

University of Illinois
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HUMAN-ENVIRONMENT RESEARCH LABORATORY

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Suzy del Villar
USDA Forest Service
1042 Park West Court
Glenwood Springs, CO 81601

Dear Suzy,

Here are the answers to the questions for the 1997 *Annual Report*.

We enclosed a photocopy of two photos that we would be happy to send to you if you think they would be good to include in the *Annual Report*. The two pictures show the great variation in the urban forest at Chicago's Robert Taylor Homes, the community where we conducted much of our NUCFAC supported research. Please let us know if you would like to have black and white or color copies of these two photos.

Hope you are well and that the task of preparing your report goes well.

Sincerely,



William C. Sullivan III
Assistant Professor



Frances E. Kuo
Visiting Assistant Professor

Figure 1



Abstract

Do people who live in, or nearby, the urban forest treat each other better than people who have less contact with the urban forest? We set out to answer this question in the largest public housing development in the United States: Chicago's Robert Taylor Homes. The density of the urban forest immediately outside the buildings at Robert Taylor Homes vary considerably; some buildings are surrounded by only concrete and asphalt, while others have trees and grass. We measured the amount of vegetation outside 18 buildings and then conducted in-depth interviews with women living in those buildings. We also observed and compared resident's outdoor activities.

We found the presence and density of trees in neighborhood spaces increases the use of these common spaces, leading to increases in informal territorial control and social interaction among neighbors. Further, we found that the urban forest is associated with higher levels of neighborhood safety, including lower incidence of aggression and physical violence, and greater persistence and more proactive behavior in the residents' struggles against poverty. We also found evidence that the density of the urban forest contributes to stronger social ties among neighbors and stronger sense of community for both young adults and the elderly.

What are the Major Findings?

We found that, compared to people who live with very few nearby trees, people who live in or nearby the urban forest experience:

- less family violence
- greater persistence and more proactive behavior in their struggles against poverty
- stronger ties to their neighbors
- increased sense of safety and adjustment
- lower incidence of vandalism, graffiti and other incivilities

Recommendations for Community Foresters

This work provides considerable support for the kind of programs that community foresters lead. At a time when the nation's attention is focused on issues such as crime prevention, health care, and the plight of single mothers, our research suggest that urban forests are a basic part of any environment fit for humans; as necessary as streets, sewers, and electricity. Community foresters are welcome to cite our work in their efforts to gain support for the programs they lead.

List of Publications about this work by Kuo and Sullivan's research team:

- Brunson, L., Kuo, F.E., & Sullivan W.C. (under review). Sowing the seeds of community: Greening and gardening in inner-city neighborhoods. Submitted to *American Journal of Community Psychology*.
- Brunson, L., Kuo, F.E., & Sullivan, W.C. (1996). "Community life and nature in public spaces in urban public housing." In Nasar, J. & Brown, B. (Eds.) *Public and Private Places*. EDRA, Edmond, OK.
- Brunson, L., Kuo, F.E., & Sullivan, W.C. (1997). "The benefits of participation in greening and gardening activities for adults living in urban public housing." In Amiel, M., Bertrand, R., & Vischer, *Journal of Space and design management for place making*. EDRA, Edmond, OK.
- Coley, R.L., Kuo, F.E., & Sullivan, W.C. (1996). "The influence of nature on neighbor relations in urban public housing." In Nasar, J. & Brown, B. (Eds.) *Public and Private Places*. EDRA, Edmond, OK.
- Coley, R.L., Kuo, F.E., & Sullivan, W.C. (1997). Where does community grow? The social context created by nature in urban public housing. *Environment & Behavior*, 29(4), 468-494.
- De Pooter, S., Sullivan, W.C., & Kuo, F.E. (1996). "Neighbors and nature: Trees & social interactions in urban public housing." In Nasar, J. & Brown, B. (Eds.) *Public and Private Places*. EDRA, Edmond, OK.
- Faber, A., Wiley, A., Kuo, F.E., & Sullivan, W.C. (1996). "Play in the inner city: Nature as resource for sociodramatic play." In Nasar, J. & Brown, B. (Eds.) *Public and Private Places*. EDRA, Edmond, OK.
- Kuo, F.E. (1994). Knowing your constituency: Urban forests for inner city residents. *The Fifth International Symposium on Society & Resource Management*.
- Kuo, F.E. (in preparation). Trees, mental fatigue, and effective life functioning in urban public housing residents. To be submitted to *Environment & Behavior*.
- Kuo, F.E., Bacaicoa, M., & Sullivan, W.C. (in press). Transforming inner-city neighborhoods: Trees, sense of safety, and preference. *Environment & Behavior*.
- Kuo, F.E., Sullivan, W.C., & Schlosser, A. (1996). "Inner-cities, mental fatigue, and violence." In Nasar, J., & Brown, B. (Eds.) *Public and Private Places*. EDRA, Edmond, OK.
- Kuo, F.E., Sullivan, W.C., Coley, R.L., & Brunson, L. (under review). Fertile ground for community: Inner-city neighborhood common spaces. Submitted to *American Journal of Community Psychology*.
- Morvay, R., & Kuo, F.E. (1994). Inner city residents' uses and preferences for nature. *The Fifth International Symposium on Society & Resource Management*, 160.
- Sullivan, W.C. & Kuo, F.E. (1994). "Urban public housing residents and the power of trees." *Illinois Research* 36(1&2) p.11-13.

