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 pre-existing 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, data. 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

General Introduction to Experimental Concepts


Defense of Experimentation

Experimentation to Guide Policy


Experimentation to Detect Discrimination


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](http://vote.research.yale.edu/courses.html) and follow the link to Political Science 239.