Sociology 190: Life and Death in the US: Medicine and Disease in Social Context

Final Exam, Spring 2008

Please read all these instructions, and those on subsequent pages, carefully.

Your exam is due either May 8 or May 9. If you want to avoid the crush of people and standing in line to hand it in, you can turn it in **between 3 pm and 5 pm, Thursday, May 8** in William James Hall, 568. Otherwise, you can turn it in **between 9am and 12n, Friday, May 9** in the same place, but you may have to wait as the exams need to be checked in individually. (You also may wish to set the earlier window as the main deadline for yourself because we will not grant last-minute extensions, except in documented, exigent circumstances.)

Please turn in printed paper. You will write a total of three essays. Each essay should be 5-7 double-spaced pages. Good answers will make arguments that are explicitly backed up with evidence from lecture material and course readings. Good answers will allude to pertinent readings from throughout the course (as relevant). Providing references in parentheses is fine (*i.e.*, detailed footnotes are <u>not</u> required). Though you are free to consult them, outside references are neither necessary nor expected. You will also notice, however, that several questions do ask that you engage with "the real world."

By noon on Friday, May 9th, you must also upload a copy of your exam to the course website, in the "Final Exam" tab at the left side of the site. Please do not forget to do this.

Exams are to be individual efforts. The only exception is that if you choose to do question II-A (regarding Boston neighborhoods), you may travel in a group to the neighborhoods in question, though you must collect your own notes. TFs can answer general clarification questions, but under no circumstances will they read drafts or outlines.

Each essay should start on a new page, and all essays should have page numbers, though only the face page should include your name. Please submit your exam as follows:

1) Face page: your full name / your teaching fellow's name / date;
2) Essay I-a/b (Title as you see fit, but be sure to include "I-a/b");
3) Essay II-a/b (Title as you see fit, but be sure to include "II-a/b");
4) Essay III-a/b (Title as you see fit, but be sure to include "III-a/b").

Please staple each essay separately, and attach (using a binder clip or a rubber band) the face page on top of the packet of three independent essays. This will allow us to number, and then evaluate, your essays anonymously.

Soc190 Final Exam FACE PAGE (please copy/paste and make this the first page of your exam)

Name: _____

Teaching Fellow's Name: _____

Section Day/Time: _____

Essay I *(choose one)*

I-A. A recent editorial in the *American Journal of Psychiatry* argues that "Internet Addiction" should be included in the DSM-V (the Diagnostic and Statistical Manual of Mental Disorders, a handbook for mental health professionals that lists/defines all mental health disorders officially recognized by the American Psychiatric Association). This editorial, written by Jerald Block, MD (and available at http://ajp.psychiatryonline.org/cgi/content/full/165/3/306), defines Internet addiction as a compulsive-impulsive disorder that involves online and offline computer usage, including "excessive gaming, sexual preoccupations, and e-mail/text messaging."

This editorial recently came to the attention of the Harvard Deans (via an anonymous tip from a group of Professors and TFs concerned about the amount of time students spend on Facebook, surfing, and text messaging). The Deans in turn sent out a call to all Houses to address Internet Addiction in House Wellness Initiatives.

Imagine you are now advising your House Masters on this initiative. What course concepts would you bring into the discussion? How would you frame the problem? Is the problem purely an individual one or does it warrant a response by the House? What types of initiatives, if any, would you propose to address it and why? If you propose to do nothing, please provide a careful explanation of why.

