

Health and Social Behavior, Fall, 2007

(psych 415)

David J. McKirnan

The University of Illinois at Chicago, Department of Psychology
m/c 285, 1007 W. Harrison St., Chicago, Il. 60607-7137
312-413-2634 / fax: 312-413-4122 / e-mail: davidmck@uic.edu

Updated 9/13/07

<p>Health and Social Behavior is a graduate course addressing theory and research on social and psychological factors in health and health behavior. The focus will be theories and data from clinical & social psychology and public health, addressing health- or prevention-related behavior, stress and coping, design and evaluation of behavioral interventions, and community or policy-level issues.</p> <p>Readings will be primarily journal articles and reviews, with some general text chapters. Students will write a brief (1 -2 Pp., double spaced) reaction paper each week discussing the readings. The primary purpose of the reaction papers is to give you momentum for class discussion, so try to be as innovative and speculative as you can.</p> <p>The major evaluation for the course will be a PHS-style grant proposal presenting an empirically testable model of a health behavior or intervention. Students are strongly advised to articulate this project with their other (MA, Prelim, Ph.D.) work.</p> <p>A general topic list is given here. We will not address all of these in depth. The target behaviors & theories we address will be guided by student (and instructor!) interests (as may the class meeting time).</p>	Course Schedule (click on links to go to a given week)	
	Week 1	Introductions, student goals & projects
	Week 2	Overview: How theories work
	Week 3	Overview of Health behavior & behavioral medicine concepts
	Week 4	Basic attitude theory, self-regulation
	Week 5	Self-regulation, Self-Efficacy and the Health Belief model.
	Week 6	General Social-Cognitive / Affective Models: Cognitive representations of health and illness, Protection Motivation Theory
	Week 7	Judgments of vulnerability: Perceived threat, motivated risk perception, realistic & unrealistic optimism.
	Week 8	Self-awareness, "Automaticity", and Cognitive Escape.
	Week 10	Socio-economic Status and Health.
	Week 11	SES, Race and Health.
	Week 12	Overview of

	Psychoimmunology.
Week 13	Psychoimmunology 2: Effects and interventions
Week 14	Policy, Economic and Political Influences on Health
Week 15	Spirituality, Happiness, Mindfulness, Well-Being and Health
Misc. Class materials, updated 9/13/07 [Look for updates here!]	
Paper outline here.	

Weekly topics & readings.

Introductions, student goals and projects, overall framework of Health Psychology

This first week we will spend discussing the course and articulating student goals. So, for your "reaction" paper please describe your interests in Health Behavior, particularly vis-a-vis theories or bodies of empirical work you are particularly interested in. I will try to adjust the schedule to meet everyone's

Week 1. interests.

To kick off we will have readings at two extremes, just to illustrate the range of issues we will address and to get you all thinking. The first is on social networks and obesity (the paper that has been all over the news recently), and two others taking much more of a neuro-biological look at behavior, one a review of "Social neuroscience" and another on histocompatibility, mating and romantic faithfulness (and you thought love was an emotion...).

Primary Readings

Christakis, N. A., & Fowler, J. H. (2007). The Spread of Obesity in a Large Social Network over 32 Years. *N Engl J Med*, 357(4), 370-379. [Link](#)

Barabasi, A.-L. (2007). Network Medicine -- From Obesity to the "Diseasome". *N Engl J Med*, 357(4), 404-407. [Link](#)

Cacioppo, J. T., Amaral, D. G., Blanchard, J. J., Cameron, J. L., Sue Carter, C., Crews, D., et al. (2007). Social Neuroscience: Progress and Implications for Mental Health. *Perspectives on Psychological Science*, 2(2), 99-123. [Link](#)

Garver-Apgar, C. E., Gangestad, S. W., Thornhill, R., Miller, R. D., & Olp, J. J. (2006). Major Histocompatibility Complex Alleles, Sexual Responsivity, and Unfaithfulness in Romantic Couples. *Psychological Science*, 17(10), 830-835. [Link](#)

Discussion of grant proposal assignment. Overview of basic theories

Defining the research phenomena

Contrast spaces, defining research questions, counterfactuals.

What is explained in social science: structural presuppositions in explanations, "counterfactuals" and explanations.

Decisions about research strategies: testing theories, using theory to test applications.

Week 2. Criteria for causation: covariation, changeability, etc. The importance of construct validity.

Boundary conditions in research; the nature & importance of moderator effects in data & theory.

Non-linear models of social & behavioral change

The first two readings are pdf copies of Xerox copies – they may be a little difficult to read. Let me know if they are too rough. The first reading can be dense -- if you can put in some time on it, it is very rewarding. The White paper is a nice historical overview of concepts of "cause", whereas the Cook & Campbell paper is a nice fast read applying these concepts to psychology. Not here are structural modelling perspectives, which we can discuss in class.

Primary Readings

Garfinkel, A. (1981). *Forms of Explanation: Rethinking the Questions in Social Theory*. Yale University Press, New Haven. Pp. 1-74. [Link](#)

McGuire, W.J. (1983). A Contextualist theory of knowledge: Its implications for innovation and reform in psychological research. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology*, 16, 1-47, New York: Academic Press. [Link](#)

White, P.A. (1990). Ideas About Causation in Philosophy and Psychology. *Psychological Bulletin*, 1990, Vol. 108, No. 1, 3-18. [Link](#)

Cook, T.D. & Campbell, D.T. (1979). *Quasi-experimentation: Design & Analysis Issues for Field Settings*. Houghton Mifflin Co., Boston. Chapter 1, Causal inference and the language of experimentation, Pp. 1-36. [Link](#)

For a nice web- based overview go to: <http://en.wikipedia.org/wiki/Causality>

Bonus Reading:

A lot of university-based research pertinent to health is funded privately. The most conspicuous of this is drug research, although many other clinical trials are private funded. Pre-clinical and efficacy trials for a new medication can easily cost half a million dollars or more, so private industry is an important source of funding. However, this raises some serious reporting and validity issues. This piece from Atlantic is a nice

overview.

