active living. *Journal of Teaching in Physical Education, 27*, 155-166.
- Cardenas, D., Henderson, K.A., & Wilson, B. (2009a). Experiences of participation in Senior Games among older adults. *Journal of Leisure Research, 41*(1), 41-56.
- Cardenas, D., Henderson, K.A., & Wilson, B. (2009b). Physical activity and senior games participation: Benefits, constraints, and behaviors. *Journal of Aging and Physical Activity, 17*(2).
- Floyd, M.F., Crespo, C.J., & Sallis, J.F. (2008). Active living in diverse and disadvantaged communities: Stimulating dialogue and policy solutions. *American Journal of Preventive Medicine, 34*, 271-274.
- Floyd, M.F., Spengler, J.O., Maddock, J., Gobster, P.H., & Suau, L. (2008). Park-based physical activity in diverse communities of two U.S. cities: An observational study. *American Journal of Preventive Medicine, 34*, 299-305.
- Floyd, M.F., Spengler, J.O., Maddock, J., Gobster, P.H., & Suau, L. (2008). Environmental and social correlates of physical activity in neighborhood parks: An observational study in Tampa and Chicago parks. *Leisure Sciences, 30*, 360-375.
- Floyd, M.F., Taylor, W.C., & Whitt-Glover, M.C. (2009). Measuring park and recreation environments in low-income communities of color: Highlights of challenges and recommendations. *American Journal of Preventive Medicine 36 (Supplement 1), S156-S160.*
- Henderson, K.A. (2008). Contributions of parks and recreation to health and active lifestyles. *Journal of Leisure and Recreation Studies (Korean), 32*(4), 233-230.

- Henderson, K.A. (2009). Just research and physical activity: Diversity is more than an independent variable (research reflection). *Leisure Sciences, 31*, 100-105.
- Henderson, K.A. (2009). The paradox of sport management and physical activity. *Sport Management Review, 12*, 57-65.
- Henderson, K.A., & Brown, W. (in press). Women, leisure, and health. In L. Payne, B. Ainsworth, & G. Godbey (Eds.) *Leisure, Health, and Wellness*. State College, PA: Venture.
- Hickerson, B., Moore, A., Oakleaf, L., Edwards, M., James, P.A., Swanson, J., & Henderson, K.A. (2008). The role of a senior center in promoting physical activity for older adults. *Journal of Park and Recreation Administration, 26*(1), 22-39. (Winner of the 2009 National Institute of Senior Centers Research Award).
- Kaczynski, A., & Henderson, K.A. (2008). Parks and recreation settings and active living: A review of associations with physical activity function and intensity. *Journal of Physical Activity and Health, 5*, 619-632.
- Kanters, M. A., Bocarro, J., & Casper, J. M. (2008). Supported or pressured? An examination of agreement among parents and children on parent's role in youth sports. *The Journal of Sport Behavior, 31*(1).
- Kanters, M. A., Bocarro, J., Casper, J. M., & Forrester, S. (in press). Guidelines for positively engaging parents in children's sports. *YouthFirst: The Journal of Youth Sports*
- Kanters, M., Bocarro, J. N., Casper, J., & Forrester, S. (2008). Determinants of sport participation in middle school children and the impact of intramural sports. *Recreation Sports Journal, 32*, 134-151.
- Koka, C., & Henderson, K.A., Ascii, F. H., Bulgu, N. (2009). Constraints to leisure-time physical activity and negotiation strategies in Turkish women. *Journal of Leisure Research, 41*(2), 225-252.
- Whitt-Glover, M.C., Taylor, W.C., Floyd, M.F., Yore, M.M., Yancey, A.K., & Matthews, C.E. (2009). Disparities in physical activity and sedentary behaviours among US children and adolescents: Prevalence, correlates, and intervention implications. *Journal of Health Policy, 30*, (Supplement 1), S309-S334.

