Environmental influences on well-being through the life course



Spring 2020; 3 credits Nancy M. Wells Wednesdays 1:30 - 4:30 pm nmw2@cornell.edu Room 112 Ives Hall 2429 MVR Hall, (607.25)4.6330

Overview: We examine the impact of built and natural environments on human health and health behaviors. We will discuss environmental factors including nature and parks, the food environment, housing and neighborhood, products, and interior environments. We conceptualize "health" broadly to include physical health, mental health, and cognitive functioning, as well as health behaviors such as diet and physical activity. Theoretical models employed include the life course perspective, the bioecological model, and the reasonable person model (RPM). We also consider environ-mental factors that act as protective mechanisms that foster resilience or as risk factors that contribute to vulnerability.

Readings: Articles on canvas: canvas.cornell.edu

Note: there could be an occasional, minor tweak to readings as we progress. If so, will be indicated on Blackboard.

Requirements & Grading: Note: Late assignments will not be accepted and will receive 0 (zero) points.

A. Discussion Leadership 15% Each week, 1 (or 2) student(s) will prepare discussion questions in advance and email these questions to me on the Sunday (by 3:00 pm) prior to our meeting. This student(s) will then facilitate discussion in class.

B. Class participation & mini assignments 30% Participation is critical. In addition to contributing to discussion, participation involves completing three (3) mini assignments (given 8 options) such as environmental evaluations, collecting a bit of data through interviews, observation, or brief analysis & writing. Mini assignments and due dates will be posted on Canvas. Students are also invited to participate in a "good news show & tell" during the last ~20 minutes of each class.

C. Project: Bridging the Gap (BTG) 20% Product & presentation

due Wed Apr 8, In class

- Topic, audience & idea (~ 1 page)
- Draft/outline of product/idea (2 page max)

due Mon Feb 11, 12:00 noon due Mon Mar 9, 12:00 noon

Create a product or intervention tool that is *evidence-based* and *grounded in theory* to address a real health/ healthy environment issue. Partner with a local (or distant) non-profit or other "real world" organization. The nature and form of the "product" is flexible – might be printed or electronic or 3-dimensional.

D. Final Paper (~20 pages) 25% [+5% +5% below = 35%]

due Mon May 4, 12:00 noon

- Topic Idea & at least 5 references (1-2 pages)
- Paper Draft 5%
- In-Class Presentation of Final Paper 5%

due Fri Feb 28, 12:00 noon due Fri March 20, 12:00 noon Wed April 22 + Wed April 29

Your final paper will explore a topic related to environments & health. It must include a thorough, well-organized literature review (with at least 12 references – mostly journal articles). The paper may be either: 1) a research grant proposal or 2) an empirical research paper (i.e., collect and analyze data & report findings).

Course Objectives

- Demonstrate understanding of influence of built & natural environment on health & health behaviors.
- Think critically to apply theory and other content to real-world contexts.

- Apply multi-disciplinary perspectives including planning, public health, & environmental psychology to health & environment issues.
- Communicate effectively, both orally and in writing, related to environment and health issues.
- Develop interpersonal skills; work effectively together.
- Understand interdependence & social responsibility through service learning project.

DEA Statement DEA is dedicated to fostering a respectful and accepting learning community in which individuals from various backgrounds, experiences, and perspectives can embrace and respect diversity. Everyone in this community is empowered to participate in meaningful learning and discussion, regardless of an individual's self-identified gender, sexual orientation, race, ethnicity, religion, or political ideology. We encourage students to share their uniqueness; be open to the views of others; honor and learn from their colleagues; communicate in a respectful manner; and create an inclusive environment.

SOME RELEVANT WEBSITES:

Active Living Research, Robert Wood Johnson Foundation http://www.activelivingresearch.org/

Change Lab Solutions http://changelabsolutions.org/

CDC – Designing and Building Healthy Places http://www.cdc.gov/HEALTHYPLACES/

EPA's Health Research http://www2.epa.gov/healthresearch

Healthy Eating Research, Robert Wood Johnson http://www.healthyeatingresearch.org/

Foundation

National Park Service, Healthy Parks, Healthy People US https://www.nps.gov/public_health/hp/hphp/partners_ptp.htm

Perkins & Will's Transparency Project http://transparency.perkinswill.com/

Public Health Law Center http://publichealthlawcenter.org/topics

Side Walk Labs https://www.sidewalklabs.com

Smart Growth American http://www.smartgrowthamerica.org/research/dangerous-by-

design/dbd2014/national-overview/

The Project for Public Spaces http://www.pps.org/
The Story of Stuff http://storyofstuff.org