Press, E. & Washburn, J. (2000). The Kept University. The Atlantic Monthly. Volume 285, No. 3; page 39-54. (On-line version; www.TheAtlantic.com/issues/2000/03/press.htm). [Link](#)

2-pager assignment

For each week I want a 1 to 2 page (double spaced, regular margins) thought paper. Use this as a spring board to make insightful points in class and impress your fellows.

For this week see if you can apply some of the causality / contrast space / explanatory relatively concepts to your ongoing research. How have you struggled with defining your "contrast space" or articulating the "boundary conditions" of your research? Can you actually say what causes what in your specific research or in your field generally? Why is (or *is not*) this larger topic important in your area?.

Overview of Health behavior & behavioral medicine concepts

These readings are a little dated but give good overviews of core concepts and models. We will do more "big picture" stuff as we go along, particularly on the

Week 3. Psychosocial side. The Krantz article is limited to CHD, but gives a more recent look at core constructs.

Theory-testing PowerPoint show [here](#).

Basic health models PowerPoint show [here](#).

Primary readings

Breslow, L. (2004). Perspectives: The Third Revolution in Health. Annual Review of Public Health, Preface, Vol. 25, xii - xviii. [Link](#)

House, J.S., Landis, K.R., & Umberson, D (1988). Social relationships and health. Science, 241, 540-545. [Link](#)

Baum, A. & Posluszny, D.M. (1999). Health Psychology: Mapping Biobehavioral Contributions to Health and Illness. Annual Review of Psychology, 50, 137-163. [Link](#)

Krantz, D. S., & McCeney, M. K. (2002). Effects Of Psychological And Social Factors On Organic Disease: A Critical Assessment of Research on Coronary Heart Disease. *Annual Review of Psychology*, 53(1), 341-369. [Link](#)

Bonus Reading

Does crime spread like an infectious disease? Could other "problem" behaviors such as smoking or unsafe sex? Equally important, is the spread of one of these problems non-linear (unlike virtually all of our statistical models) such that a "flat" distribution suddenly takes off after some crucial threshold has been reached? We will address "diffusion" and norm models as we go, but here is a cute piece from the New Yorker on the Tipping Point. Gladwell, M. The Tipping Point. New Yorker. [Link](#)

2-pager assignment

Your class assignment will be a short version of a PHS research grant proposal. Begin thinking about your grant proposal topic and design; optimally you should take an active research interest and apply it directly to a core health behavior or health status (biomedical) outcome. Apply one of the models we discuss this week -- **be prepared to chat about it during class** so each of us can be discussing the actual applicability of

these general models and findings

Basic attitude theory, self-regulation

This is a fairly recent attitude overview by Ajzen, who wrote the granddaddy of attitude theories with Marty Fishbein at UIUC. We will spend a lot of time later on more sophisticated cognitive theories from Social Psychology, but this is a good review.

Week 4.

The Karoly paper is a little old but is still a nice overview of self-regulation, more from an information processing frame. There are also two more applied / descriptive papers.

Primary readings

Ajzen, I. (2001). Nature And Operation Of Attitudes. Annual Review of Psychology, 52(1), 27-58. [Link](#)

Karoly, P. (1993). Mechanisms of self-regulation: A systems view. Annual Review of Psychology, 44, 23-52. [Link](#)

Williams, G.C., Rodin, G.C., Ryan, R.M., Grolnick, W./S., & Deci, E.L. (1998). Autonomous regulation and long - term medication adherence in adult outpatients. Health Psychology, 17(3), 269-276. [Link](#)

Albarracin, D., Johnson, B. T., Fishbein, M., & Muellerleile, P. A. (2001). Theories of reasoned action and planned behavior as models of condom use: A meta-analysis. Psychological Bulletin, 127(1), 142-161. [Link](#)

Bonus Reading

This paper is not really about attitudes or norms per se. (a key component of the Fishbein model is social norms), although I guess I could make a linkage between cultural norms, sexual attitudes, and lax self-regulation in key environments. Anyway, this is an excellent piece on the "down low" phenomenon among African-American men who have sex with men. Just to spice up your week... [Link](#)

2-pager assignment

Attitude theory is in fact one important perspective on self-regulation; it assumes that these consciously available, fairly rational constructs directly guide our behavior within the specific situations they pertain to. Ajzen adds some perspective from Efficacy and related theories, suggesting that simple "here is what I should do" judgements may not be the whole story. Karoly and others of course go well beyond this. What is your take on the utility of these different theories in the health area you are most interested, and why? (Of course, any intelligent alternative 2-pager topic is just fine...).

More on self-regulation, plus Self-Efficacy and the Health Belief model.

This week we have a good self-regulation overview by Carver & Scheier. This is a little redundant with the Karoly paper, but is more comprehensible. They also provide a brief overview of Robin Vallacher's Action Identification theory, Gray's approach-avoidance framework, and some non-linear models. Also in the general self-regulation frame is Bandura's paper on self-efficacy and health

behavior. This is dated but represents a nice overview of his perspective, plus some nice health data. The bonus paper is a monster chapter by Bandura giving his Sermon from the Mount on how all of behavior works. The Health Belief paper is a big bird's-eye-view discussion that could be more critical but provides a nice overview.

Week 5. We will return briefly to the Karoly paper at the beginning of class to finish that off, then get to Carver. After the break we can do Bandura and Health Belief. If we do not get through the Health Belief model we will pick it up next week, when we cover a other social-psychology infused health behavior models. These files are large -- particularly the bonus paper.

