## Ph 458 Evidence and Policy

## **WEEK 8: "External Validity"**

Suppose a trial result (say from an RCT) 'reveals' that a treatment is effective within the population of people involved in the study. It is obvious, when you think about it, that this by no means entails that the treatment will be effective in other populations; indeed it seems likely that the outcome may well be very different if the second population differs from the first in some causally relevant way. Under what circumstances can we reasonably claim to have evidence that some treatment works in the population that we are interested in, when this is not the same population as the one on which the trial was carried out? This is 'the problem of external validity'.

# Reading and Study questions

### Required Reading:

- (a) John Worrall 'Evidence: Philosophy of Science meets Medicine': section on 'What theory is tested?'
- (b) Nancy Cartwright 'Evidence Based Policy. What's to be done about relevance?'

Background and Further Reading: See list in Moodle

## Study Questions (Please all come equipped for a good discussion on the following)

## A. On Cartwright:

- 1. Why does she refer to RCT results as 'clinchers'? Is she right to do so?
- 2. What is the relationship between 'relevance' and the problem of external validity?
- 3. Does her account give advice that can be put into practice?

## B. More open discussion:

- 1. Discuss the following claim 'Given that RCTs give evidence only for the *average* effect of a cause T in a test population, we cannot be assured that this effect is transferable to a *wider* (more varied) population, nor can we be assured that this effect is transferable to a *narrower* (less varied) population.'
- 2. Is the effect size uncovered by an RCT relevant for 'external validity'? Why? Or Why not?