COOL TOOLS:

EPA's EnviroAtlas: http://enviroatlas.epa.gov/enviroatlas/DataFactSheets/index.html

http://enviroatlas.epa.gov/enviroatlas/atlas.html

Good Guide: http://www.goodguide.com/
 Walkscore http://www.walkscore.com/
 Gap Minder http://www.gapminder.org/
 Park Score http://parkscore.tpl.org/

INTRODUCTIONS

22 January, Wednesday Introduction: Environmental Impacts on Health

Koehler, K., Latshaw, M., Matte, T., Kass, D., Frumkin, H., Fox, M., ... & Burke, T. A. (2018). Building healthy community environments: a public health approach. *Public Health Reports*, *133*(1 suppl), 35S-43S.

Robert Wood Johnson Foundation (2014). *Time to Act: Investing in the Health of our children and communities*. Executive Summary, pp. 1-31 [peruse]

Optional Readings¹:

Jackson R.J., Kochtitzky C: Creating a healthy environment: the impact of the built environment on public health. Available from http://www.sprawlwatch.org/health.pdf

Srinivasan, S., O'Fallon, L.R. and Dearry, A. (2003). Creating healthy communities, healthy homes, healthy people: initiating a research agenda on the built environment and public health. *AJPH*, 93 (9), 1446-1450.

Week 2

29 January, Wednesday History of Environment & Public Health; & Health Impact Assessment

Wells, N.M., Evans, G.W. & Yang, Y. (2010). Environments and Health: Planning Decisions as Public Health Decisions. *Journal of Architectural and Planning Research*, 27 (2), 124-143.

Owens, C (2016). Reconnecting urban planning and public health. *Next City*. January 29, 2016. https://nextcity.org/daily/entry/urban-planning-public-health-collaborating

Dannenberg, A.L. & Capon, A.G. (2016). Healthy Communities. Ch 15. In: *Environmental Health from global to local, pp. 377-411.* In: H. Frumkin (Ed.) John Wiley & Sons: San Francisco, CA. [excerpt: 377-385].

Bloomberg, M.R. et al., (2010). *Active Design Guidelines: promoting physical activity and health in design*. Chapter 1: Environmental design and health: past and present, pp. 12-19; Chapter 2: Urban design: creating an active city, pp. 22-24; peruse 25-65

Bhatia, R. (2011). *Health Impact Assessment: A Guide for Practice*. Oakland, CA: Human Impact Partners. Principles & Values p. ix; Introduction pp. 1-7; Steps and Activities in the HIA Process pp. 9-19.

Review at least two of the following websites:

- Centers for Disease Control & Prevention, HIA: http://www.cdc.gov/healthyplaces/hia.htm
- Active Living Research, RWJF, HIA: http://www.activelivingresearch.org/resourcesearch/hia
- World Health Organization, HIA: http://www.who.int/hia/en/
- Heath Impact Project: http://www.healthimpactproject.org/hia/us

Upstream Public Health (May 2011). *Health Impact Assessment HB 2800: Oregon Farm to School and School Garden Policy* https://www.issuelab.org/resources/12943/12943.pdf [Peruse].

Kuo, F.E. (2002). Bridging the gap: How scientists can make a difference. In R.B. Bechtel and A. Churchman (Eds.) *Handbook of Environmental Psychology*, NY: Wiley, pp. 335 – 346.

Optional Readings:

Bhatia, R. & Wernham, A (2008). Integrating human health into environmental impact assessment: An unrealized opportunity for environmental health and justice. *Environmental Health Perspectives*, 116 (8), 991-1000.

Frumkin, H., Frank, L. and Jackson, R. (2003). Ch. 3 "Evolution of urban health" In: *Urban sprawl and public health*. Colvelo, CA: Island Press.

Gifford, R. (2002). Making a Difference: Some ways environmental psychology has improved the world. In R.B. Bechtel and A. Churchman (Eds.) *Handbook of Environmental Psychology*, NY: Wiley, pp. 323 - 334.

Morris, M. (2006). *Integrating Planning and Public Health: Tools and Strategies to create healthy places.* Chapter 6: Health Impact Assessment. Pp. 73-80.