Research and Public Service Presentations in 2008-2009:

- Baran, P. Danninger, T., Moore, R., Floyd, M., Bocarro, J., Cosco, N., Smith, W.R., Kepez, O. (2009, February) Utilization of GIS Mapping and Technology to Increase Community Capacity for Physical Activity. Paper presented at the 2009 NC GIS Conference, Raleigh, NC.
- Baran, P., Danninger, T., Moore, R., Floyd, M.F., Bocarro, J. N., Cosco, N., Smith, W., & Kepez, O. (2009) *Building custom GIS tools for developing neighborhood characteristics Measurements*. Poster presented at the Active Living Research 2009 Annual Conference, San Diego, CA.
- Baran, P.K. (2009, August) Utilization of GIS Mapping in the IPARK (Investigating Parks for Active Recreation for Kids) Project. UNC, Center for Health Promotion and Disease Prevention, 2008 Obesity Prevention in Public Health Course, Chapel Hill: NC, August 24-29, 2008
- Bocarro, J. N., & Floyd, M. (2008, August). *IPARC: Investigating Places for Active Recreation in Communities*. NC Citizen Board Member State Forum. Greensboro, NC.
- Bocarro, J. N., Henderson, K., & Floyd, M. (2008, November). *IPARC: Investigating Places for Active Recreation in Communities*. North Carolina Recreation and Parks Association. Charlotte, NC.
- Bocarro, J. N., Henderson, K., Floyd, M. F., Edwards, M. B., Casper, J., Moore, R., & Kanters, M. A. (2008). *Park and recreation director's perceptions of community based physical activity*. 2008 NRPA Leisure Research Abstracts, Baltimore, MD.
- Cardenas, D., Wilson, B., & Henderson, K. (May 2008). Promoting physical activity through Senior Games programs in communities. Paper for the Canadian Congress on Leisure Research in Montreal, CAN.
- Edwards, M. B., Kanters, M. A., & Bocarro, J. N. (May 2008). *Exploring race and gender in a preliminary comparison of participation in middle school interscholastic and intramural sport programs*. Canadian Conference on Leisure Research.
- Edwards, M. B., Kanters, M. A., & Bocarro, J. (May 2008). Middle School Sports Participation: An Exploration of Program Structure, Gender, and Race Effects. Canadian Conference on Leisure Research in Montreal, Can.
- Floyd, M. F., Bocarro, J. N., Smith, W., Baran, P., Moore, R., & Cosco, N. (February 2009). What contributes to children's physical activity in urban neighborhood parks? An examination of individual, social, and environmental factors. Paper presented at the Active Living Research 2009 Annual Conference, San Diego, CA.
- Floyd, M.F. (2008, May). Disparities in access to park and recreation environments: Evidence and Research Needs. Invited presentation, The State of Environmental Justice in America 2008 Conference "Promoting Partnerships for Sustainable Solutions." Washington, DC.
- Floyd, M.F. (2008, June). Contributions of public parks to physical activity in low-income and diverse communities. Invited presentation to National Institute on Drug Abuse Scientific Meeting, "Can Physical Activity & Exercise Prevent Drug Abuse? Promoting a Full Range of Science to Inform Prevention." Bethesda, MD.
- Floyd, M.F. (2008, August). Benefitting African American communities through environmental change: The role of public neighborhood parks. Presentation to the 3rd African American Obesity Research Network (AACORN) Invited Workshop, University of Pennsylvania. Philadelphia, PA.
- Floyd, M.F. (2009, February). ALR 101: An overview of leisure studies and recreation and park research related to active living. Pre-conference presentation at the Active Living Research 2009 Annual Conference. San Diego, CA.

