

Study Guide: Neighborhoods - Embodiment

Issues and Questions

Thursday's class will examine how daily experiences enter the body through "embodiment." According to **Krieger** (2005) there are three critical claims made under "embodiment":

“(1) bodies tell stories about—and cannot be studied divorced from—the conditions of our existence; (2) bodies tell stories that often—but not always—match people's stated accounts; and (3) bodies tell stories that people cannot or will not tell, either because they are unable, forbidden, or choose not to tell.”¹

Ultimately, humans are both social beings and biological organisms. The readings for Thursday's class range in topics, from the lasting impacts of infectious disease and stress, to questions about the way in which social environments impact smoking rates. These readings ask- how does embodiment occur? And, what are its causes and consequences? We begin with **Kieger** and **Davey-Smith's** piece that suggests embodiment can generate new insight into the ways societal conditions shape the expression of biologic traits, population distributions of disease, and social inequalities in health. The authors provide several examples of how social inequalities are expressed through physical health outcomes.

In “Do Schools Moderate the Genetic Determinants of Smoking?,” **Boardman** makes a case for the integration of environmental and biological explanations for cigarette use. He examines the extent to which school social and institutional factors moderate genetic tendencies to smoke and finds that, while smoking is genetically influenced, school environment matters for whether or not students smoke. **Epel et al.** investigate the impact of stress on cellular aging, and find that both perceived stress and chronic stress have important implications for longevity. Lastly, **Dowd, Zajacova** and **Aiello** detail the manner in which lifetime exposure to infection and inflammation may be important determinants of later-life morbidity and mortality.

Embodiment is truly a fascinating concept that helps us understand how our bodies react to situations that may have previously been thought of as having no physical consequences. It helps us understand health from a holistic perspective that takes into account the multiple facets of human experience.

Questions

1. According to Kieger and Davey-Smith, “The notion of ‘embodiment’ accordingly embraces biologic processes while avoiding the trap of equating ‘biologic’ with ‘innate,’ and simultaneously embraces social processes without assuming the soma is governed solely by the psyche.” What does this

¹ Krieger, N. (2005). Embodiment: a conceptual glossary for epidemiology. *Journal of Epidemiology and Community Health*, 59(5), 350–355. <http://doi.org/10.1136/jech.2004.024562>



mean? Can you illustrate this by referencing one of the biologic expressions of social inequality discussed in the article? Kieger and Davey-Smith list several.

2. What is the contextual trigger model and how does it differ from the social control model? What are the four aspects of schools that Boardman posits may impact smoking rates? Which factors appear to have the most significant impacts on smoking?
3. Epel et al. examine two groups of women classified as caregivers (high stress) and noncaregivers (low stress). On average, what is the difference in cellular aging between high stress and low stress women?
4. How does early exposure to infections predispose individuals to chronic disease? What factors are associated with a higher likelihood of infection and overall burden of infection? What health outcomes is high burden of infection associated with?

Key Terms

Embodiment

Biomarkers

Life-course

Gene-environment interaction

Social Control Model

Contextual trigger model

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