Sloan, D.C. (2006). From congestion to sprawl: Planning and health in historical context. *Journal of the American Planning Association*, 72 (1), 10-18.

Week 3

THEORETICAL GROUNDING [note: class 2:30-4:30 today]

5 February, Wednesday Human Ecology, Health Promotion, The Life Course Perspective & the Reasonable Person Model

Bronfenbrenner, U. & Morris, P. (1998). The ecology of developmental process. In W. Damon and R. Lerner (Eds.) *Handbook of Child Psychology*, 5th ed. 992-1028. Wiley.

Optional readings are not provided on Canvas. Some may be useful resources for paper or other pursuits.

Stokols, D. (1996). Translating social ecological theory into guidelines for community health promotion. *American Journal of Health Promotion*, *10*, 282-298.

Wethington, E. (2005). An overview of the life course perspective: Implications for health and nutrition. *Journal of Nutrition Education and Behavior, 37* (3), 115-120.

Basu, A. & Kaplan, R. (2015). Chapter 1: The Reasonable Person Model: Introducing the Framework and the Chapters. In: A. Basu + R. Kaplan (eds) *Fostering Reasonableness: Supportive Environments for Bringing out the Best.* Michigan Publishing, Ann Arbor, MI. [see: https://quod.lib.umich.edu/m/maize/13545970.0001.001]

Kaplan, S. & Kaplan, R. (2008). Bringing out the best in people: A psychological perspective. *Conservation Biology*, 22 (4), 826-829.

Optional Readings:

Bronfenbrenner, U. (1979). The ecology of human development: experiments by nature and design. Cambridge, MA: Harvard University Press. Chapter 1: Purpose and Perspective, pp 3-15; Chapter 2: Basic Concepts, pp 16-42.

Elder, G.H. (1998). The life course and human development. Chapter 16. In: W. Damon and R.M. Lerner (Eds.) Handbook of Child Psychology. Volume 1: Theoretical Models of Human Development. NY: J. Wiley & Sons, Inc.

Kaplan, S. & Kaplan, R. (2004). Health, supportive environments, and the reasonable person model. *American Journal of Public Health*, 93 (9), 1484-1489.

Kaplan S. & Kaplan, R. (2011). Well-being, reasonableness, and the natural environment. *Applied Psychology: Health & Well-Being*, 3 (3), 304-321. doi: 10.1111/j.1758-0854.2011.010155.x

Pavalko, E.K. (1997). Beyond Trajectories: multiple concepts for analyzing long-term processes. In M.A. Hardy (Ed.) *Studying aging and social change: conceptual and methodological issues.* Sage Publications.

Evans, G.W. (2004). The environment of childhood poverty. American Psychologist, 59 (2), 77-92.

Rutter, M. (1987). Psychosocial resilience and protective mechanisms. Am J. of Orthopsychiatry, 57 (3), 316-331.

Stokols, D., Perez Lejano, R. & Hipp, J. (2013). Enhancing the resilience of human-environment systems: A social ecological perspective. *Ecology & Society, 18* (1) [http://www.ecologyandsociety.org/vol18/iss1/art7/]

Stokols, D. (1992). Establishing and maintaining healthy environments: toward a social ecology of health promotion. American Psychologist, 47, 6-22.

MONDAY Feb 11, 12:00 noon PROJECT: BTG Topic, Audience & Product Idea DUE ~1 page

Week 4 HOUSING

12 February, Wednesday Housing & Health – Physical Health & Mental Health

Sandel, M and Desmond, M. (2017). Investing in housing for health improves both mission and margin. *JAMA*, 318 (23), 2291-2292.

Epstein, H. (2013). Lead Poisoning: The Ignored Scandal. The New York Review of Books, March 21, 2013.

Shaw, M. (2004). Housing and public health. *Ann. Rev. Public Health*, 25, 397-418. excerpt pp. 387-398; 402-414.

Schultz, A. and Northridge, M.E., (2004). Social determinants of health: Implications for environmental health promotion. *Health Education & Behavior, 31* (4), 455-471.

Vaid, U. & Evans, G.W. (2017). Housing quality and health: An evaluation of slum rehabilitation in India. *Environment & Behavior, 49* (7), 771-790. [peruse]

Weitzman, M., Baten, A., Rosenthal, D.G., Hoshino, R., Tohn, E., & Jacobs, D.E. (2013). Housing and child health. *Curr Probl Pediatr Adolesc Health Care*, 43, 187-224. [peruse]

Optional Readings:

Bartlett, S. N. (1997). Housing as a factor in the socialization of children: A critical review of the literature. *Merrill-Palmer Quarterly*, 43 (2), 169-198.

