Experiments enable social scientists to draw valid inferences about cause and effect. The essential ingredient of experimentation is random assignment of people to treatment and control groups. Randomization ensures that these groups differ solely due to chance. So long as an experiment involves an ample number of subjects, the role of chance becomes minimal; the treatment and control groups become virtually identical. These equivalent groups are then presented with different treatments. Since systematic preexisting differences have been eliminated, the different responses of the treatment and control groups may be attributed to the influence of the treatment.

Experiments correct many of the deficiencies of observational, or nonexperimental, research. Random assignment enables researchers to disentangle the complex causal interplay among variables. It also affords the researcher much more control over what the treatment is and how accurately it is measured. There are, of course, practical as well as ethical limits to the sorts of experiments that can be performed in social science. Nevertheless, the range of applications remains very large. The Summer Program discusses a wide array of exemplary experiments in the fields of political science, advertising, public policy, health, and criminal justice.

Course Readings

The readings are drawn from a combination of original research articles and a textbook that I am co-authoring with Alan Gerber. The textbook is still in draft form but will be in print by March of 2012.

General Introduction to Experimental Concepts


Experimentation to Guide Policy


**Experimentation to Test Social Psychological Mechanisms**


**External Validity**


**Complications Posed by Noncompliance (“failure to treat”)**


**Complications by Asymmetrical Measurement of Outcomes in Treatment and Control Conditions**


**Natural Experiments**


**Publication Bias**


Downstream Experimentation


Causal Pathways


Using Experiments as Benchmarks for Evaluating Other Methods


A more extensive set of readings may be found on Professor Green’s course website. Visit http://vote.research.yale.edu/courses.html and follow the link to Political Science 239.