Identifying Independent & Dependent Variables

First, you need to decide whether the question describes an experiment, quasi-experiment, a mix of the two, OR a descriptive research study (one with no IVs at all). This will then allow you to complete the appropriate section (blue or green) for each question. DO NOT complete both sections for any given question…. Only one section is correct.

Note that for experiments and quasi experiments (blue section): A given question may describe a study with 1 or 2 IVs, with 1 to 2 DVs. Fill out the table as appropriate.

Note that for descriptive research (green section): A given question may have 1-4 variables. Fill out the table as appropriate.

Please do the practice problems in Canvas first. If you struggle with the practice problems, get help from myself or the class intern before you do this assignment.

1. Does video game preference depend on sex? To find out, a researcher asks 50 men and 50 women 18-25 years old whether they prefer violent or non-violent games. He records the number of people falling into each of the 4 category combinations (men-violent, men-nonviolent, women-violent, women-nonviolent).

Experiment or Quasi-Experiment	Descriptive Research
Independent variable 1:	Variable 1
Levels of IV 1:	Scale of measure for variable 1
DV 1:	Variable 2
Scale for DV 1:	Scale of measure for variable 2
Independent variable 2:	Variable 3
Levels of IV 2:	Scale of measure for variable 3
DV 2:	Variable 4
Scale for DV 2:	Scale of measure for variable 4

2. Does adding hot spice to food and increasing water consumption promote weight loss? Participants were randomly assigned to a spicy vs. bland diet. Within each of these groups, 1/3 were then randomly assigned to a low, medium, or high water consumption group. Six months later, the amount of weight lost or gained was recorded for each participant in the 6 groups and their means were compared.

Experiment or Quasi-Experiment	Descriptive Research
Independent variable 1:	Variable 1
Levels of IV 1:	Scale of measure for variable 1
DV 1:	Variable 2
Scale for DV 1:	Scale of measure for variable 2
Independent variable 2:	Variable 3
Levels of IV 2:	Scale of measure for variable 3
DV 2:	Variable 4
Scale for DV 2:	Scale of measure for variable 4

3. Does choice of sport depend on gender? One hundred men and 100 women were asked whether they preferred to play team vs. individual sports. The number of people in each of the resulting 4 categories was then analyzed to see if sport and gender were related.

Experiment or Quasi-Experiment	Descriptive Research
Independent variable 1:	Variable 1
Levels of IV 1:	Scale of measure for variable 1
DV 1:	Variable 2
Scale for DV 1:	Scale of measure for variable 2
Independent variable 2:	Variable 3
Levels of IV 2:	Scale of measure for variable 3

DV 2:	Variable 4
Scale for DV 2:	Scale of measure for variable 4

4. Does wearing "bling" during a speed dating session yield more dates? A group of 20 women participated in 30 individual speed dating sessions. Half the time, they wore "bling", the other half the time they did not. Otherwise, what they said and their behavior toward the men was kept constant. The number of dates yielded per woman in the bling and non-bling conditions was recorded and their means compared.

Experiment or Quasi-Experiment	Descriptive Research
Independent variable 1:	Variable 1
Levels of IV 1:	Scale of measure for variable 1
DV 1:	Variable 2
Scale for DV 1:	Scale of measure for variable 2
Independent variable 2:	Variable 3
Levels of IV 2:	Scale of measure for variable 3
DV 2:	Variable 4
Scale for DV 2:	Scale of measure for variable 4

5. Is oxytocin hormone replacement therapy an effective treatment for women convicted of child abuse? To find out, a researcher randomly assigned 60 women convicted of child abuse to either an oxytocin or placebo control group. After 6 months, the researcher recorded the number of nurturing, neutral, and aggressive behaviors toward a realistic, but cyborg child in a 24 hour period. The mean for each behavior was then compared between the oxytocin and placebo groups.