Bashir, S.A. (2002). Home is where the harm is: Inadequate housing as a public health crisis. *American Journal of Public Health*, 92 (5), 733-738.

Dunn, J., and Hayes, M. (2000). Social inequality, population health and housing: A study of two Vancouver neighborhoods. *Social Science and Medicine*, *51*, 563-587.

Evans, G.W., Wells, N.M., Chan, E., & Saltzman, H. (2000). Housing and mental health. *Journal of Consulting and Clinical Psychology*, 68, 526-530.

Evans, G.W., Wells, N.M. and Moch, A. (2003). Housing and mental health: A review of the evidence and a methodological and conceptual critique. *Journal of Social Issues*, 59 (3), 475-500.

Evans, G.W. (2003). The built environment and mental health. Journal of Urban Health, 80 (4), 536 - 555.

Gifford, R. and Lacombe, C. (2006). Housing quality and children's socioemotional health. *Journal of housing and built environment, 21*, 177- 189.

Krieger, J. & Higgins, D.L. (2002). Housing and health: time again for public health action. *American Journal of Public Health*, 92 (5), 758-768.

Thomson, H. Petticrew, M., and Morrison, D., (2001). Sorting out the connections between the built environment and health. A conceptual framework for navigating pathways and planning healthy cities. *J of Urban Health, 80* (4), 556-568

Week 5

19 February, Wednesday

Healthy Products, Healthy Interiors & Healthy Buildings

Leonard, A. The Story of Stuff. Free Press: New York. Chapter 2 "Production" pp. 44 -105

Schettler, T. (2006). Human exposure to phthalates via consumer products. *International Journal of Andrology*, 29, 134-139.

Kriebel, D. et al (2001). The precautionary principle in environmental science. *Environmental Health Perspectives*, 109 (9), 871 – 876.

The WELL Building Standard. Explore: https://www.wellcertified.com/en/explore-standard

International Living Future Institute. Living Building Challenge 3.0: A Visionary Path to a Regenerative Future. http://living-future.org/sites/default/files/reports/FINAL%20LBC%203 0 WebOptimized low.pdf [peruse]

Transparency Project Website: www.Transparency.PerkinsWill.com [peruse]

Google Green: http://www.google.com/green/efficiency/oncampus/#building [peruse]

Optional readings:

Stapleton, H.M., Sharma, S., Getzinger, G., Ferguson, P.L., Gabriel, M., Webster, T.F. & Blum, A. (2012). Novel and high volume use flame retardants in US couches reflective of the 2005 PentaBDE phase out. *Environmental Science & Technology*, 46 (24), 13432-9.

Colborn, T., Dumanoski, D., & Myers, J.P. (1996). Our Stolen Future. Wiley: New York.

Smith, R. & Lourie, B. (2009). Slow Death by Rubber Duck. Counterpoint publishers, Berkeley, CA.

Bernstein, F.A. (2012) To help make sure your home is healthy, an ingredients list. *New York Times*, Feb 1, 2012. http://www.nytimes.com/2012/02/02/garden/an-online-database-of-hazardous-building-materials.html? r=2

Anderson R. (2009). Ray Anderson, CEO of Interface Carpet: The business logic of sustainability. http://www.ted.com/talks/ray_anderson_on_the_business_logic_of_sustainability.html

February Break: Saturday 2/22 – Tuesday 2/25

Week 6

NEIGHBORHOODS

26 February, Wednesday

Neighborhoods & Health

Ellen, I.G., Mijanovich, T. and Dillman, K. (2001). Neighborhood effects on health: exploring the links and assessing the evidence. *Journal of Urban Affairs*, 23 (3-4), 391-408.

Epstein, H. (2003). Enough to make you sick? *The New York Times Magazine*, October 12, 2003. http://www.nytimes.com/2003/10/12/magazine/ghetto-miasma-enough-to-make-you-sick.html?pagewanted=all&src=pm

Rollings, KA, Wells, NM, Evans, GW, Bednarz, A, and Yang, Y (2017). Housing and neighborhood physical quality: Children's mental health and motivation. *Journal of Environmental Psychology*, *50*, 17-23.