- Floyd, M.F. (2008, October). An overview of the National Policy and Legal Analysis Network (NPLAN) to prevent childhood obesity and the role of built environment research. Invited presentation, N.C. Obesity Conference, "A Call to Action: Working Together to Solve North Carolina's Obesity Crisis." Greensboro, NC
- Floyd, M.F., Spengler, J.O., Suau, L., Maddock, J.E., & Gobster, P.H. (2009, February). Assessing the population impact of public parks on physical activity: An analysis of energy expenditure and neighborhood parks. Poster presented at the 2009 Active Living Research Annual Conference. San Diego, CA.
- Hickerson, B.D., & Henderson, K.A. (February, 2009). *Physical activity at camp*. Paper presented to American Camp Association conference in Orlando, FL.
- Kanters, M. A., & Bocarro, J., Casper, J., Forrester, S. (May 2008). Middle School Sport Participation: An Examination of Intramural versus Extramural Sports Using the Theory of Planned Behavior. Canadian Conference on Leisure Research in Montreal.
- Mahar, M.T., Guerieri, A.M., Kanters, M.A., & Bocarro, J.N. (2009). Effect on epoch length on objectively-measured physical activity in middle school students. Poster presented at the 2009 American College for Sports Medicine Conference, Seattle, WA.
- Moore, R., Cosco, N., Bocarro, J.N., Baran, P., & Kepez, O. (2008). *Environment-behaviour measures of urban neighbourhood park use by children*. Paper presented at International Association for People-Environment Studies (IAPS) Biennial International Conference, Rome.

Objective2:

To facilitate collaborative research opportunities among NC State faculty and other colleagues throughout the state and across the nation regarding active recreation in communities.

Grants (Funded and Unfunded) Associated with IPARC:

NOTE: A major effort this year was focused on identifying potential grant sources and making plans for grant submission by IPARC members.

In Review:

- Floyd, M.F., (PI) Baran, P., (Co-PI) Smith, W., Armstrong, P., Anderson, D.H., & Brownson, R. An Evaluation of the Effects of Park Renovations on Physical Activity among Children and Families in Rural Communities. Submitted to Active Living Research, Robert Wood Johnson Foundation, \$385,085.
- Floyd, M.F., (PI) Baran, P., McHale, M., Leung, Y., Henderson, K., Devine, H. & Anderson, D. Contributions of Urban and Community Forests to Physical Activity and Health. Submitted to the National Urban and Community Forestry Advisory Council, USDA Forest Service, \$180,439.
- Kanters, M.(Co-PI), Bocarro, J., (Co-PI) Trogdon, J., Devine, H., Siderelis, C. McKenzie, T., & Casper, J. Middle School Sport Facilities: Policies, Physical Activity, and Cost Effectiveness (2010-2011). Submitted to the Robert Wood Johnson Foundation, \$102,468.

Funded:

- Moore, R., (PI), Floyd, M.F. (Co-PI), Cosco, N., Baran, P., Bocarro, J., & Smith, W. I-PARK (Investigating Parks for Active Recreation for Kids) (2007-09). Robert Wood Johnson Foundation. \$205,000.
- Kanters, M.,(PI) Bocarro, J., (Co-PI) Mahar, M., McKenzie, T., & Casper, J. School Intramural Sports and Physical Activity: A Middle School Policy Intervention (2008-2010). Robert Wood Johnson Foundation. \$199,495.

Not Funded or not in Need of Funding:

- Peel, J. Examining Girls' Choices in an After School Program. In cooperation with Raleigh Parks and Recreation.
- Henderson, K. & Wilson, B. Evaluation of North Carolina Senior Games. Direct costs (\$2500) from NC Senior Games.

Objective 3:

To advance the state of knowledge about evidence-based research about active recreation in communities through projects, publications, and training workshops and seminars.