Primary readings

Carver, C.S. & Scheier, M.F. (2000). On the structure of behavioral self-regulation. In: M. Boekaerts, P. Pintrich & M. Zeidner (Eds.), *Handbook on Self-Regulation*. New York: Academic Press. Pp. 41-84. [Link](#)

Bandura, A. (1991). Self-efficacy Mechanism in Physiological Activation and Health-Promoting Behavior. In J. Madden (Ed.), *Neurobiology of Learning, Emotion, and Affect*. New York: Raven, Pp. 229-269. [Link](#)

Strecher, V.J., Cahampion, V.L. & Rosenstock, I.M. (1997). The health belief model and health behavior. In D.S. Gochman (Ed.), *Handbook of Health Behavior Research I: Personal and Social Determinants*. New York, Plenum, Pp. 71-91. [Link](#)

Bonus Reading

Bandura, A. (1991). Self-regulation of motivation through anticipatory and self-reactive mechanisms. In R.A. Dienstbier (Ed.), *Perspectives on Motivation: Nebraska Symposium on Motivation*. Vol. 38, Pp. 69-164. Lincoln: University of Nebraska Press. [Link](#)

2-pager assignment

With Karoly and Carver & Scheier and, to some extent, Bandura we are getting into the real cognitive-social guts of self-regulation. We will get more applied as we move along. For now, think of your health research interests from the perspective of more basic mechanisms; what core cognitive processes may underlie whatever phenomenon you are addressing. Extra points if you can apply Chaos theory or another sexy non-linear model! As usual, any intelligent alternative topic is just fine....

General Social-Cognitive / Affective Models: Cognitive representations of health and illness, Protection Motivation Theory, Miller's "C-SHIP" model.

Week 6. This week we review three perspectives on how people respond to potential health threats. Like the Health Belief Model, Cognitive Representations of Health is less a bounded "theory" than a more general orientation toward understanding health vis-à-vis "thinking about how people think". Rogers and others purport to "test" Protection Motivation as a bounded theory, although it really just marries self-efficacy or perceived control to perceived vulnerability. Miller ties many of these perspectives together in her general C-SHIP model. Miller's model is not testable per se, nor has it remained in the literature as a specific theory of health behavior. However, this (somewhat poorly written ... sorry!) review does summarize many perspectives, and provides a strong and interesting role for

negative affect in the health behavior process.

Your (short!!) bonus paper questions whether any of these social-cognitive models are really testable per se., with a reply by Ajzen..

Primary readings

Wu, Y., Stanton, B. F., Li, X., Galbraith, J., & Cole, M. L. (2005). Protection Motivation Theory and Adolescent Drug Trafficking: Relationship Between Health Motivation and Longitudinal Risk Involvement. *Journal of Pediatric Psychology*, 30(2), 127-137. [Link](#)

Sturges, J.W. & Rogers, R.W. (1996). Preventive health psychology from a developmental perspective: An extension of protection motivation theory. *Health Psychology*, 15(3), 158-166. [Link](#)

Lau, R. (1997). Cognitive representations of health and illness. In: D.S. Gochman (ed.), *Handbook of Health Behavior Research I*. Plenum, New York, Pp. 41 - 67. [Link](#)

Benyamini, Y., Gozlan, M., & Kokia, E. (2004). On the self-regulation of a health threat: Cognitions, coping, and emotions among women undergoing treatment for infertility. *Cognitive Therapy & Research*, 28(5), 577-592. [Link](#)

Miller, S.M., Shoda, Y., & Hurley, K. (1996). Applying cognitive-social theory to health-protective behavior: Breast self-examination in cancer screening. *Psychological Bulletin*, 119(1), 70-94. [Link](#)

Bonus Reading

Ogden, J. (2003). Some problems with social cognition models: A pragmatic and conceptual analysis. *Health Psychology*, 22(4), 424-428. [Link](#)

Ajzen, I., & Fishbein, M. (2004). Questions Raised by a Reasoned Action Approach: Comment on Ogden (2003). *Health Psychology*, 23(4), 431-434. [Link](#)

2-pager assignment

The usual -- see what you can apply here, or just give me some intelligent comments that you can use to sound smart in class. Of some interest -- to me at any rate -- is the integration of affect with these other models. Use your 2-pager to speculate or to move toward real hypotheses...

Judgments of vulnerability: Perceived threat, motivated risk perception, realistic & unrealistic optimism.

Perceived vulnerability to a health threat is central to protective or risk behavior. How and when we make such judgments is a core question. We will read Neil Weinstein's basic perspective on optimistic bias in risk perceptions, plus two empirical articles that illustrate these effects. Then read Janet Talar's classic discussion of how optimism – realistic or otherwise – may in fact underlie positive mental health and coping. Following are two papers demonstrating how individual differences in optimism may in fact not only affect coping, but more direct measures of health.

Week 7.

The bonus paper, which I recommend you wade through, is from an excellent book by Kahneman, Slovic and Tversky on cognitive heuristics. Tversky went on to win a Nobel prize for this work as it applied to Economics. This chapter summarizes many of their concepts as they apply to risk perceptions. For those interested in optimism I have included a bonus paper addressing whether “optimism - pessimism” actually has construct validity, or is simply a variant on neuroticism or negative – positive affectivity.

Most of these articles are short, so do not be put off by the raw number.

Primary Readings

Weinstein, N. (1989) Optimistic Biases about Personal Risks. *Science, New Series*, 246 (4935), 1232-1233. [Link](#)

Weinstein, N.D. (1980) Unrealistic optimism about future life events. *Journal of Personality and Social Psychology*, 39, 806-820. [Link](#)

Arnett, J. J. (2000). Optimistic bias in adolescent and adult smokers and nonsmokers. *Addictive Behaviors*, 25(4), 625-632. [Link](#)

Blanton, H., & Gerrard, M. (1997). Effect of sexual motivation on men's risk perception for sexually transmitted disease: There must be 50 ways to justify a lover. *Health Psychology*, 16(4), 374-379. [Link](#)

Taylor, S. & Brown, J.D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, 103(2), 193-210. [Link](#)

Raikkonen, K., Matthews, K. A., Flory, J. D., Owens, J. F., & Gump, B. B. (1999). Effects of optimism, pessimism, and trait anxiety on ambulatory blood pressure and mood during everyday life. *Journal of Personality & Social Psychology*, 76(1), 104-113. [Link](#)

