

Practice Questions on IVs & DVs and the Experimental Method

1. You believe that snorting Ritalin when you study, improves your grades. You randomly assign undergraduates to 2 groups. One is instructed to study every night between 7 and 9 and to crush and snort 60 mg of Ritalin at 6:30 each night. The other group is instructed exactly the same, except they are given no instructions to crush and snort Ritalin. You compare midterm grades and find that the Ritalin group has significantly higher exam scores.

What is the IV?

What is the DV?

2. You believe that women who are observed with a beer in their hand will be perceived by men as more attractive than women who are observed with a soda in their hand. To test this you show some men pictures of women drinking beer and other men see pictures of women drinking soda. All men then evaluate the women on measures of attractiveness. Your hypothesis is supported. .

What is the IV?

What is the DV?

3. You believe that depressed children can benefit from relaxation training, that it will lessen their symptoms of anxiety. You assign children to one of 3 groups: no relaxation training, moderate training (told to practice 1 hr per day) or heavy training, (told to practice 2 hrs per day). After 1 month you assess their anxiety by recording their heart rate when you tell them they will have to give a 10 minute public speech.

What is IV?

What is DV?

4. You believe that your new ad campaign will be very effective and increase sales of the product dramatically. In order to test this, your adds are shown on TV, to Bensonville, Ark residents during a 2 month blitz. You compare sales of your product in Bensonville to sales of your product in Sharksville Kansas, a town which sells your product, but residents saw no TV adds.

What is the.IV?

What is the DV?

5. You believe that alcohol makes people aggressive. In order to test this, you went to ASU and asked college aged undergraduates to come into your laboratory and consume alcohol. They come in individually, but then are randomly assigned to one of 2 groups. One group drinks 6 shots in an hour and a second group drinks only 1 shot in an hour. You then have a friend of yours come in and really insult them. Soon after, each participant is told that while they were waiting for the alcohol to wear off, they could participate in a second “unrelated” study. All agreed and they were taken to another room and given the chance to give electrical shock to the person who insulted them. The research assistant recorded how much shock they gave to the person who insulted them.

What is the IV?

What is the DV?

Answers on back

Answers to Practice Questions on IVs & DVs and the Experimental Method

1. You believe that snorting Ritalin when you study, improves your grades. You randomly assign undergraduates to 2 groups. One is instructed to study every night between 7 and 9 and to crush and snort 60 mg of Ritalin at 6:30 each night. The other group is instructed exactly the same, except they are given no instructions to crush and snort Ritalin. You compare midterm grades and find that the Ritalin group has significantly higher exam scores.

What is the IV? **Dose of Ritalin (some versus none)**

What is the DV? **Midterm Grades**

2. You believe that women who are observed with a beer in their hand will be perceived by men as more attractive than women who are observed with a soda in their hand. To test this you show some men pictures of women drinking beer and other men see pictures of women drinking soda. All men then evaluate the women on measures of attractiveness. Your hypothesis is supported. .

What is the IV? **Type of Picture (beer can versus soda)**

What is the DV? **Ratings of Attractiveness**

3. You believe that depressed children can benefit from relaxation training, that it will lessen their symptoms of anxiety. You assign children to one of 3 groups: no relaxation training, moderate training (told to practice 1 hr per day) or heavy training, (told to practice 2 hrs per day). After 1 month you assess their anxiety by recording their heart rate when you tell them they will have to give a 10 minute public speech.

What is IV? **Relaxation Training (none versus some)**

What is DV? **Anxiety level or Heart Rate**

4. You believe that your new ad campaign will be very effective and increase sales of the product dramatically. In order to test this, your adds are shown on TV, to Bensonville, Ark residents during a 2 month blitz. You compare sales of your product in Bensonville to sales of your product in Sharksville Kansas, a town which sells your product, but residents saw no TV adds.

What is the.IV? **TV Adds (some versus none)**

What is the DV? **Sales of Product**

5. You believe that alcohol makes people aggressive. In order to test this, you went to ASU and asked college aged undergraduates to come into your laboratory and consume alcohol. They come in individually, but then are randomly assigned to one of 2 groups. One group drinks 6 shots in an hour and a second group drinks only 1 shot in an hour. You then have a friend of yours come in and really insult them. Soon after, each participant is told that while they were waiting for the alcohol to wear off, they could participate in a second “unrelated” study. All agreed and they were taken to another room and given the chance to give electrical shock to the person who insulted them. The research assistant recorded how much shock they gave to the person who insulted them.

What is the IV? **Alcohol or Dose of Alcohol**

What is the DV? **Level of Aggression or How much shock**