Course Information

Research methods in the social sciences rely upon numerous ways of collecting data. This series of videos by Dr. Ryan Meldrum provides an in-depth look at research design, especially with regard to experimental design. Students will be exposed to the importance of experimental designs as well as the diverse types of experiments. Students will also be provided several examples of experimental designs.

Introduction to Reliability and Validity
http://sk.sagepub.com/video/introduction-to-reliability-and-validity

Dr. Ryan Meldrum defines reliability and validity and he explains different ways researchers assess both. He draws on specific examples to illustrate the assessment methods.

The Classical Experiment
http://sk.sagepub.com/video/the-classical-experiment

Professor Ryan Meldrum gives an introductory lesson on classical experimentation. His explanation also includes a series of hypothetical set-ups to demonstrate the principles of classical experimentation.

Variations of the Classical Experiment
http://sk.sagepub.com/video/variations-of-the-classical-experiment

Dr. Ryan Meldrum discusses variations of the classical experiment and gives examples of how to use different types of experiment. He explains how a classical experiment works and demonstrates how to adjust it to create a factorial experiment and a posttest-only experiment.

Suggested Courses or Topics

These videos can be used in a variety of criminology courses, which might include:
- social science research methods,
- survey of crime and justice,
- criminal justice research methods, or
- social science statistics.

Classroom Clips

- Introduction to Reliability and Validity
  This clip discusses what reliability is and how reliability is assessed. Clip 0:34 – 9:10.
  This clip discusses what validity is and how validity is assessed. Clip 9:11 – 16:03.
- The Classical Experiment
  This clip discusses the purpose of the classical experiment. Clip 0:29 – 1:36.
- This clip provides multiple examples of classical experiments. Clip 1:45 – 14:58.
- This clip breaks down the components of a classical experiment. Clip 15:00 – 19:29.
- Variations in the Classical Experiment
  This clip provides a recap of the classical experiment. Clip 0:28 – 1:54.
- This clip discusses factorial experiments. Clip 1:55 – 4:05.
- This clip provides an example of a factorial experiment evaluating different amounts of external stimuli. Clip 4:06 – 9:18.
- This clip provides an example of a factorial experiment evaluating different types of external stimuli. Clip 9:18 – 15:49.
- This clip provides examples of posttest-only experiments. Clip 15:50 – 19:45.
- Measuring Crime: This clip discusses how crime data are collected and measured. Clip 0:03 – 3:39.

Research Assignment

Find four different research articles that utilized an experimental design. Explain how each study was implemented, including who the participants were, what type of experimental design was used, and what were the results of the experiment.
Classroom Discussion

Experiments are the “gold standard” in research design. Why are experiments difficult to implement in criminology? What are the ramifications of having little experimental research in the discipline? How can this issue be improved?