## A matter that becomes clear ceases to concern us. -- Nietzsche

You are to generate (typed/double-spaced) <u>two experiments</u>, <u>each</u> with (A) one **psychology-related INDEPENDENT variable** of your own choosing as well as (B) one **psychology-related DEPENDENT variable** of your own choosing (but nothing less than ratio or interval data). In other words, in this assignment you will be operationally defining **two independent** variables and **two dependent** variables.

For each independent variable, you will be defining it as used in an *experiment* you could actually (potentially) do. I.e., where participants would be *randomly assigned* to the different levels of that variable examining some aspect of human behavior (this is a psychology course, after all).

For each dependent variable, you should define it in a manner that you could realistically (potentially) collect that data from your behavioral experiment. In other words, avoid using fancy and expensive technologies or surveys that you do not actually have.

Note that you should be certain to provide me with sufficient details in order for your measures and manipulations to make sense to me.

## EXAMPLES:

So, for example, let's say I wanted to do a study to determine the effects of humor on people's perceptions of the realism of art. I could **manipulate** <u>HUMOR</u> (independent variable) so that there were three levels/groups. I would **RANDOMLY ASSIGN** 30 participants to a "high humor" group, another 30 to a "medium-humor" group, and a final 30 to a "low-humor" group. My definition of "humor" as an independent variable would be *amount of time laughing that a confederate engages in per joke (taken from any google search for "jokes") while the research participant is present. The more laughing, the more humor. Specifically, I would have confederates laugh 8 seconds per joke, 4 seconds per joke, or 0 seconds per joke, depending on the condition (high, medium, low humor).* 

For my dependent variable that **measured** <u>REALISM</u> I would simply have people rate the "realism" of a randomly selected top-100 museum painting in the world (or at a specific museum, or based on a google search, etc.) using a 7-point Likert scale after each joke. The definition here is *the self-reported level of perceived realism of museum-quality paintings based on a 7-point Likert scale, where 1 = "not at all realistic" and 7 = "extremely realistic."* To get sufficient data, I would probably make sure to have each participant complete twenty trials (i.e., provide ratings for 20 randomly selected paintings each following 20 different jokes).

**<u>BOTTOM LINE</u>**: Ultimately how you define your variables depends on the research goal. Clearly, there are research questions for which the above methods would not be appropriate.

Your mission is to generate two simple experiments in order to come up with operational definitions of **two dependent** and **two independent** variables of your own choosing as they would be used in a psychological experiment you could really (potentially) perform.

**<u>IMPORTANT</u>**: Please *DO NOT rely solely on an <u>example</u> as your definition*. Your definition may (and probably should) *include* an example, but must ultimately be <u>independent</u> of examples. I.e., you should DEFINE the variable not just give examples of it. **Example-only "definitions" earn** <u>no credit</u>.

**<u>TIP</u>**: If you find yourself struggling to create an operational definition for a variable, then DROP that variable and try another one. Don't make this assignment more difficult than it needs to be!

## **WARNING:** You may <u>not</u> use the following as independent or dependent variables:

Amount of Sleep	Hunger	Music	Light Color
Stress	Distraction	Sex/Gender	Room Color
IQ/Intelligence	Temperature	Paper Color	(Maybe just avoid color)

## EXAMPLE TERMS

Amount-of-blood-sugar Amount-of-study-time Arousal Audience Building-floor Ceiling-height Clothing-style Day-of-week Experimenter-appearance Experimenter-attitude Familiarity-with-other Hopefulness Lighting Nervousness Noise-level Number-of-doors Number-of-people Personal-space Physical-comfort Presence-of-experimenter Presence-of-odor Presentation-medium **Room-location Room-orientation** Room-size Seating-arrangement Strength Time-of-day Type-of-lighting Weather

Aggression Attention Attitudes Balance Body-temperature Breathing-rate Distance-judgment Emotions Eye-blinking Eye-contact-duration **Eve-movements** Facial-expression Hand/eye-coordination Heart-rate Humor-appreciation Imagination Instruction-following Judgment-of-time Memory Mood Pleasure Problem-solving **Reaction-time Reading-ability Reading-speed** Reflexes Respiration Smoking Sympathy Task-performance

Age Beauty Disability Education-level Eye-separation Food-preference Gender Geographic-location Hair-length Handedness Height Inquisitiveness Major-in-college Materialism Muscular-health Olfactory-sensitivity Personal-interests Personality-type **Political-beliefs** Profession Race Religion Sexual-orientation Shoe-size Smoking-preference Socioeconomic-status Study-habits Type-of-course-sampled Visual-acuity Weight

Note: You are not required to use *any* of the above, these are just provided in case you get stuck.