

**LABORTATORY 1**  
**BASIC RESEARCH COMPONENTS**

Consider the following scenario:

A social service group is attempting to reduce the amount of bullying that occurs among children and teenagers. The first step in doing so is to determine the characteristics of those who are bullied in middle school. Members of the social service group visit a middle school and observe students in their first year at the school. They observe these students again during their second and third years at the school. The group members easily identify victims of bullying and notice that most of them have the "nerd" stigma. They wonder, therefore, if a relationship exists between people's levels of "nerdiness" and the degree to which they are bullied.

Please answer the following questions. You may handwrite your answers below or attach a separate, typed, page containing your responses.

1. What type of study did the researchers use to address the issue of time?
  
  
  
  
  
  
  
  
  
  
2. a. What research hypothesis applies to the teachers' investigation? (Use notation.)  
  
  
  
  
  
  
  
  
  
- b. What null hypothesis corresponds to the research hypothesis stated above? (Use notation.)
  
  
  
  
  
  
  
  
  
  
- 3. a. What is the independent variable for the research and null hypotheses?  
  
  
  
  
  
  
  
  
  
- b. What is the nature of the independent variable?
  
  
  
  
  
  
  
  
  
  
- 4. a. What is the dependent variable for the research and null hypotheses?  
  
  
  
  
  
  
  
  
  
- b. What is the nature of the dependent variable?

5. a. Describe a sample scenario (you may draw a diagram if you wish) to explain why the possibility of causal time order issue prevents the researcher from claiming that "nerdiness" causes one to be bullied. TURN TO BACK OF PAGE

b. Describe a sample scenario (you may draw a diagram if you wish) to explain why the possibility of an intervening variable prevents the researcher from claiming that "nerdiness" causes one to be bullied.

## **LABORATORY 2 RESEARCH ETHICS**

Suppose you are a member of a Human Subjects Review Board for a prominent university, thus playing a role in deciding whether proposed research projects meet ethical standards. The following two situations have been brought to the attention of the Human Subjects Review Board.

1. Medical sociologists are interested in patterns of hypochondria among the American population. They hypothesize that more women than men are hypochondriacs. Gathering data to test this hypothesis involves having doctors use miniature tape recorders, placed in the pockets of their white lab coats, to record their discussions with patients. The doctors are asked to speak into the tape recorder before entering each examination room, simply stating whether the patient is a male or a female. Researchers plan to review the tapes, taking into account the sex of each patient, his or her conversation with the doctor, and the doctor's diagnosis, to determine the number of males and the number of females who have exaggerated or misinterpreted their health problems.
  
2. A study seeks to determine if people violate speed limits more when driving alone than when driving with passengers. All subjects are asked to drive along a predetermined route, which includes a part of town known for having a very low speed limit. Some of the subjects have passengers (people hired by the researchers) in the car and others drive alone. Researchers stationed along the driving route plan to note any changes in speed as individual pass through this section of town. To avoid the Hawthorne Effect, subjects are told that the researchers wish to compare the choices of radio stations by drivers with different numbers of passengers in the car. They are told that any individual who decides not to participate in the study for any reason may simply leave before it is his or her turn to drive. But, those who stay agree to have their data analyzed. After driving the route, each individual who drove or rode in the car is presented with a written explanation of the study's real purpose as well as contact numbers for the researchers and mental health professionals in case any questions or problems resulting from the study arise.

Based upon these situations, complete the chart on the other side of this page.

	SCENARIO 1	SCENARIO 2
Is informed consent obtained?		
Is the standard of confidentiality violated? If so, how?		
Is the standard of anonymity violated? If so, how?		
Is the standard of privacy violated? If so, how?		
Is the standard regarding deception violated? If so, how?		
Is the harm standard violated? If so, how?		
Should the Human Subjects Review Board approve this study? Why or why not?		

### LABORATORY 3 SAMPLING AND INSTRUMENTS

Suppose a researcher is comparing the different types of music played in “under 21” and “21 and older” dance clubs in New York City.

1. What are the units of analysis?
2. What is the population?

One concern that the researcher has about the study is that the different types of music he or she hears may reflect the different cultures in the five boroughs of the city, rather than the type of club. The researcher, therefore, does a Google search for dance clubs in each borough and obtains five separate alphabetical lists, identifying a total of 1600 clubs. Knowing that it is impossible to visit all 1600 clubs, the researcher visits those that begin with the letter A from each list, reasoning that these clubs have nothing in common other than the first letter of their names and, therefore, should provide a variety of experiences.

3. What is the sampling frame?
4. Identify the sampling method(s) used.

The researcher visits the selected clubs and observes, taking notes about the types of music played at each. Should the researcher use a scale (For five bonus points, name the TYPE of scale that should be used), index, or typology to structure his or her measurement of each of the following dimensions?

5. whether the club is for those under 21 or for those 21 and older
6. how strong the bass lines of the songs are
7. the number of “slow songs” played

While at the clubs, the researcher speaks to patrons, asking them if they like the music being played. He or she records their responses.

8. Why shouldn't the researcher use this information as an indicator of the type of music played. (Be specific. Use methodological terms.)
  
9. What level of measurement would indicate whether patrons like the music (coded as 2), are indifferent (coded as 1), or don't like the music (coded as 0)?

## LABORTATORY 4 DATA GATHERING TECHNIQUES

Suppose that you plan to examine people's senses of tradition regarding movie snacks. You hypothesize that, even when given multiple snack options at snack bars, people buy just as much popcorn as they do at theaters that only serve popcorn. You are, however, unsure about how to collect data for your study. So, you contemplate using a survey, observation, experiment, and unobtrusive measures.

Please answer the following questions.

1. If you use a survey to gather data,
  - a. Would an interview or a questionnaire be more appropriate? Why?
  
  
  
  
  
  
  
  
  
  
  - b. Would open-ended or closed-ended questions be more appropriate? Why?
  
  
  
  
  
  
  
  
  
  
2. If you use an observation to gather data,
  - a. Would participant or non-participant observation be more appropriate? Why?
  
  
  
  
  
  
  
  
  
  
  - b. Identify a behavior, situation, display, etc. that provide the data you need for the independent variable. Identify a behavior, situation, display, etc. that provide the data you need for the dependent variable.
  
  
  
  
  
  
  
  
  
  
3. If you use an experiment to gather data,
  - a. Identify the stimulus.
  
  
  
  
  
  
  
  
  
  
  - b. Which experimental design would be the best to use? Why?

4. If you use unobtrusive measures,
  - a. Identify a source that could provide the data needed for each variable. (That's TWO sources in total.)
  - b. Why might the sources you use provide only poor attributes for the variables. (Give an example of the information you NEED vs. the information you can OBTAIN.)