Segerstrom, S. C., Taylor, S. E., Kemeny, M. E., & Fahey, J. L. (1998). Optimism is associated with mood, coping and immune change in response to stress. *Journal of Personality & Social Psychology*, 74(6), 1646-1655. [Link](#)

Bonus Readings

Slovic, P., Fishhoff, B. & Lichtenstein, S. (1982). Facts versus fears: Understanding perceived risk. In: D. Kahneman, P. Slovic & A. Tversky (Eds.), *Judgment Under Uncertainty: Heuristics and Biases*. Cambridge, Cambridge University Press, 1982. [Link](#)

Smith, T. W., Pope, M. K., Rhodewalt, F., & Poulton, J. L. (1989). Optimism, neuroticism, coping, and symptom reports: An alternative interpretation of the Life Orientation Test. *Journal of Personality & Social Psychology*, 56(4), 640-648. [Link](#)

2-pager assignment

The usual -- see what you can apply here, or just give me some intelligent comments that you can use to sound smart in class.

Some out of the blue bonus readings on science and empiricism in modern life

After Harry Frankfurt wrote the essay [On Bullshit](#) it made its way onto the web, and subsequent semi-fame. He has recently expanded it into a book-length treatment. He makes a vital distinction between lying and "bullshit". In his view lying reflects a respect

for and knowledge of the truth (or at least a possible truth), despite a conscious decision to make a contrary statement. He describes bullshit as a simple disregard for the actual or even potential truth value of a statement, or perhaps even a belief that there is no such thing as "truth". For Frankfurt bullshit is a situation where sincerity or personal conviction outweighs or even replaces any concern about the factual basis of statements. The application to current social and political discourse is obvious.

I am also enclosing a nice piece from the New Yorker by Allen Orr on [Why Intelligent Design Isn't](#). FYI and edification.

Self-awareness, "Automaticity", and Cognitive Escape.

This week we review still more basic cognitive-social processes, here the larger phenomenon of self-awareness. As you have noted, most models we have discussed assume that people "know what they are doing" and make conscious decisions about behavior. That assumption may not always hold. Karoly several weeks ago and Bargh here notes that much of behavior is relatively "mindless" (that is, "automatic" rather than "controlled"). Automatic cognitive behavior (such as lexical processing, generative grammar, etc.) is dramatically more efficient: imagine if you had to consciously parse each sentence you recognize or speak. The same may be the case for much of our self-regulatory behavior.

Week 8.

Of course there may be times when being "mindful" of our behavior and its consequences is actually aversive, and we are motivated to escape self-awareness. Heatherton's semi-classic article reviews this, as does my humble entry in the HIV area. Christensen has two papers describing both self-awareness as it varies by symptom levels, and a self-awareness intervention.

Bonus: A cute paper by our own Len Newman, plus a larger review by Bargh for those interested in further readings.

Primary readings

Bargh, J. A. and T. L. Chartrand (1999). "The unbearable automaticity of being." *American Psychologist* 54(7): 462-479. [Link](#)

Heatherton, T.F. & Baumeister, R.F. (1991). Binge eating as escape from self-awareness. *Psychological Bulletin*, 110(1), 86-108. [Link](#)

McKirnan, D.J., Ostrow, D., & Hope, B. (1996). Sex, drugs and escape: A psychological model of HIV-risk sexual behaviors. *AIDS Care*, 8(6), 655-669. [Link](#)

Christensen, A. J., P. J. Moran, et al. (2002). "Effect of a behavioral self-regulation intervention on patient adherence in hemodialysis." *Health Psychology* 21(4): 393-397. [Link](#)

Christensen, A. J., J. S. Wiebe, et al. (1996). "Body consciousness, illness-related impairment, and patient adherence in hemodialysis." *Journal of Consulting and Clinical Psychology* 64(1): 147-152. [Link](#)

Bonus Reading

Newman, L. & Bausmeister, R. (1996). Toward an explanation of the UFO abduction phenomenon: Hypnotic elaboration, extraterrestrial sadomasochism, and spurious memories. *Psychological Inquiry*, 7(2), 99-126. [Link](#)

Bargh, J. A. and M. J. Ferguson (2000). "Beyond behaviorism: On the automaticity of higher mental processes." *Psychological Bulletin* 126(6): 925-945. [Link](#)

2-pager assignment

The usual -- see what you can apply here, or just give me some intelligent comments that you can use to sound smart in class. ***Let's begin moving these Rx papers toward real, testable hypotheses!!*** Apply these concepts to something other than what you already know a lot about, or spin off some new aspect of your area to address.

Two out of the blue bonus readings on evolutionary perspectives.

The cognitive-social perspective is a little dyspeptic toward the role of cognition in health behavior. Cognitions are biased, illusory, or simply irrelevant since so much of behavior is automatic anyway. When a topic is difficult we may want to escape from what self-awareness we do have. This gets even worse in an evolutionary frame, where the core assumption is that many key behaviors -- mate selection, social organization, eating behaviors -- are governed by naturally selected brain mechanisms that operate wholly outside of conscious awareness. This assumption has been important to those who stress the continuity of humans and other primates, and therefore assign no special status to the distinctive human characteristics of reflexive consciousness and verbal behavior. [Bering & Shackelford](#) counter this trend with interesting discussion of the possible role of human consciousness as a causal factor in evolution. Take a look at this if you need some reassurance that "mind" may still be important. I am including an Annual Review paper by [Caporael](#) that provides a general overview of evolutionary theories applied to Psychology, FYI.

In applying evolutionary theories more directly to health I am including a Darwinian view of stress reactions I found very interesting by [Korte](#). He argues that most species divide into "Hawks" and "Doves", each of which represents a coherent approach to coping with adversity (environmental pressure, feeding...), and each of which has distinctive consequences for stress responses and physical health. This gets a little far afield from our discussion of social cognition (it reviews animal research and falls into the "unconscious evolutionary mechanism" camp), but is a very interesting read on possibly naturally selected stress responses.

