

Headline or Hogwash?

Activator · Correlational thinking · 15 minutes

Name _____ Block _____ Date _____

HOW TO READ A RESEARCH HEADLINE

Every headline below reports a correlational study — researchers measured two things and found they move together. That does not mean one caused the other, and the headline is often written to make you think it did.

Whenever two things move together there are always three explanations. Write all three before deciding which you believe. Most people stop at the first. Work alone or with a partner; brief answers, full sentences.

THE HEADLINES

HEADLINE 1

“Teenagers Who Sleep Less Have Lower GPAs”

1. Direction — circle one: POSITIVE NEGATIVE
2. Underline the word or phrase in the headline that makes it *sound* causal.
3. Write all three explanations. Every one must be a complete sentence.

A causes B — the headline’s version

B causes A — the arrow runs backward

C causes both — a third variable

4. Circle the explanation above you would bet on. In one sentence, why?

HEADLINE 2

“People Who Exercise More Report Lower Levels of Anxiety”

1. Direction — circle one: POSITIVE NEGATIVE
2. Underline the word or phrase in the headline that makes it *sound* causal.
3. Write all three explanations. Every one must be a complete sentence.

A causes B — the headline’s version

B causes A — the arrow runs backward

C causes both — a third variable

4. Circle the explanation above you would bet on. In one sentence, why?

HEADLINE 3

“Increased Social Media Use Is Linked to Higher Rates of Depression”

1. Direction — circle one: POSITIVE NEGATIVE
2. Underline the word or phrase in the headline that makes it *sound* causal.
3. Write all three explanations. Every one must be a complete sentence.

A causes B — the headline's version

B causes A — the arrow runs backward

C causes both — a third variable

4. Circle the explanation above you would bet on. In one sentence, why?
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HEADLINE 4 · THE ODD ONE OUT

“Cheese Consumption Per Person Closely Tracks the Number of Civil Engineering Degrees Awarded”

1. Direction — circle one: POSITIVE NEGATIVE
2. Underline the word or phrase in the headline that makes it *sound* causal.
3. Write all three explanations. Every one must be a complete sentence.

A causes B — the headline's version

B causes A — the arrow runs backward

C causes both — a third variable

4. Circle the explanation above you would bet on. In one sentence, why?
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5. **This one is different.** Try all three explanations above. What goes wrong? What does that tell you about the pattern itself?
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ONE LAST QUESTION — ANSWER THIS ONE CAREFULLY

If a correlation can never prove that one thing causes another, why do psychologists run correlational studies at all?

Name one research question that could ONLY be studied this way — something impossible or unethical to test with an experiment.

REMINDERS — AND TONIGHT'S READING

- These studies show relationships, not cause and effect.
- More than one explanation can be reasonable. Say which you would bet on and why.
- “Linked to” and “associated with” are correlation words. “Causes” and “leads to” are causal words. Headlines mix them on purpose.

Homework: read the illusory correlation section that follows. Come in able to answer — what makes an illusory correlation different from a third-variable problem?