Service and Media Opportunities in 2008-2009:

Advisory Board Member, National Policy and Legal Network to Prevent Childhood Obesity (supported by the Robert Wood Johnson Foundation) (Floyd)
Advisory Committee Member for NC Center for Physical Activity Policy Research (UNC-CH) (Henderson)
Advocates for Health and Action of Wake County (C. Smith)
CNR Magazine article – Fit for Life (2008/09) (Bocarro, Casper, Kanters)
Designing Parks for Healthier Lifestyles. NC State *Results* Magazine, Winter 2009. (Floyd, Henderson)
Eat Smart, Move More NC Leadership Team (Peel)
Guest Editor for a special edition focusing on Physical Activity and Health for *Journal of Parks and Recreation Administration* (Bocarro)
National Advisory Committee for Active Living Research (Robert Wood Johnson Foundation) (Henderson)
NBC News 17 news story on RWJF Grant (Featured Friday October 17th, 2008) (Bocarro, Casper, Kanters)
North Carolina Senior Games Board of Directors. (Wilson)
Partner with Project FACT (Faith-based groups Addressing health issues through Community outreach together in the Community). Active Community Neighborhood Grant, NC Physical Activity and Nutrition Branch, NC Division of Public Health. (Grant awarded to the Gethsemane Seventh Day Adventist Church). (Floyd)

Student Research in 2008-2009:

Edwards, M. *Disparities of place in access to extra-curricular school sports and physical activity in North Carolina Middle Schools*. (Ph.D.) (Adviser: Bocarro, Kanters)
Hickerson (Ph.D.) – *Individual, social, environmental and organizational correlates of children's summer camp physical activity*. (Ph.D.) (Adviser: Henderson)
Witmer, L. *Adolescent girls' attitudes toward physical activity and health*. (Masters) (Adviser: Bocarro)

Summary of Accomplishments for 2008-2009 for IPARC based on Yearly Objectives:

1. Complete Analysis of “Physical Activity Survey of North Carolina”—publish 2 additional papers.
Status: Continuing to work on submissions; not publications in other areas described above
2. Launch a website that will provide information about evidence-based research that promotes physical activity through parks, recreation, schools, and other community events. Compile information that will assist practitioners and the public in interpreting research to promote physical activity.
Status: Launched in May 2009
3. Interested faculty, staff, and students from PRTM meet regularly to share research and ideas for addressing the mission.
Status: We held 8 Brown Bag Lunch seminars in 2008-2009 attended by an average of 12 people each time. PRTM Faculty presenting included: Casper, Wilson/Henderson, Bocarro, Floyd, and Baran. Other NCSU faculty: Dr. Mary Tschirhart (Institute for Nonprofits)
Off campus and out of town guest presenters included: Drs. Kim Shinew (University of Illinois, Department of Recreation, Tourism and Sport) and Kelly Evenson (UNC-Chapel Hill, Gillins Global School of Public Health).
4. Engage students (through assistantships and seed money) in the process of research to promote active recreation.
Status: Note students listed above.

5. Provide seed money (\$5000 per project, negotiable) for faculty or students to conduct small projects to further the aims of promoting physical activity in communities.

Status: This goal was not instituted because of budget reversions.

6. Revise strategic plan and update IPARC Logic Model

Status: This goal was not undertaken but will be addressed in the Fall 2009.

Proposed IPARC GOALS for 2009-2010:

1. Update and maintain website that will provide information about evidence-based research that promotes physical activity through parks, recreation, schools, and other community events.
2. Meet regularly using Brown Bag seminars to share research and ideas for addressing the mission of IPARC.
3. Engage students (through assistantships and seed money) in the process of research to promote active recreation.
4. Revise strategic plan and update IPARC Logic Model
5. Seek new partners for research collaboration as well as for IPARC service
6. Facilitate 2-4 Webinars (in lieu of another Summit) to communicate information to the profession and to other research colleagues

2009-2010 Budget Needs:

Funding of one Ph.D. student

Facilitate Training Opportunities for Faculty through Webinars or other means

Subsidize travel for physical activity related conferences (e.g., Active Living Research)

Submitted by Karla A. Henderson, (de facto) Coordinator of IPARC