Bering, J. M., & Shackelford, T. K. (2004). The Causal Role of Consciousness: A Conceptual Addendum to Human Evolutionary Psychology. *Review of General Psychology*, 8(4), 227-248.

Caporael, L. R. (2001). Evolutionary psychology: Toward a unifying theory and a hybrid science. *Annual Review of Psychology* Vol 52 2001, 607-628. <http://psych.annualreviews.org/>.

Korte, S., Koolhaas, J. M., Wingfield, J. C., & McEwen, B. S. (2005). The Darwinian concept of stress: Benefits of allostasis and costs of allostatic load and the trade-offs in health and disease. *Neuroscience & Biobehavioral Reviews*, 29(1), 3-38.

Week 9. Class cancelled this week.

Socio-economic Status and Health.

Week
10.

This week we begin discussing SES and health. Two readings by Nancy Adler describe and explore the famous gradient between SES and health: health increases with every increment in wealth, not just at levels above poverty. Adler describes several potential explanations for this.

Gallo and Matthews discuss the role of negative emotions as a possible mechanism for SES - Health effects. Later on we will see that negative affect has direct immune consequences, making this link all the more plausible. Finally, Shelly Taylor describes mechanisms whereby environmental events (work, family, stress, etc.) may influence health. Take a look at her discussion of "allostatic load": it represents a core construct in this area.

Primary readings

Adler, N. E., Boyce, T., Chesney, M. A., Cohen, S., & et al. (1994). Socioeconomic status and health: The challenge of the gradient. *American Psychologist*, 49(1), 15-24. [Link](#)

Adler, N. E., & Snibbe, A. C. (2003). The role of psychosocial processes in explaining the gradient between socioeconomic status and health. *Current Directions in Psychological Science*, 12(4), 119-123. [Link](#)

Gallo, L. C., & Matthews, K. A. (2003). Understanding the association between socioeconomic status and physical health: Do negative emotions play a role? *Psychological Bulletin*, 129(1), 10-51. [Link](#)

Taylor, S. E., Repetti, R. L., & Seeman, T. (1997). HEALTH PSYCHOLOGY: What is an Unhealthy Environment and How Does It Get Under the Skin? *Annual Review of Psychology*, 48(1), 411-447. [Link](#)

SES, Race and Health.

This week we continue our discussion of SES and health; we will go over the papers from last week, and compliment them with two papers on race and health. As is obvious, race and SES overlap a lot, so you will see a lot of similarity in discussions.

I am including a number NY Times articles addressing the larger issues of SES, race and health. NYT has published a good number of interesting and well researched articles on social class and health – they have been a national leader in the MSM (Main Stream Media) in raising this issue. "Class in America" (the NYT article by Scott) has links to an excellent series on social class (let me know if there are problems with these links). A piece in the APS Observer discusses health consequences of increasing SES stratification in the U.S. The Observer article references a piece by Paul Krugman from NYT: I am including that as well.

Finally, some bonus papers. I am including two related pieces from NEJM on the attempt by the Bush administration to ignore SES and racial Disparities in health, by altering a DHHS report in 2004. I have one paper on stress and the metabolic syndrome, since we spent so much time talking about it this week, and a paper by Evans discussing environmental toxins and health in poverty-prone areas.

Primary readings

Krieger, N. (2003). "Does racism harm health? Did child abuse exist before 1962? On explicit questions, critical science, and current controversies: An ecosocial perspective." *American Journal of Public Health* 93(2): 194-199. [Link](#)

LaVeist, T. A. (2005). Disentangling Race and Socioeconomic Status: A Key to Understanding Health Inequalities. *Journal of Urban Health*, 82, iii26-iii34. [Link](#).

Hébert, R. (2003). In Sickness or in Wealth: Cognitive responses to stress link socio-economic status and incidence of disease. *APS Observer*, 16(11). [Link](#)

Krugman, P. (2002, 10/20/2002). For Richer. *The New York Times*. [Link](#)

Scott, J. (2005, 5/16/2005). Life at the Top in America Isn't Just Better, It's Longer. *The New York Times*. [Link](#)

Epstein, H. (2003, 10/12/2003). GHETTO MIASMA; Enough To Make You Sick? *The New York Times*. [Link](#)

Gonzalez, D. (2005, 1/25/2005). Paying a Price for Doughnuts, Burgers and Pizza. *The New York Times*. [Link](#).

Bonus Readings

Rosmond, R. (2005). "Role of stress in the pathogenesis of the metabolic syndrome." *Psychoneuroendocrinology* 30(1): 1-10. [Link](#)

Evans, G.W. & Kantrowitz, E. (2002). Socioeconomic Status and Health: The Potential Role of Environmental Risk Exposure. *Annual Review of Public Health*, 23, 303-331. [Link](#)

Bloche, M. G. (2004). Health Care Disparities — Science, Politics, and Race. *New England Journal of Medicine*, 350, 1568-1570. [Link](#)
 Steinbrook, R. (2004). Disparities in Health Care — From Politics to Policy. *New England Journal of Medicine*, 350, 1486-1488. [Link](#)

2-pager assignment

The usual; try to apply all this to your stuff.

Psychoimmunology.

This week we begin Psychoimmunology. The real details of the immune system go well beyond the scope of this course. However, several of these papers provide brief overviews, and an overview from National Institute of Infectious and Allergic Diseases is given below.

The Kiecolt-Glaser Annual Review chapter is a good review from a more psychological perspective. They have a lot of interesting work in this area – do an APA search for them for other interesting articles on immune functioning in response to social stresses, marital conflict, etc.

Segerstrom – whose paper on optimism and blood pressure we read earlier – here has a review and meta-analysis of stress and immune function. Kop's shorter piece follows this with a more specific focus on depression, immune function and CHD. Finally, Suinn discusses the "terrible twos" – anxiety and anger – in terms of immune function, disease outcomes, and mental health and behavior.