Mitchell, K.S., Aiello, A.E., Galea, S., Uddin, M., Wildman, D., and Koenen, K.C. (2013). PTSD and obesity in the Detroit neighborhood health study. *Gen Hosp. Psychiatry*, 35 (6), 671-673.

Rundle, A., Neckerman, K.M., Freeman, L., Lovasi, G.S., Purciel, M., Quinn, J., Richards, C., Sircar, N., & Weiss, C., (2009). Neighborhood food environment and walkability predict obesity in New York City. *Environmental Health Perspectives*, *117* (3) 442-447.

Larson, N.I., Story, M.T., & Nelson, M.C. (2009). Neighborhood environments: disparities in access to healthy foods in the U.S. *American Journal of Preventive Medicine*, *36* (1), 74-81.

Optional Readings:

Frumkin, H., Frank, L. and Jackson, R. (2003). Ch. 9 "Social capital, sprawl and health" In: *Urban sprawl and public health*. Colvelo, CA: Island Press.

Leventhal, T. & Brooks-Gunn, J. (2000). The neighborhoods they live in: The effects of neighborhood residence on child and adolescent outcomes. *Psychological Bulletin*, *126*, 309-337.

Morland, K., Wing, S., and Roux, A.D. (2002). The contextual effect of the local food environment on residents' diets. American Journal of Public Health, 92 (11), 1761-1767

- O'Campo, P. (2003). Invited commentary: Advancing theory and methods for multilevel models of residential neighborhoods and health. *American Journal of Epidemiology*, *157*, 9-13.
- Katz, L.F., Kling, J.R. & Liebman, J.B. (2001). Moving to opportunity in Boston: Early results of a randomized mobility experiment. *The Quarterly Journal of Economics*, 607-654.
- Morland, K., Wing, S., Roux, A.D., and Poole, C. (2002). Neighborhood characteristics associated with the location of food stores and food service places. *American Journal of Preventive Medicine*, 22 (1), 23-29.
- Sampson, R., Morenoff, J.D., & Earls, F. (1999). "Beyond Social Capital: Spatial Dynamics of Collective Efficacy for Children." *American Sociological Review.* 64, 633-660.
- Stein, C.S. & Bauer, C. (1934) Store buildings and neighborhood shopping centers. *Architectural Record*, 75 (2) 174-187. Story, M., Kaphingst, K.M. Robinson-O'Brien, R. & Glanz, K. (2008). Creating healthy food and eating environments:
 - policy and environmental approaches. Annu. Review Public health, 29, 253-272.
- Wrigley, N., Warm, D. and Margetts, B. (2003). Deprivation, diet, and food-retail access: findings from the Leeds 'food deserts' study. *Environment and Planning*, *35*, 151-188.

FRIDAY Feb 28, 12:00 noon PAPER Ideas Due – 1-2 pages w/ at least 5 citations

Week 7

4 March, Wednesday

Physical Activity, Active Living, Pedestrian Safety

Bloomberg, M.R. et al., (2010). *Active Design Guidelines: promoting physical activity and health in design*. Chapter 2: Urban design: creating an active city, pp. 22-24; peruse 25-65 [review, see Week 2]

Wells, N.M., et al. (2007). Environment, design and obesity. Environment and Behavior, 39 (1), 6-33.

Frumkin, H. (2002). Urban Sprawl and Public Health. Public Health Reports, 117, 201-217.

Kuhlman, R. Helping Johnny Walk to School. National Trust for Historic Preservation [peruse]

Vaughn, Alexa (nd) DeafScape: Applying DeafSpace to Landscape. Ground Up, Issue 8, http://groundupjournal.org/deafscape

Rogers, S. H., Gardner, K. H., & Carlson, C. H. (2013). Social capital and walkability as social aspects of sustainability. *Sustainability*, *5*(8), 3473-3483.

Mowen, A.J. (2010). Parks, playgrounds and active Living. Research synthesis. Active Living Research.

Russo BJ et al (2018). Pedestrian Behavior at Signalized Intersection Crosswalks: Observational Study of Factors Associated with distracted walking, pedestrian violations, and walking speed. *Transportation Research Record*, 2672(35), 1-12.

Peruse: Vision Zero Network: https://visionzeronetwork.org

Wells, N.M, Myers, B.M. & Henderson, C.R. (2014). School gardens and physical activity: A randomized controlled trial of low-income elementary schools. *Preventive Medicine*, 69, S27-S33.