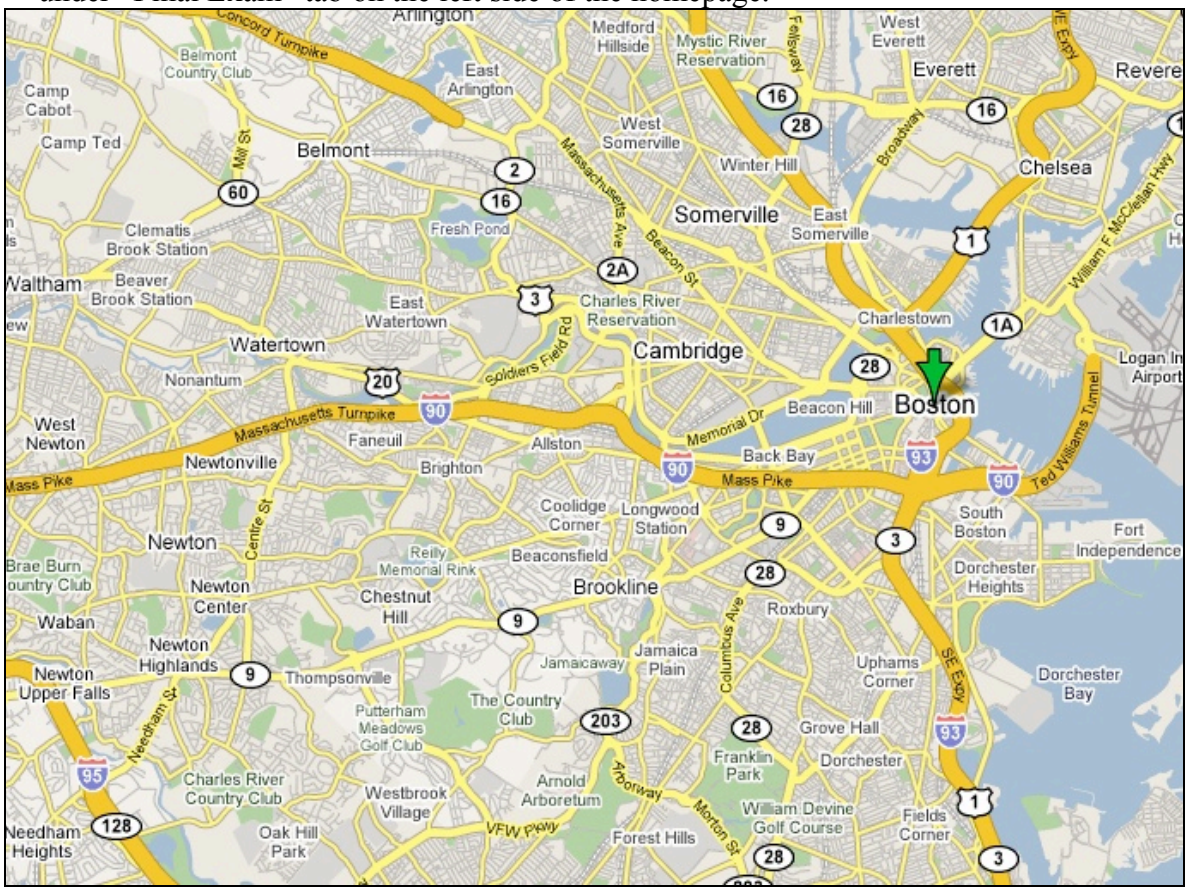
I-B. As sociologist Robert K. Merton argues in his classic work on "reference groups," we all are a part of, and perceive ourselves to be within, groups of individuals who affect us. Merton was among the first, however, to carefully delineate two broad and distinct ways that our reference groups might function: members of our reference groups might serve as points of *comparison*, or members of our reference group might serve as a means of *influence*. *These two processes – comparison and influence – need not work in the same direction with respect to our health.*

In the course, we read Marmot's and Wilkinson's explication of how comparison might affect individual health. In other readings, we read about how we are influenced by others around us or how we are otherwise affected by membership in a group. Pick one health outcome -- such as depression, obesity, overall healthiness (e.g., as measured by self-rated health or by disability), longevity, or any other health problem you want -- and discuss the ways these two processes (influence and comparison) play out in *opposing ways*. Also discuss some of the key social or biological mechanisms by which these two process might work. You might find it helpful to contrast the situation of an otherwise identical person situated in two different groups: either in a group that was "better" than him/her in terms of its socioeconomic status or behaviors, or in a group that was "worse."