Week 12 You have two excellent bonus articles. The paper by Ader reviews his and others' work on classical conditioning processes in immune function. This is really interesting work that he compliments with a more detailed discussion of immunology and stress responses. Ader is one of the key figures in this area (as is this paper), so it is work working through. The McDade paper is from Anthropology, where there has been considerable interest and good work on larger ecological processes in health and the distribution of disease.

Here is a brief overview of the immune system from NIAID: NIAID. (2003). The Immune System. NIAID Internet, from www.niaid.nih.gov/publications/immune/the_immune_system.pdf . [Link](#)

Primary readings

Kiecolt-Glaser, J. K., McGuire, L., Robles, T. F., & Glaser, R. EMOTIONS, MORBIDITY, AND MORTALITY: New Perspectives from Psychoneuroimmunology. (2002). Annual Review of Psychology, 53(1), 83-107. [Link](#).

Segerstrom, S. C., & Miller, G. E. (2004). Psychological Stress and the Human Immune System: A Meta-Analytic Study of 30 Years of Inquiry. Psychological Bulletin, 130(4), 601-630. [Link](#).

Kop, W. J., & Gottdiener, J. S. (2005). The Role of Immune System Parameters in the Relationship Between Depression and Coronary Artery Disease. Psychosomatic Medicine, 67(Suppl1), S37-S41. [Link](#).

Suinn, R. M. (2001). The terrible twos--anger and anxiety: Hazardous to your health. American Psychologist, 56(1), 27-36. [Link](#).

Bonus Readings

Ader, R., & Cohen, N. Psychoneuroimmunology: Conditioning and Stress. (1993). Annual Review of Psychology, 44(1), 53-85. [Link](#)

McDade, T. W. (2005). The Ecologies Of Human Immune Function. Annual Review of Anthropology, 34(1), 495-521. [Link](#)

2-pager assignment

Move on grant proposals. Get very concrete and specific about aims, general significance and basic methods. Keep it simple, but innovative -- emphasize outcomes or predictors that differ from what you are already doing, and that clearly emphasize basic health variables.

Psychoimmunology 2

This week we consider some variables we addressed in the early part of the course. I am biasing these toward actual experimental demonstrations of psychological effects on immunity, particularly interventions. Most of these papers are short, so please stay with them! To no surprise the self-efficacy people weigh in here: Wiedenfeld shows that enhancing self-efficacy among phobics has immuno-enhancing properties. Strauman takes Tory Higgin's model of ideal-real self discrepancy and shows it to have effects on NK counts. Thus, feeling enhanced control over one's behavior or affective responses increases immunocompetence, whereas feeling further from your ideal self has the opposite effect.

Week 13. Petrie uses Pennebaker's model of written emotional expression to show that thought suppression (or, conversely, the expression of trauma-related thoughts) has significant health and immune effects. I have included a short bonus paper addressing this paradigm among HIV patients, and a meta-analysis describing the Pennebaker paradigm vis-à-vis health outcomes.

Miller provides a larger meta-analysis of psychological interventions for immune functioning. Here intervention effect sizes are less large than individual reports may lead one to expect, but generally interventions work. I am including a short mechanism paper by Robles; it can get technical but stay with it. They argue that the effect of chronic stress on immune functioning and disease is mediated by an *increase* in proinflammatory cytokines, particularly Interlukin-6, which itself is immuno-suppressant. Conversely, an experimental increase in IL-6 induces depression in lab animals: depression and immune functioning have bi-directional effects. Finally, stress-induced increases in cytokines may "sensitize" the animal, such that the cytokine → HPA / immune cascade occurs at lower and lower thresholds. I have two bonus papers addressing this that are well worth wading through.

Primary readings

Wiedenfeld, S. A., O'Leary, A., Bandura, A., Brown, S., & et al. (1990). Impact of perceived self-efficacy in coping with stressors on components of the immune system. *Journal of Personality and Social Psychology*, 59(5), 1082-1094. [Link](#)

Strauman, T. J., Lemieux, A. M., & Coe, C. L. (1993). Self-discrepancy and natural killer cell activity: Immunological consequences of negative self-evaluation. *Journal of Personality and Social Psychology*, 64(6), 1042-1052. [Link](#)

Petrie, K. J., Booth, R. J., & Pennebaker, J. W. (1998). The immunological effects of thought suppression. *Journal of Personality and Social Psychology*, 75(5), 1264-1272. [Link](#)

Miller, G. E., & Cohen, S. (2001). Psychological interventions and the immune system: A meta-analytic review and critique. *Health Psychology*, 20(1), 47-63. [Link](#)

Robles, T. F., Glaser, R., Kiecolt-Glaser, J. K. (2005). Out of Balance: A New Look at Chronic Stress, Depression, and Immunity. *Current Directions in Psychological Science*, 14(2), 111-115. [Link](#)

Bonus Readings

Smyth, J. M. (1998). Written emotional expression: Effect sizes, outcome types, and moderating variables. *Journal of Consulting and Clinical Psychology*, 66(1), 174-184. [Link](#)

Petrie, K. J., Fontanilla, I., Thomas, M. G., Booth, R. J., & Pennebaker, J. W. (2004). Effect of Written Emotional Expression on Immune Function in Patients With Human Immunodeficiency Virus Infection: A Randomized Trial. *Psychosomatic Medicine*, 66(2), 272-275. [Link](#)

Anisman, H., & Merali, Z. (2002). Cytokines, stress, and depressive illness. *Brain, Behavior, & Immunity*, 16(5), 513-524. [Link](#)

Simmons, D. A., & Broderick, P. A. (2005). Cytokines, stressors, and clinical depression: augmented adaptation responses underlie depression pathogenesis. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*, 29(5), 793-807. [Link](#)

2-pager assignment

Directly address these immunology themes: fold this mechanism into the project you are doing for this course or your research generally, take a critical look at these studies, or consider all this in terms of the SES and environmental / cultural variables we have been discussing.

