More walkable neighborhoods are not necessarily better for building social capital between residents.

In recent years, many urban theorists have argued that one solution to the apparent decline in social capital in cities is to build more walkable neighborhoods which will in turn enhance neighborhood sociability. In new research, **Hee-Jung Jun** examines the relationship between walkability and a neighborhood's social environment. She finds that the relationship is not as straightforward as many have believed, with perceived – rather than physical – walkability being a much more important factor in encouraging social interaction.



The decline of social capital is a significant problem in the US as it can be a sizeable hurdle for communities to overcome if they wish to become more sustainable. Since New Urbanists advocated that walkable neighborhoods as those that enhance social capital, numerous studies have examined the association between walkability and neighborhood social environment. However, the literature shows that there is a lack of consensus on the association. Some studies find that walkability enhances neighborhood sociability while others find that walkability is not so relevant to enhancing neighborhood sociability. With these mixed findings in mind, my colleague, Misun Hur, and I examined how physical and perceived walkability is associated with neighborhood social environment by measuring the physical walkability and using the 2004 Homeowner Survey data conducted in Franklin County—the central county for the Columbus Metropolitan Statistical Area in Ohio. We find that the relationship between walkability and a neighborhood's social environment is not a simple one.

Our research focused on social interaction and sense of community as the measures of neighborhood social environment. Social interaction was measured by the frequency of casual talk with neighbors, the frequency of offering a favor, and the frequency of participating in community events/activities. Sense of community was measured by the degree of feeling at home in the neighborhood, the degree of agreement that the neighborhood "sticks together," and the degree of maintaining good relations with their neighbors.

We calculated the level of physical walkability for each neighborhood by combining net residential density, retail floor area ratio, intersection density, and land use mix, which are components of a widely used walkability index. To examine the association between perceived walkability and neighborhood social environment, we also selected variables that match with the four components of physical neighborhood walkability from the survey: the perceived degree of neighborhood density (net residential density), the perceived degree of ability to walk to stores and services (retail floor area ratio), the perceived degree of easy walking paths (intersection density), and the perceived degree of useful shops within walking distance (land use mix).

The proposition that the more walkable a neighborhood is, the more neighborhood residents socially interact and feel a sense of community, received limited support from this study. We ran OLS regression analyses that examined the direct relationships between physical and perceived walkability and neighborhood social environment. We also ran structural equation analyses that allowed us to examine the indirect relationships—physical walkability along with residents' demographic characteristics affect neighborhood social environment by first influencing perceived walkability and then affecting neighborhood social environment. The findings show that while perceived walkability generally has a positive effect on neighborhood social environment, physical walkability is not relevant to social interaction and has a negative relationship with sense of community.

Why does physical walkability not enhance neighborhood social environment while perceived walkability does? We think that this is because physical walkability and perceived walkability do not correlate into the same direction and a neighborhood with high physical walkability does not correspond to a neighborhood with high perceived walkability. The level of socio-economic disadvantage is often high in the neighborhoods where physical walkability is high in the US. Like in many other large US cities, inner-city neighborhoods in Columbus

are characterized by higher poverty and crime rates. Figure 1 shows that physical walkability is generally greater in the inner-city neighborhoods around the city center but gradually declines as we move further away.

Figure 1 – Physical Walkability in Franklin County



Note: The score shows the physical walkability values calculated based on Frank et al.'s (2010) walkability index formula. The darker color on the map indicates the higher physical walkability in the neighborhood (census block group).

In this regard, we found that the negative relationship between physical walkability and sense of community turned out to be insignificant when the poverty rate, a socio-economic disadvantage factor, was controlled for in the OLS regression model. In the structural equation model, we also found that poverty rate and physical walkability were combined into one factor. These findings suggest that there is a spatial intersection between high physical walkability and socio-economic distress.

Unlike New Urbanist ideals, denser neighborhoods in inner cities are often places where traffic, crime and 'less desirable' residents are concentrated. Residents in such neighborhoods where physical walkability is high and thus there are great "opportunities" for strong social capital may be afraid of walking in their community, thereby having limited social interaction and a lower sense of community. By contrast, we suspect that residents in a neighborhood where perceived walkability is high but socio-economic distress is low, especially in the suburbs, may be more likely to walk and thus have more social interaction and a greater sense of community even though physical walkability is relatively lower.

Despite analyzing factors affecting neighborhood social environment in only one county, this study affirms that there is no simple relationship between the built environment and people's social behaviors but that there are complexities of understanding in how walkability affects a neighborhood's social environment. A neighborhood's social environment may not be simply improved by redesigning street patterns, mixing land uses, or developing denser neighborhoods, which are common elements promoting walkability. Thus, this study suggests that

neighborhood socio-economic characteristics as well as physical walkability should be taken into account in enhancing neighborhood social environments.

*This article is based on the paper, "*The relationship between walkability and neighborhood social environment: The importance of physical and perceived walkability" *in Applied Geography.*

Featured image credit: Kat N.L.M. (Flickr, CC-BY-NC-2.0)

Please read our comments policy before commenting.

Note: This article gives the views of the author, and not the position of USAPP – American Politics and Policy, nor the London School of Economics.

Shortened URL for this post: http://bit.ly/1Hbz1VD

About the author

Hee-Jung Jun – Sungkyunkwan University

Hee-Jung Jun is an assistant professor in the Department of Public Administration and Graduate School of Governance at Sungkyunkwan University. Her research interests include neighborhood dynamics, sustainable community development, and social capital.