- Sullivan, W.C. & Kuo, F.E. (1996). "Do trees strengthen urban communities, reduce domestic violence?" Feature article, *Arborist News*, 5(3) p. 33-34.
- Sullivan, W.C. & Kuo, F.E. (1996). Do trees strengthen urban communities, reduce domestic violence? *USDA Forest Service Southern Region, Technical Bulletin No. 4*, Forestry Report R8-FR 55, Athens.
- Sullivan, W.C., & Kuo, F.E. (1994). "Urban public housing residents and the power of trees." *Illinois Research*, 36(1-2), 11-13.
- Sullivan, W.C., Bacaicoa, M., & Kuo, F.E. (1996). "The urban forest in urban public housing: Enhancing the use of outdoor public spaces." In Nasar, J. & Brown, B. (Eds.) *Public and Private Places*. EDRA, Edmond, OK.
- Sullivan, W.C., Kuo, F.E., & Coley, R.L. (1997). "Community-building effects of nature in urban public housing." In Amiel, M., Bertrand, R., & Vischer, J. *Space and design management for place making*. EDRA, Edmond, OK.
- Sullivan, W.C., Kuo, F.E., & Wiley, A. (1997). "Benefits of nature across the lifespan in urban public housing." In Amiel, M., Bertrand, R., & Vischer, J. *Space and design management for place making*. EDRA, Edmond, OK.
- Taylor, A.F., Kuo, F.E., Sullivan, W.C., & Wiley, A. (1997). "Tending the flock: Adult supervision in the inner city." *Abstracts: Biennial Meeting of the Society for Research in Child Development*. SRCD, Washington, D.C.
- Taylor, A.F., Kuo, F.E., Sullivan, W.C., & Wiley, A. (1997). "The young and restless: Nature in the lives of children in urban public housing." In Arnie!, M., Bertrand, R., & Vischer, J. *Space and design management for place making*. EDRA, Edmond, OK.
- Taylor, A.F., Wiley, A., Kuo, F.E., & Sullivan, W.C. (1997). "Play in the inner city: Where does it bloom?" *Abstracts: Biennial Meeting of the Society for Research in Child Development*. SRCD, Washington, D.C.
- Taylor, A.F., Wiley, A., Kuo, F.E., & Sullivan, W.C. (in press). Growing up in the inner city: Green spaces as places to grow. *Environment & Behavior*.
- Wiley, A., Kuo, F.E., & Sullivan, W.C. (1996). "Examination of the implications for children's environments of the U.N. Convention on the Rights of the Child." In Nasar, J. & Brown, B. (Eds.) *Public and Private Places*. EDRA, Edmond, OK.
- Wiley, A., Kuo, F.E., & Sullivan, W.C. (1996). "Nature in the inner city: Fertile ground for child development." In Nasar, J. & Brown, B. (Eds.) *Public and Private Places*. EDRA, Edmond, OK.

List of Publications about this work by others:

- Beaumont, Gary (1997). Trees may reduce violence, strengthen communities. *Illinois Research*, 1(1), 5.
- Cook, A. (1997, February 3). Trees found beneficial at housing in Chicago. *The Champaign-Urbana News Gazette*, p. A3.

- Cook, A. (1997, May 11). Volunteering proves satisfying. *The Champaign-Urbana News Gazette*, p. A2.
- de Forest, A. (1996, May 26). The unnaturals. *Philadelphia Inquirer*, p. 25.
- Fazio, J.R. (1995, May/June). Trees may offer new social benefits. *Arbor Day*, 6.
- Grant, A. (1996, March 21). Plant a tree, nurture an urban community. *The Providence Journal-Bulletin*, pp. F1, F4.
- Hug a tree. (1995, July/August). *New Age Journal*, p. 21.
- Jones, B. (1996, September). The power of the natural world. *New Woman*, 109-111, 143, 145.
- Kriet, K. (1995, December). Urban greening: A tool against crime. *Arbor Age*, 15(12), 8-10.
- Lewis, R.K. (1997, Summer). Urban trees. *American Forests*, p. 23-25.
- Marder, D. (1997, May 1). Trees, says study, calm angry homes. *The Philadelphia Inquirer*, p. B3.
- Pitt, L. (1997, February 18). Trees might make inner-city life a little less violent, study says. *Chicago Sun Times*, p. 7.
- Recktenwald, W. (1997, May 25). Tree-dimensional: Chicago digs in for a record planting season. *Chicago Tribune*, pp. B7, B9.
- Ross-Flanigan, N. (1996, December 16). It's only natural. *The Dallas Morning News*, pp. 8D-10D.
- Stepp, L.S. (1996, April 22). Where the wild things are. *The Washington Post*, p. C5.
- Study says urban forests build stronger communities. (1996, July/August). *The Forestry Source*, p. 13.
- Study suggests urban trees help curb domestic violence. (1995, August 1). *American Nurseryman*, p. 14.
- The power of trees. (1997, Spring). *Tree Scapes*, pp. 1-2.
- Urban "forests" improve relationships, curb violence. (1995, July). *Resource*, 5.

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Learn more about our NUCFAC sponsored work by looking at our home page at:

[http: / /www.aces.uiuc.edu/ —herl/](http://www.aces.uiuc.edu/~herl/)

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Project Name: COPING WITH POVERTY: THE VALUE OF NATURE IN URBAN PUBLIC HOUSING

William C. Sullivan III

Signature of Official Project Chief

21 AUGUST '97

Date

WILLIAM C. SULLIVAN III

Printed/typed name of signature above

Federal Grant Control Number