More Psychosocial-oriented Readings in Psychoimmunology

Cohen, S., Frank, E., Doyle, W. J., Skoner, D. P., Rabin, B. S., & Gwaltney, J. M., Jr. (1998). Types of stressors that increase susceptibility to the common cold in healthy adults. *Health Psychology*, 17(3), 214-223. [Link](#)

Leventhal, H., Patrick-Miller, L., & Leventhal, E. A. (1998). It's long-term stressors that take a toll: comment on Cohen et al. (1998)[comment]. *Health Psychology*, 17(3), 211-213. [Link](#)

Cole, S. W., Kemeny, M. E., Taylor, S. E., & Visscher, B. R. (1996). Elevated physical health risk among gay men who conceal their homosexual identity. *Health Psychology*, 15(4), 243-251. [Link](#)

Kiecolt-Glaser, J. K., Page, G. G., Marucha, P. T., MacCallum, R. C., & Glaser, R. (1998). Psychological influences on surgical recovery: Perspectives from psychoneuroimmunology. *American Psychologist*, 53(11), 1209-1218. [Link](#)

Pennebaker, J. W., Kiecolt-Glaser, J. K., & Glaser, R. (1988). Disclosure of traumas and immune function: Health implications for psychotherapy. *Journal of Consulting and Clinical Psychology*, 56(2), 239-245. [Link](#)

Weisse, C. S. (1992). Depression and immunocompetence: A review of the literature. *Psychological Bulletin*, 111(3), 475-489. [Link](#)

Policy, Economic and Political Influences on Health

This week we take the larger view and discuss political / policy issues in health behavior, including the regulatory and physical environment. The focus of most research and thinking in this area has been on smoking and weight control – there is less work on, e.g., chronic disease management or sexual risk. Following this trend, our articles will focus on tobacco and obesity.

Week 14

Begin with the Chicago Tribune's series on the Oreo® cookie. The history of the Oreo illustrates a variety of issues, including financial pressure for "junk" food production, the role of regulation, and the potential influence of scientific findings (including whether researchers can or should ever be neutral about these topics). We then have two review papers on environmental and policy effects on obesity, exercise and tobacco. These are a little redundant, so you can read the second a little faster. French et al. give a nice overview of social and structural issues – obesity is a "perfect storm" of individual and structural inducements toward poor health – whereas Brownson et al. review the outcomes of structural-level interventions. Wang and Brownell take these themes and describe the dangers of individual-level (or "medical") explanations, and promulgate more science-based advocacy for policy and regulatory change. This takes on meaning now since obesity has recently been recognized as a medical disorder, justifying 3rd party payments for (individual-based) treatment.

Craig Ewart's influential paper on Social Action Theory is a nice integration of the individual-level variables we went over in the early section of the class, plus interpersonal and social variables.

The bonus papers are interesting if you can get to them. First, a nice – and alarming – NYT Sunday Mag. piece by Gross discussing how corporate agriculture ("Agribiz") has lobbied for highly favorable supports and regulations to dramatically increase corn production, leading to the glut of high fructose corn syrup that is driving the U.S. obesity epidemic. Szreter reviews the history of population-level health approaches and the relation of population health to economic development and political change. Then a set of three: a short NYT article discusses a paper by Chou and Grossman addressing the economics of smoking and weight. They argue that obesity rates have gone up as smoking

has become more expensive and difficult (due to restrictive regulation): basically, as public health regulation lessened one key health threat it exacerbated another in the process. Gruber disagrees: I could not find his paper directly addressing Grossman's analysis of the population trend data, so I enclosed another piece of his that provides a larger view of tobacco regulation.

Primary readings

Manier, J., Callahan, P., & Alexander, D. (2005) The Oreo, Obesity and Us. Chicago Tribune, 8/21/05, at <http://www.chicagotribune.com/news/specials/chi-oreos-specialpackage,1,7094476.special?coll=chi-news-hed> [Link](#).

French, S. A., Story, M., & Jeffery, R. W. (2001). Environmental influences on eating and physical activity. *Annual Review of Public Health*, 22, 309-335. [Link](#).

Brownson, R. C., Haire-Joshu, D., & Luke, D. A. (2006). Shaping the Context of Health: A Review of Environmental and Policy Approaches in the Prevention of Chronic Diseases. *Annual Review of Public Health*, In Press. [Link](#).

Wang, S. S., & Brownell, K. D. (2005). Public Policy and Obesity: The Need to Marry Science with Advocacy. *Psychiatric Clinics of North America*, 28(1), 235-252. [Link](#).

Ewart, C. K. (1991). Social action theory for a public health psychology. *American*

Psychologist, 46(9), 931-946. [Link](#).

Bonus Readings

Pollan, M. (2003). THE WAY WE LIVE NOW: The (Agri)Cultural Contradictions Of Obesity. New York Times, 10/12/2003. [Link](#).

Szreter, S. (2003). The Population Health Approach in Historical Perspective. American Journal of Public Health, 93(3), 421-431. [Link](#).

Gross, D. (2005). ECONOMIC VIEW; Cigarettes, Taxes and Thin French Women. New York Times, 7/24/05. [Link](#).

Chou, S. Y., Grossman, M., & Saffer, H. (2004). An economic analysis of adult obesity: results from the Behavioral Risk Factor Surveillance System. Journal of Health Economics, 23(3), 565-587. [Link](#).

Gruber, J. (2002). The economics of tobacco regulation. Health Affairs, 21(2), 146-162. [Link](#).

2-pager assignment

Grant methods section.

Spirituality, Happiness, Mindfulness, Well-Being and Health

As a final, really high-level conceptualization of mind and body, this final week we consider spirituality and health. We begin with an infamous Columbia University study that appeared to demonstrate that intercessory prayer (other people praying for you without your knowledge) can influence objective measures of health, in this case the success of in-vitro fertilization. The study had considerable press, and has been widely cited by religious groups as evidence of supernatural influence in health. Unfortunately for the religious minded the study was a fraud, as reviewed in a scathing article by Bruce Flamm in the *Skeptical Inquirer*. His discussion includes general cautions about “belief- based science”.