Essay II (*choose one)*

II-A. Consider information available from the 2000 US Census regarding neighborhoods in the greater Boston area shown on the map below: Allston (02134), Brighton (02135), Somerville, Belmont, Concord, Roxbury (02118, 02119, and 02120), Jamaica Plain (02130), and Newton. Using population statistics on social or structural conditions (such as median age, average household size, per capita income, or any other traits you wish to highlight) in these Boston neighborhoods (information that you can obtain from http://factfinder.census.gov) and also evidence (both theoretical and empirical) from the readings, make an argument as to why one health outcome of your choice (pick one of the following: longevity, infant mortality, low birth weight, obesity, asthma) might differ between two of these neighborhoods. You do not need actual evidence that the outcome you pick does indeed vary across the neighborhoods; you can assume that it does (i.e., just assume that one neighborhood is high and the other is low on the health outcome in question, and specify which one of the two you assume to be high and low).

A good answer about how neighborhoods can affect health will make an informed critical analysis of the causal pathways that have been discussed this term. An excellent answer might include photographs of the neighborhoods or brief first-hand ethnographic evidence (e.g., description of the neighborhood, a short chat with a local merchant, etc.) obtained from a short trip to whichever two of these neighborhoods you pick (though this is not required for an "excellent" answer). Information on the relevant T-stops is posted on the course website under "Final Exam" tab on the left side of the homepage.



II-B. Several weeks ago you completed a class survey in which you described your health habits and friendships in the class. On the following page you'll find a social network graph of your classmates' exercise patterns. Lines between nodes represent friendships, and node colors represent the importance of exercise in students' lives (red= "not important", orange= "somewhat", green= "very").

Imagine that you've been charged with writing a report to University Health Services (UHS) on ways to improve student health. This report should be framed in three parts, with the first two parts being analyses, and the last part making connections between this analysis and broader course themes.[1]

a) For the first part, consider the possibility of an intervention designed to improve the health of the class population by "seeding" key class members with better exercise habits; these key people are denoted by A, B, C, and D in Figure 1. Assume that a behavioral intervention does work in the individual and that a change in this individual definitely affects others – like a contagion which spreads from person to person.

To answer this question, you should trace network paths two steps (degrees) away from the focal individuals (ego). With a *yellow* highlighter, identify 1st-degree alters connected to that ego; in *blue*, identify 2nd-degree alters (the nodes directly connected to 1st degree alters).[2] Then, report on how seeding nodes A, B, C, or D might differentially improve the population health, ranking the nodes in terms of how many people might be reached within two degrees of ego.

b) For the second part of your report to UHS, consider Figure 2, in which two people (A & B) have an equal number of friends. Who would be a better candidate for a behavioral intervention to improve exercise habits? Why? Feel free to use your knowledge of Harvard University and the value of social support or network structure in order to ground your argument.

c) For your conclusion, integrate results from (a) and (b) with lessons on social connectivity from the course (relevant themes might include, but are not limited to: social capital, the public good, and preventative medicine), and make an argument either for or against this type of social-network based intervention as a health policy matter.

[1] But be sure to include a beginning/middle/end, as well as strong argument, cogent organization, and thorough evidence to support your claims!

[2] You should make four photocopies of Figure 1 (one for each key node) to aid in your analysis. Be sure to staple your work to your answer so we can assign partial credit if needed.

