Low Income Neighborhoods Provide Less Supportive Environments for Physical Activity

Introduction
Physical activity is essential to physical and mental health. People are more physically active in neighborhoods where there are a diversity of shops and restaurants within walking distance, access to parks and recreation facilities, and safe places to walk or ride bicycles. However, it is unclear whether environmental characteristics that support physical activity are equally present in both high income and low income neighborhoods.

Research Approach
To address this question, a study of 2,199 US adults examined the differences in physical activity environments between high-income and low-income neighborhoods. Participants were selected from both high and low income neighborhoods, as well as neighborhoods with high and low “walkability” scores. High walkable neighborhoods are neighborhoods where residents can walk to a variety of shops and other destinations, like schools and parks. Low walkable neighborhoods are neighborhoods located in the suburbs, where shops are too far away for walking, requiring residents to drive to their destinations. A survey assessed other characteristics that make a neighborhood more agreeable for physical activity, such as the presence of safe and well maintained sidewalks, pleasant landscaping, adequate lighting, and traffic safety features.
Main Findings

1. Residents of lower income neighborhoods reported small-scale environmental features that are less favorable for physical activity, including:
   - Fewer walking and cycling features, such as safe and maintained sidewalks, pedestrian paths, and bike trails;
   - Less aesthetically pleasing features, such as landscaping, trees that provide shade, interesting sights, attractive buildings, or enjoyable vistas;
   - Fewer pedestrian and traffic safety features, such as safe crosswalks and slow traffic speeds;
   - Less safety from crime, including comfort of walking at night, and neighborhood crime rates.

   Walking and cycling facilities, aesthetics, and pedestrian/traffic safety, are smaller-scale features which are easily changeable at a relatively low cost.

2. Residents of low income neighborhoods reported fewer destinations within walking distance:
   - Presented with a list of 23 types of destinations (e.g., schools, grocery store, post office) residents of lower income areas reported fewer destinations located within walking distance of their home, making it less likely that these residents will walk for transport.
   - Especially relevant for physical activity, participants in low income neighborhoods reported fewer convenient recreation areas (e.g., basketball courts, soccer fields, tennis courts) within walking distance.
   - Residents of low income neighborhoods also reported fewer gyms and fitness facilities within walking distance.

Conclusions

This research exposes environmental injustices that make physical activity less attractive, less safe, and less feasible in lower income neighborhoods. Residents of low income neighborhoods reported fewer safe and maintained sidewalks, walking and biking trails, trees, interesting or attractive sights, adequate crosswalks, and less safety from traffic and crime. Based on these findings, modifying smaller-scale neighborhood characteristics (walking and cycling facilities, aesthetics, and pedestrian/traffic safety) could provide a cost-effective approach to increasing physical activity and improving health of populations living in poor neighborhoods. Given that low-income populations suffer disproportionately high rates of chronic disease, efforts to revitalize disadvantaged neighborhoods could have a significant health impact on those most in need.

NOTE: Participants rated their agreement about presence of attributes in their neighborhoods on a 1-4 scale. Higher scores are better.

**Walking/Cycling Facilities in Walkability-by-Income Quadrants**

![Bar chart showing Walking/Cycling Facilities in Walkability-by-Income Quadrants](image)

**Take-away message:**
Low-income neighborhoods are less attractive and more dangerous places to be active. Realistic improvements could promote physical activity among those with high risk for disease:

- Improve sidewalks
- Plant trees
- Calm traffic
- Add bicycle lanes & pedestrian paths

**Neighborhood Aesthetics in Walkability-by-Income Quadrants**

![Bar chart showing Neighborhood Aesthetics in Walkability-by-Income Quadrants](image)

Reference:

**Pedestrian/Traffic Safety in Walkability-by-Income Quadrants**

![Bar chart showing Pedestrian/Traffic Safety in Walkability-by-Income Quadrants](image)

**Safety from Crime in Walkability-by-Income Quadrant**

![Bar chart showing Safety from Crime in Walkability-by-Income Quadrant](image)