Optional Readings:

- Appleyard, D. and Lintell, M. (1972). The environmental quality of city streets: the residents' viewpoint. *Journal of the American Institute of Planners, 38*, 84-101. (Also in Kaplan & Kaplan (1982). *Humanscape*. 233-258. Ulrich's.)
- Barriers to Children walking and biking to school United States, 1999. *Morbidity and Mortality Weekly Report, 51* (32), August 16, 2002. CDC.
- Coleman KJ, Gonzalez EC (2001). Promoting stair use in a US-Mexico border community. *American Journal of Public Health*, 91(12): 2007-2009.
- Ewing, R., Schmid, T., Killingsworth, R., Zlot, A., and Raudenbush, S. (2003). Relationship between urban sprawl and physical activity, obesity, and morbidity. *Am. J. of Health Promotion*, *18*(1), 47-57.
- Frank, L.D., Engelke, P.O. & Schmid, T.L. (2003). Chapter 3: Physical activity and public health (pp. 38-54)
- Kerr J, Eves F, Carroll D (2001). Encouraging stair use: Stair-riser banners are better than posters. *American Journal of Public Health*, 91 (8): 1192-1193.
- Kerr, N.A., Yore, M.M., Ham, S.A. & Dietz, W.H. (2004). Increasing stair use in a worksite through environmental changes. *American Journal of Health Promotion*, 18 (4), 312-315.
- King, A.C., Stokols, D., Talen, E., Brassington, G.S. and Killingsworth, R. (2002). Theoretical approaches to the promotion of physical activity: forging a transdisciplinary paradigm. *American Journal of Preventive Medicine*, 23 (25), 15-25.
- Muraven, M. & Baumeister, R.F. (2000). Self-regulation and depletion of limited resources: Does self-control resemble a muscle? *Psychological Bulletin*, 126 (2), 247-259. [peruse]
- Pate R.R., Pratt M., Blair S.N., et al. (1995). Physical activity and public health: a recommendation from the Centers for Disease Control and Prevention and the American College of Sports Medicine. *Journal of the American Medical Association*. 273:402-407
- Russell WD, Hutchinson J (2000). Comparison of health promotion and deterrent prompts in increasing use of stairs over escalators. Percept. Motor Skills, 91 (1), 55-61.

Sallis, J. F. Bauman, A., & Pratt, M. (1998). Environmental and policy interventions to promote physical activity. *Am. Journal of Preventive Medicine*, *15* (4), 379-397.

Shute, N. (1991). Driving beyond the limit. The Amicus Journal. Spring 1991. 10-17

Savitch, H.V. (2003). How suburban sprawl shapes human well-being. Journal of Urban Health, 80 (4), 590 -607.

MONDAY March 9, 12:00 noon BTG PROJECT: draft / outline of DUE 2 page max.

Week 8

11 March, Wednesday The Food Environment: From Micro to Macro

Dubowitz, T. et al., (2015). Changes in diet after introduction of a full service supermarket in a food desert. Health Aff (Millwood). 34 (11), 1858-1868.

Caspi, C.E., Sorenson, G., Subramanian, S.V. & Kawachi, I. (2012). The local food environment and diet: A systematic review. *Health & Place*, *18* (5), 1172-1187.

Story, M., Kaphingst, K.M. Robinson-O'Brien, R. & Glanz, K. (2008). Creating healthy food and eating environments: policy and environmental approaches. *Annu. Review Public health*, 29, 253-272

Cohen, D.A. (2010). Evidence on the food environment and obesity (ch 14). In: Waters, Swinburn & Seidell & Uauy (Eds) *Preventing Childhood obesity*, Blackwell Publishing.

Greenhalgh, DG, Bridges, P, Coombs, E, Chapyak, D, Doyle, W, O'Mara, MS, and Palmieri, TL (2006). Instant cup of soup: design flaws increase risk of burns, *Journal of Burn Care and Research*, 27(4), 476-481.

Optional Readings:

Donofrio, G.A. (2007). Feeding the City. Gastronomica: The journal of food and culture. 7 (4), 30-41.

Wansink, B. (2004). Environmental factors that unknowingly increase food intake and consumption volume of unknowing consumers. *Annual Review of Nutrition*, 24: 455-479.

Brown, H. (2007). Democracy, by way of food. The Ithaca Times, January 10 - 16, 2007. pp. 6, 7, 11.

Cummins, S. and Macintyre, S. (2006). Food environments and obesity – neighborhood or nation? *International Journal of Epidemiology*, 35, 100-104.