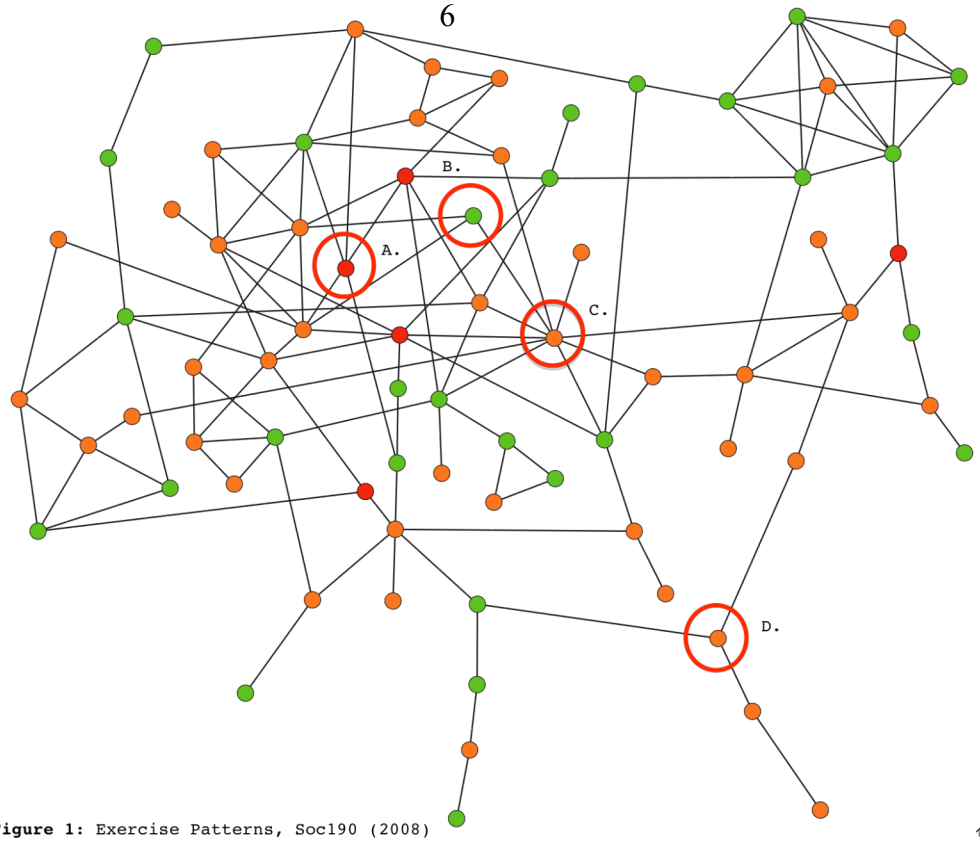


Figure 1: Exercise Patterns, Soc190 (2008)

