Cascades

Assignment 4 (Due: March 8, 2017)

Sociology 204: Social Networks

*Please submit your assignment on blackboard.*

1) Consider the search process in the Travers and Milgram small-world experiment. Is this better described as: [10 points]

a) broadcast search

b) directed search

2) A main goal of infectious disease control strategies is to: [10 points]

a) increases R\_0 above 1

b) make R\_0 exactly 1

c) decrease R\_0 below 1

3) The sexual network in Jefferson High School, described in Bearman et al 2004, followed a power-law degree distribution. True or false. [10 points]

a) True

b) False

4) The sexual network in Jefferson High School, described in Bearman et al 2004, had a high clustering coefficient compared to an Erdos-Renyi random graph with the same number of nodes and edges. True or false. [10 points]

a) True

b) False

5) What is an issue or question that you would like to discuss in precept about the readings from this week? [30 points]

6) The *New York Times* article by Tierney used the concept of an *information cascade* to understand the case of a mistaken consensus about healthy diets. Your assignment is to use the concept of an information cascade to understand (or help to understand) some other real-world behavior. [30 points]

Following Easley and Kleinberg (2010, p. 427) we will define situations where information cascades can occur to include four elements:

1. There is a decision to be made with two possible outcomes (e.g., whether to adopt a new technology or whether to vote for a particular political candidate).
2. People make decisions sequentially and everyone can observe the previous decisions of others.
3. Each person has some private signal that can guide her decision.
4. Each person combines her private signal with the public behavior of others in order to make a decision.

Further, we say that an information cascade has occurred when the public behavior of others overrides the private signal that an individual has about what is the right decision to make.

If you draw on outside sources to make your argument be sure to cite them. Finally, please double-space your response and limit it to 2 pages. Hint: If you’ve thought about for a while and are stuck, read this article by Duncan Watts from *Slate*: http://www.slate.com/id/2095993/

When evaluating your paper we will use the following criteria:

* There should be a tight linkage between your situation and the definition of an information cascade. For example, a key element of the definition of an information cascade is the distinction between the private signal a person has and the public behavior that a person observes. That distinction should probably be considered when describing your situation. Remember, not every situation where people end up doing the same thing should be considered an information cascade.
* Everything in the paper should be necessary for your argument. Unnecessary information weakens your argument.
* The writing should be crisp and free of grammatical and spelling errors. Further, the overall structure of the paper should be clear and easy to follow.