Experiment or Quasi-Experiment	Descriptive Research
Independent variable 1:	Variable 1

Levels of IV 1:	Scale of measure for variable 1
DV 1:	Variable 2
Scale for DV 1:	Scale of measure for variable 2
Independent variable 2:	Variable 3
Levels of IV 2:	Scale of measure for variable 3
DV 2:	Variable 4
Scale for DV 2:	Scale of measure for variable 4

6. Does dog breed ownership depend on the owners' socioeconomic status (SES)? Three dog breed groups were studied: toy, sporting, and working. The number of owners (n=200) who fell into low, medium, and high SES within each dog breed group was recorded. The frequencies of the resulting 9 category combinations were then compared to see if dog breed ownership and SES were related.

Experiment or Quasi-Experiment	Descriptive Research
Independent variable 1:	Variable 1
Levels of IV 1:	Scale of measure for variable 1
DV 1:	Variable 2
Scale for DV 1:	Scale of measure for variable 2
Independent variable 2:	Variable 3
Levels of IV 2:	Scale of measure for variable 3
DV 2:	Variable 4
Scale for DV 2:	Scale of measure for variable 4

7. Does consuming a high caloric drink immediately before a test improve test scores? To find out, 50 participants were randomly assigned to consume either a low or high caloric drink

immediately before taking a multiple choice statistics test (lucky them!). The mean score for the two groups were then compared.

Experiment or Quasi-Experiment	Descriptive Research
Independent variable 1:	Variable 1
Levels of IV 1:	Scale of measure for variable 1
DV 1:	Variable 2
Scale for DV 1:	Scale of measure for variable 2
Independent variable 2:	Variable 3
Levels of IV 2:	Scale of measure for variable 3
DV 2:	Variable 4
Scale for DV 2:	Scale of measure for variable 4

8. Does personality and type of PDA (public display of affection) have any effect on ratings of acceptability? 100 people were classified as either an extravert or an introvert. Each participant then watched three 30 second videos of a couple in a busy park, in random order: holding hands, kissing, kissing and hugging. After each video, they were asked to rate how acceptable they believed the couple's behavior to be on a 5 point scale (1 completely unacceptable to 5 completely acceptable). The means for the resulting 6 groups were then compared.

Experiment or Quasi-Experiment	Descriptive Research
Independent variable 1:	Variable 1
Levels of IV 1:	Scale of measure for variable 1
DV 1:	Variable 2
Scale for DV 1:	Scale of measure for variable 2
Independent variable 2:	Variable 3
Levels of IV 2:	Scale of measure for variable 3

DV 2:	Variable 4
Scale for DV 2:	Scale of measure for variable 4

9. Do the number of swearwords in a two hour movie affect viewers' perception of the movie's level of violence? Participants were randomly assigned to watch one of three movies: no swearwords, 10 swear words, 100 swearwords. Perceptions of violence were assessed on a 10 point scale (1 entirely nonviolent to 10 extremely violent). The three means were then compared.

Experiment or Quasi-Experiment	Descriptive Research
Independent variable 1:	Variable 1
Levels of IV 1:	Scale of measure for variable 1
DV 1:	Variable 2
Scale for DV 1:	Scale of measure for variable 2
Independent variable 2:	Variable 3
Levels of IV 2:	Scale of measure for variable 3
DV 2:	Variable 4
Scale for DV 2:	Scale of measure for variable 4

10. Do highway speeds increase with or decrease with the number of decals displayed on vehicles? Highway cameras equipped with radar took pictures of vehicles as they passed a checkpoint. The researcher counted the number of decals on each vehicle and the speed of each vehicle in mph. to see whether speeds and number of decals are related to each other.

Experiment or Quasi-Experiment	Descriptive Research
Independent variable 1:	Variable 1
Levels of IV 1:	Scale of measure for variable 1

DV 1:	Variable 2
Scale for DV 1:	Scale of measure for variable 2
Independent variable 2:	Variable 3
Levels of IV 2:	Scale of measure for variable 3
DV 2:	Variable 4
Scale for DV 2:	Scale of measure for variable 4