Week 15

Then we get a paper by Ryan and Deci – the “Autonomous self-regulation” theorists – on happiness. They review the larger area of well-being, and introduce all the relevant jargon (“eudaimonic well-being”?). Brown and Ryan review some data on “mindfulness” as a psychological intervention: there is lately a lot of research on this construct in clinical and, to a lesser extent, health research. I included a short paper by Folkman on positive coping, also an area of increasing attention. This is from a special issue of *American Psychologist* on coping, a worthwhile collection for you coping types.

Then we get two papers from another *American Psychologist* series on spirituality and health. Miller reviews the general concept, proposes some research approaches, and basically defends spirituality as a research topic. Powell et al. review studies on outcomes and potential biomedical mediators.

"No testimony is sufficient to establish a miracle, unless the testimony be of such a kind, that its falsehood would be more miraculous than the fact which it endeavors to establish." -- David Hume

Primary readings

Does Prayer Influence the Success of in Vitro Fertilization–Embryo Transfer? Report of a Masked, Randomized Trial. (2001). *Journal of Reproductive Medicine*, Volume 46, Number 9 , September.

Flamm, B. (2004). The Columbia University 'Miracle' Study: Flawed and Fraud. *Skeptical*

Inquirer, 28(5), September/October. [Link](#).

Ryan, R. M., & Deci, E. L. (2001). ON HAPPINESS AND HUMAN POTENTIALS: A Review of Research on Hedonic and Eudaimonic Well-Being. *Annual Review of Psychology*, 52(1), 141-166. [Link](#).

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822-848. [Link](#).

Folkman, S., & Moskowitz, J. T. (2000). Positive affect and the other side of coping. *American Psychologist*, 55(6), 647-654. [Link](#).

Miller, W. R., & Thoresen, C. E. (2003). Spirituality, religion, and health: An emerging research field. *American Psychologist*, 58(1), 24-35. [Link](#).

Powell, L. H., Shahabi, L., & Thoresen, C. E. (2003). Religion and spirituality: Linkages to physical health. *American Psychologist*, 58(1), 36-52. [Link](#).

Bonus Readings

I have lots of bonus readings for this week: the task for primary readings was to eliminate, not add interesting papers. This section begins with some empirical papers. The first is by Jane Simoni that explores subjective spirituality among HIV+ women, a major issue in working with African-American and other ethnic minority women in HIV/AIDS. This is followed by some papers on mindfulness, and the remaining papers from that *American Psychologist* set. Then I have included most of the papers from a special issue of *Behavioral Medicine* on spirituality and health, FYI.

Simoni, J. M., Martone, M. G., & Kerwin, J. F. (2002). Spirituality and psychological adaptation among women with HIV/AIDS: Implications for counseling. *Journal of Counseling Psychology*, 49(2), 139-147. [Link](#).

Davidson, R. J., Kabat-Zinn, J., Schumacher, J., Rosenkranz, M., Muller, D., Santorelli, S. F., et al. (2003). Alterations in brain and immune function produced by mindfulness meditation. *Psychosomatic Medicine*, 65(4), 564-570. [Link](#).

Carlson, L. E., Speca, M., Patel, K. D., & Goodey, E. (2003). Mindfulness-based stress reduction in relation to quality of life, mood, symptoms of stress, and immune parameters in breast and prostate cancer outpatients. *Psychosomatic Medicine*, 65(4), 571-581. [Link](#).

Seeman, T. E., Dubin, L. F., & Seeman, M. (2003). Religiosity/spirituality and health: A critical review of the evidence for biological pathways. *American Psychologist*, 58(1), 53-63. [Link](#).

Hill, P. C., & Pargament, K. I. (2003). Advances in the conceptualization and measurement of religion and spirituality: Implications for physical and mental health research. *American Psychologist*, 58(1), 64-74. [Link](#).

Special Issue of Annals of Behavioral Medicine:

Mills, P. J. (2002). Spirituality, Religiousness, and Health: From Research to Clinical Practice. *Annals of Behavioral Medicine*, 24(1), 1-2. [Link](#).

Thoresen, C. E., & Harris, A. H. S. (2002). Spirituality and Health: What's the Evidence and What's Needed? *Annals of Behavioral Medicine*, 24(1), 3-13. [Link](#).

Sloan, R. P., & Bagiella, E. (2002). Claims About Religious Involvement and Health Outcomes. *Annals of Behavioral Medicine*, 24(1), 14-21. [Link](#).

Underwood, L. G., & Teresi, J. A. (2002). The Daily Spiritual Experience Scale: Development, Theoretical Description, Reliability, Exploratory Factor Analysis, and Preliminary Construct Validity Using Health-Related Data. *Annals of Behavioral Medicine*, 24(1), 22-33. [Link](#).

Ironson, G., Solomon, G. F., Balbin, E. G., O'Cleirigh, C., George, A., Kumar, M., et al. (2002). The Ironson-Woods Spirituality/Religiousness Index Is Associated With Long Survival, Health Behaviors, Less Distress, and Low Cortisol in People With HIV/AIDS. *Annals of Behavioral Medicine*, 24(1), 34-48. [Link](#).

Peterman, A. H., Fitchett, G., Brady, M. J., Hernandez, L., & Cella, D. (2002). Measuring Spiritual Well-Being in People With Cancer: The Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being Scale (FACIT-Sp). *Annals of Behavioral Medicine*, 24(1), 49-58.

Shahabi, L., Powell, L. H., Musick, M. A., Pargament, K. I., Thoresen, C. E., Williams, D., et al. (2002). Correlates of Self-Perceptions of Spirituality in American Adults. *Annals of Behavioral Medicine*, 24(1), 59-68. [Link](#).

Larimore, W. L., Parker, M., & Crowther, M. (2002). Should Clinicians Incorporate Positive Spirituality Into Their Practices? What Does the Evidence Say? *Annals of Behavioral Medicine*, 24(1), 69-73. [Link](#).

Lawrence, R. J. (2002). The Witches' Brew of Spirituality and Medicine. *Annals of Behavioral Medicine*, 24(1), 74-76. [Link](#).

