



Study Guide:

Neighborhoods - Built and Natural Environment - Guest lecturer: Peter James

Issues and Questions

Peter James will be the guest lecturer for our 9th class- Neighborhoods: Built and Natural Environment. **Peter** is currently a postdoctoral fellow at Harvard's School of Public Health. His research concerns the impact of the built environment on health, and much of his work has focused on establishing the causal effects of city planning and health outcomes. **Peter's** professional and academic experience will help illuminate assigned texts, which cover topics ranging from global warming, green space, physical environment and mobility, and the effects of toxins on children's intellectual development.

Climate change, the heat island effect, and rising rates of air pollution will place a rising health burden on cities. **Harlan and Ruddell** review evidence linking increased morbidity and mortality to extremely hot weather and poor air quality. The authors also present examples of what cities can do to mitigate negative outcomes, highlighting the need for interdisciplinary solutions. **James et al.** discuss the various ways that vegetation has been linked to health outcomes. While there is a need for increased research, current evidence largely suggests a positive association between greenness and improved health. In addition, **Sallis et al.** describe multilevel ecological models of behavior as they apply to physical activity. The authors highlight the various environmental factors that impact physical activity and how these may be addressed through environmental changes. Lastly, **Miranda et al.** examine the impact of childhood lead exposure on academic outcomes, showing the particular vulnerability of socioeconomically and environmentally disadvantaged children.

Questions

1. Why are urban residents at greater risk for experiencing the negative effects of global warming? Within cities, what populations are particularly susceptible? Furthermore, why does the literature focus on cities as the level for intervention? What are some of the strategies for mitigating and adapting to climate change?
2. According to James et al. how does greenness/ vegetation affect health? What does some of the evidence consist of? What findings remain inconclusive?
3. What do ecological models consist of? What are some factors that have been linked to increased physical activity? Can you give an example for each level of organization within the ecological model?
4. What are the impacts of childhood lead exposure on academic performance? What children are affected the most by lead exposure? What other factors have been linked to academic performance?



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Key Terms

Lead levels

Environmental exposures

Achievement gap

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