



Experiments Assignment

Purpose: *Metacognition* is the ability to plan, monitor, and evaluate your mental processes, which is an important skill for academic success. This assignment is designed to give you practice using metacognitive skills by figuring out what you know (and what you don't know) about a topic.

Knowledge: This assignment will also help you become familiar with the following important content knowledge in psychology:

1. Experiments
2. Independent variables
3. Dependent variables

Task Instructions:

- Complete the Experiments Assignment Worksheet below.

Criteria for Success:

Correctly identify the independent variable and its conditions, the dependent variable, and the way this experiment could be completed.



Experiments Assignment Worksheet

You've already learned about a number of experiments from your textbook and in class. Before you begin this assignment, take 5 minutes to review one of them and ask yourself, "how well do I understand experiments?"

1. *Choose one of the following hypotheses (You will not actually "DO" this experiment):*

- a. "When exposed to low-stress environments, people are happier."
- b. "If people are told that a person is interesting, they will attempt to talk with that person in a social setting more frequently."
- c. "If people have their beliefs challenged, they will be more hostile."
- d. "When a psychologist tells people that they have done 'very well' on a particular assignment, they tend to believe they have done better than how they have actually performed."

2. *For the hypothesis you chose in #1, identify the independent variable and its conditions.* Conditions are the groups you are comparing. The independent variable represents the "cause" half of the hypothesis. (You may have more than one experimental or control condition. Most will have only one of each.) Please identify:

- a. Independent variable:
- b. Experimental condition:
- c. Control condition:
- d. For Part 2, I was confused by _____, so I _____.

3. *Identify the dependent variable.* The dependent variable is what you are comparing your groups on. This variable represents the "effect" half of the hypothesis. (You may have more than one dependent variable. Most will have only one.) Please identify:

- a. Dependent variable:
- b. Are you confident about your answer? Why or why not?



4. *Describe the experiment.* In a well-constructed paragraph or two, describe how you would conduct this experiment. Include:

- operational definitions,
- the number of participants,
- the location of the experiment (and justification for this choice),
- and explain how you would use random assignment and why it's important.

Finally, discuss in writing how you can be confident that the results came from your independent variable.

5. Say that you hear a news report about how classical music helps students focus in class. In 4 to 5 sentences, explain how this assignment would help you consider this claim?