Assignment 2: Evidence Linking Exposure and Outcome

GEO 3432 Due April 7 Weight 20%

Objectives

The purpose of this assignment is to investigate an environment and health issue in detail. You will write a critical essay which assesses the state of evidence on the link between an environmental "exposure" and a health outcome.

Tasks

1. Pick a topic

You may pick any topic that is relevant to the course. Here are some examples you might consider:

- health effects of wind turbines
- health, social capital and the built environment
- obesity and suburbanization
- breast cancer and organochlorines
- health effects of noise
- health effects of waste incinerators

- radon, lung cancer and risk communication
- air pollution and health
- health effects of the Sydney Tar Ponds
- health effects of the Chernobyl disaster
- health effects of pesticide X
- psychosocial impacts of noxious facilities

2. Gather academic literature on the topic

Focus on finding peer reviewed empirical research - i.e., journal articles and books. Websites typically are not peer reviewed. How much literature is enough? Once you have all the key pieces of writing on the topic you have enough.

3. Assess The Strength of Evidence

The focus of your search is "evidence", scientific evidence linking the exposure and outcome. Use the skills you have learned in lecture and tutorial to assess how strong various pieces of evidence are. Just because something is published does not mean it is strong evidence. Critically appraise the evidence in each article you read.

4. Draw conclusions

If you were in a position to directly affect decisions on controlling the exposure in question, what would you do? What research remains to be done?

Hints

- 1. Make use of the many journal databases at the library.
- 2. Google Scholar, is getting better every day.
- 3. Focus on the most recent papers and work backwards
- 4. Use the <u>Web of Science Citation Indexes</u> to determine how often particular papers have been cited by others in academia (this gives a sense of how important are the findings).
- 5. Try evaluating each paper using this <u>critical appraisal form</u> to help you organize your thoughts.

Submit

- 1. A formal essay, 10 pages max, double spaced, 12 point font, reasonable margins, printed on letter sized paper and stapled with an appropriate title page (no covers or binders please).
- 2. Final paper to Turnitin.

For Turnitin login information. Go to the Timetable section of the syllabus.

Marking

20 marks (3 style + 17 content)

Style (3/20 marks)

- title page (-1)
- reference list (-1)
- spelling/grammar (-2 max) up to two marks can be lost, the first few are free, from then on marks are deducted at the TA's discretion
- formal style (-2 max) other formal style issues (e.g., slang, acronyms, contractions) TA's discretion

Content (17/20 marks)