Physical Environment

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Learning Objectives

- Understand how the physical environment:
  - fits into the social ecological model
  - interacts with other levels of the SEM
- Discuss the difference between the natural and built environments
- Understand how the physical environment impacts human health
- Apply examples of how the physical environment contributes to health and health outcomes

Lecture Outline

- Physical Environment in the SEM
- Physical Environment Overview
  - Natural Environment
  - Built Environment
- Physical Environment and Health
- Healthy People 2020
- Examples of Health Outcomes Impacted by the Physical Environment
  - Stress in children
  - Obesity

Physical Environment

The material and tangible conditions in which we live:

- Natural
- Built

Natural Environment
**Built Environment**

- Public
- Private

*Sønder Boulevard*, Copenhagen - prizewinner in 2008 European Prize for Urban Public Space

Your turn! Can you list some public spaces you have been in over the last week?

**Answer the Question:**

Where do people in the developed world spend most of their time?

a) Mostly outdoors
b) Mostly indoors
c) Equally outdoors and indoors

**Healthy People 2020**

*A society in which all people live long, healthy lives*

Overarching Goals:

- Achieve health equity, eliminate disparities, and improve the health of all groups
- Create social and physical environments that promote good health for all
- Promote quality of life, healthy development, and healthy behaviors across all life stages
Example: Natural Environment

• Nature buffers stress in children (Wells & Evans, 2003)

Applied Example: Obesity

Your turn! Can you name at least 3 elements in the physical environment that might contribute to obesity?

Applied Example: Obesity

• Access to recreational facilities
• Presence of sidewalks
• Presence of controlled intersections
• Access to destinations
• Access to public transportation
• Amount of green space

Applied Example: Obesity

• Even within the U.S., large disparities in rates of obesity exist
• In part due to inequality in physical environment (Taylor et al., 2006)

Applied Example: Obesity

• Physical environment & primary prevention
• Neighborhood features of the built environment affect physical activity (Robert Wood Johnson Foundation, 2007)
  – Recreational Resources
  – Land Use
  – Neighborhood Form
  – Community Environment
References

- Galea, Ahern, Rudenstine, et al.