

Correlation vs. Causation Assessment

1. What does it mean for variables to have a causal effect?

When one event causes another to occur.

2. Give an example of two variables that have a causal effect.

The student didn't ~~study~~ ~~for~~ complete their homework and their grade went down.

3. What does it mean for variables to have a correlational effect?

Measure or degree of relationship between two variables.

4. Give an example of two variables that have a correlational effect.

Often a third reason for effect.
Alarm clocks ring when the sun starts to rise.

5. Classify the following examples as a correlation or causation.

- a. As the weather gets hotter, the rate of pimples increase.

Correlation

- b. The more books that you read, your attention span increases.

Causation

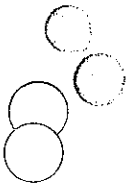
- c. As you gain weight, the amount of times that you sit also increases.

~~Correlation~~ Causation

- d. As ice cream sales increases so does the amount of drownings.

Correlation

Correlation vs. Causation Talking Points



For the following prompts, read aloud and poll the students their stance on the relationship. If students believe the relationship is causal, they cluck like a chicken. If students believe the relationship is correlational, they meow like a cat.

If students are not sure, the students on either side may plead their case and try to convince students to agree with their viewpoint.

- ✓ As the amount of files you download onto your computer increases, the amount of available digital space decreases.

 - ✓ People who have more followers on social media tend to post more frequently than average users.

 - ✓ Students who get injuries tend to play sports.

 - ✓ As the global temperature has increased it has led to the decline in the number of pirates.

 - ✓ The emergence of users on Facebook has led to the decline of Myspace users.

 - ✓ As the amount of tattoos a person gets increases, the number of motorcycle accidents they are involved in also increases.

 - ✓ The more time you talk on your cell phone, the more likely you'll get cancer.
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