Bilger, B. (2006). The lunchroom rebellion: An haute-cuisine chef goes back to school. *The New Yorker*, Sept 4, 2006. pp. 72 – 80.

Week 9

18 March, Wednesday

The Life Course & Health

Review Wethington (2005) See Week 3.

Gotlib, IH & Wheaton, B (1997). Trajectories and turning points over the life course: concepts and themes. Chapter 1, pp. 1-25 In: *Stress and adversity over the life course*. IH Gotlib and B Wheaton (Eds.) Cambridge University Press.

Clark, AE, Fleche, S., Layard, R., Podthavee, N., and Ward, G (2017). The key determinants of happiness and misery. Chapter 5 In: J. Heliwell, R. Layard and J. Sachs (Eds.) World Happiness Report 2017.

Engemann, K, Pederson CB, Arge, L, Tsigogiannis, C., Mortensen, PB, Svenning, J (2019). Residential green space in childhood is associated with lower risk of psychiatric disorders from adolescence into adulthood. Proceedings of the National Academy of Sciences (PNAS),

Poulton R., Caspi A., Milne B.J., Thomson W.M., Taylor A., Sears M.R., Moffitt T.E. (2002). Association between children's experience of socioeconomic disadvantage and adult health: A life-course study. *Lancet* 360:1640-45.

Eckenrode, J., et al., (2010). Long-term effects of prenatal and infancy nurse home visitation on the life course of youths: 19-year follow-up of a randomized trial. *Archives peditr adolesc med, 164* (1), 9-15.

Optional Readings:

Kaplan, G.A. and Larzarus, N.V. (1991). Psychosocial factors in the natural history of physical activity. *American Journal of Preventive Medicine*, 7 (1), 12-17.

King, A., Kiernan, M., Ahn, D., and Wilcox, S. (1998). The effects of marital transitions on changes in physical activity: results from a 10-year community study. *Annals of Behavioral Medicine*, 20 (2), 64-69.

Lissau I, Sørensen T. (1994). Parental neglect during childhood and increased risk of obesity in young adulthood. *Lancet*; 343:324-27.

Wells, N.M. & Lekies, K.S. (2006). Nature and the life course: Pathways from childhood nature experiences to adult environmentalism. *Children, Youth & Environments, 16* (1), 1-25.

25 March, Wednesday

Health Disparities: Poverty, Race & Health

Perlin, L.I., Schieman, S., Fazio, E.M., Meersman, S.D. (2005). Stress, health, and the life course: some conceptual perspectives. *Journal of health and social behavior, 46* (June), 205-219.

Evans, G.E.& Kantrowitz, E. (2002). Socioeconomic status and health: The potential role of environmental risk exposure, *Ann. Rev. Public Health*, 23, 303-331.

Ten Things to Know about Health. Unnatural Causes (2008). California Newsreel.

Brilliant, Larry, 2007, Climate, Poverty, and Health: Time for Preventive Medicine. Seventh Annual John H. Chafee Memorial Lecture on Science and the Environment. Washington, DC: National Council for Science and the Environment.

Bullard, R.D. & Wright, B.B. (1993). Environmental Justice for all: community perspectives on health and research needs. *Toxicology and Industrial Health*, *9*(5), 821 – 841 (excerpt 821-828).

Wolch, J.R., Byrne J., & Newell, J.P. (2014). Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough' Landscape *and Urban Planning*, 234-244.

Week 11

------ SPRING BREAK – Saturday 3/28 – Sunday 4/5 ------

1 April, Wednesday

No Class

Week 12

8 April, Wednesday PROJECT: Bridging the Gap (BTG)

8 April BTG Project Due (at start of class) & In-Class Presentations

Week 13

15 April, Wednesday Natural Environment & Human Well-Being

Hartig, T., Mitchell, R., deVries, S., & Frumkin, H. (2014). Nature and health. *Annual Review of Public Health*, *35*, 21.1 – 21.22.

Kuo, M, Browning, MHEM, and Penner, ML (2018). Do lessons in nature boost subsequent classroom engagement? Refueling students in flight. *Frontiers in Psychology, 8*, 1-15 doi.org/10.3389/fpsyg.2017.02253

Twenge, J.M (2019). The sad state of happiness in the United States and the role of digital media. Chapter 5 in: JF Helliwell, R. Layard & JD Sachs (Eds.) *World Happiness Report* 2019.

