

Class Activity

In the Discovery Channel's popular series *Mythbusters*, the hosts investigate common beliefs to determine whether there is evidence to verify them as true. In this segment, the hosts are investigating whether yawning is contagious.

Now we answer the following questions:

1. *Mythbusters* recruited 50 people by posting an ad. What type of sampling did they use? Hypothetically, if they also recruited by stopping people walking by the trailer at the market where they performed the research, what type of sampling would this be?
2. Was the study conducted a sample survey, an observational study, or an experiment?
3. Design the outline of the experiment they conducted for the 2nd time in their truck or as they said *multi chambered yawning observation lab*?
4. Did the hosts follow the principles of good experimental design? Explain your reasoning.
5. What were the explanatory variables and response variables in this study? Can you think of any lurking variables?
6. The hosts recorded whether each person yawned or did not yawn. Is this a categorical or quantitative variable?
7. What kind of sampling method did they use to to decide which person would be in a treatment group or control group?