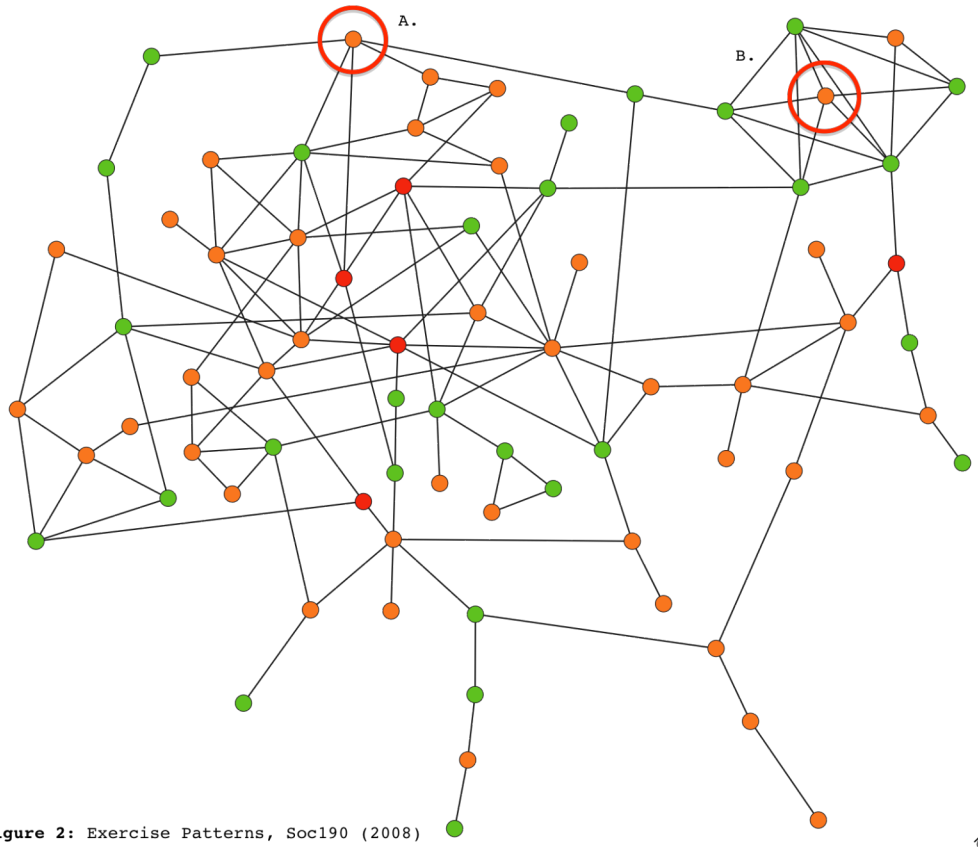


Figure 2: Exercise Patterns, Soc190 (2008)

Essay III *(choose one)*

III-A. Pick a health behavior from the following list: smoking, drinking, drug use, regular exercise, and vegetarianism. Interview two friends who evince the foregoing behavior and another two friends who do not (either because they never did or because they quit). Collect information on when and how they developed or did not develop (or stopped) such behavior. For example, identify two friends who smoke and two who do not and, through short interviews with each (i.e., 10-15 minutes), determine the factors that led them to start/continue, and those that led them to not start/quit. Then use the collected qualitative evidence to make an argument about what mechanisms account for the development of the problem/behavior and to propose possible health initiatives to promote the health behavior you have selected to discuss above. A good essay not only summarizes your friends' answers and quotes from what they say, but also employs theories discussed in the class (such as the tension between structure and agency, the variable ways that disease might be defined, etc.) to analyze them.

III-B. In recent years, scholars have argued that rates of obesity have skyrocketed to a point where it should be considered an epidemic, and thus should be treated as a public health problem. However, there is much disagreement about what kinds of policies (if any) the government should initiate in order to deal with this problem. Below are three examples of ways to target obesity. Comment on the desirability, viability, and probable effectiveness of each of these (if they were to be implemented). Discuss any key ways that obesity is a similar public policy problem to cigarette smoking, and in any key ways it is different. Be sure to discuss whether these policy responses below, and any other policy responses you discuss, are focused on structure or agency.

> a. The practice of reporting students' body mass scores to parents originated a few years ago. Now, states including Delaware, South Carolina and Tennessee have jumped on the B.M.I. bandwagon, turning the reports — in casual parlance, "obesity report cards" — into a new rite of childhood. Legislators in other states, including New York, have proposed them as well, while some individual school districts have adopted the practice.
> http://www.nytimes.com/2007/01/08/health/08obesity.html
>
> b. In New Mexico, state legislator Gail Chasey proposes the "No Child Left Inside" bill, which would levy a 1% tax on TVs, video games, and video game equipment, the dual purpose being to create a minor cost disincentive for parents to provide kids with the games, and to use the tax revenue to fund anti-obesity and outdoor education programs for kids. In short, the aim is "to get the youth of New Mexico off their butts, away from their games, and outdoors where they can engage in physical activity."
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> c. The FDA in 2007 approved Orlistat capsules as an over-the-counter (OTC) weight loss aid for overweight adults. Orlistat was initially approved in 1999 as a prescription drug to treat obesity, and remains a prescription drug for obesity at a higher dose than the OTC version. Orlistat helps produce weight loss by decreasing the intestinal absorption of fat. The 60 mg capsule can be taken up to three times a day with each fat-containing meal. Because of the possible loss of certain nutrients, it is recommended that people using Orlistat should also take a multivitamin at bedtime. The most common side effect of the product is a change in bowel habits, which may include loose stools. Eating a low fat diet will reduce the likelihood of this side effect.