Mitchell, R., & Popham, F. (2008). Effect of exposure to natural environment on health inequalities: an observational population study. *The Lancet*, 372 (9650), 1655-1660.

Wells, N.M. and Evans, G.W. (2003). Nearby Nature: A Buffer of Life Stress among Rural Children? *Environment and Behavior, 35* (3), 311-330.



Kaplan, S. and Kaplan, R. (1989). Cognition and Environment. Ann Arbor: Ulrich's. pp. 77-88.

South, E. C., Hohl, B. C., Kondo, M. C., MacDonald, J. M., & Branas, C. C. (2018). Effect of Greening Vacant Land on Mental Health of Community-Dwelling Adults: A Cluster Randomized Trial. *JAMA Network Open*, 1(3), e180298-e180298.

Optional Readings:

Kuo, F.E. (2001). Coping with poverty: impacts of environment and attention in the inner city. *Environment and Behavior,* 33 (1), 5-34.

Berman, M.G., Jonides, J. and Kaplan, S. (2008). The cognitive benefits of interacting with nature. *Psychological Science*, *19* (12), 1207-1212.

Frumkin, H (2001). Beyond Toxicity: human health and the natural environment. *Am. J of Prev Medicine*, 20(3), 234-240 Hartig, T., Evans, G.W., Jamner, L.D., Davis, D.S. and Gärling, T. (2003). Tracking restoration in natural and urban field settings. *Journal of Environmental Psychology*, 23, 104-124.

Ulrich, R.S. (1984). View through a window may influence recovery from surgery. Science, 224, 420-421.

22 April, Wednesday

Consumption & Affluenza & Presentation of Final Papers



London, B. (1932). Ending the depression through planned obsolescence. (pdf retrieved from Wikipedia)

DeGraaf, J. Wann, D., & Naylor, T.H. (2000). *Affluenza: The all-consuming epidemic*. San Francisco: Berrett-Koehler Publishers, Inc. Introduction: what is affluenza pp 1- 8;-Ch 29 Annual checkups, pp 224-230.-Optional: Ch 18 An emerging epidemic, pp141-147; Ch 19 The age of affluenza, pp148-154.

Miller, T. (1995). *How to Want What You Have.* Avon Books. Ch 3 "Human Nature" 54-79.

Milburn, J (2017). Slow clothing culture. Journal of the Home Economics Institute of Australia, 24 (2), 2-10.

Elgin, D. (1993). Voluntary Simplicity. William Morrow: New York. "Simplicity and Consumption" 147-152.

Watson, M. (2009). Purchasing is for suckers. *Buzzsaw*. March 1st, 2009 http://www.buzzsawmag.org/2009/03/01/purchasing-is-for-suckers/

24 April, Friday: SITE VISIT – TBA 1:00 – 4:30 pm

Week 15

29 April, Wednesday Environmentalism & Sustainability: Taking Care of our Planet & Presentation of Final Papers

Evans, G.W. (2019). Projected Behavioral Impacts of Global Climate Change. *Annual Review of Psychology*, 70, 449-474. [peruse]

Aldred Cheek, K and Wells, NM (2020). Changing behavior through design: A lab fume hood closure experiment. *Frontiers in Built Environment, 5,* 1-13

Winter, D.D.N. and Koger, S.M. (2010). *The psychology of environmental problems: psychology for sustainability*. Mahwah NJ: Lawrence Erlbaum Associates. Chapter 1: What on Earth are we doing? Pp. 1 – 29. Chapter 11: Putting it together – using psychology to build a sustainable world. Pp. 321-354.

Stern, P.C. (2000). Psychology and the science of human-environment interactions. *American Psychologist*, 55 (5), 523 – 530.

DeYoung, R. (2000). Expanding and evaluating motives for environmentally responsible behavior. *Journal of Social Issues*, *50* (3), 509-526.

Optional Readings:

Leonard, A. (2010) *The Story of Stuff.* New York. Simon & Schuster. And see: http://storyofstuff.org/resources/# Wells, N.M. and Lekies, K.S. (2006). Nature and the life course: pathways from childhood nature experiences to adult environmentalism. *Children, Youth and Environment, 16* (1), 1-25.

Osbaldiston, R. and Sheldon, K.M. (2003). Promoting internalized motivation for environmentally responsible behavior: A prospective study of environmental goals. *Journal of Environmental Psychology*, 23, 349 – 357.

Monday 4 May, 12:00 noon

Final Papers Due