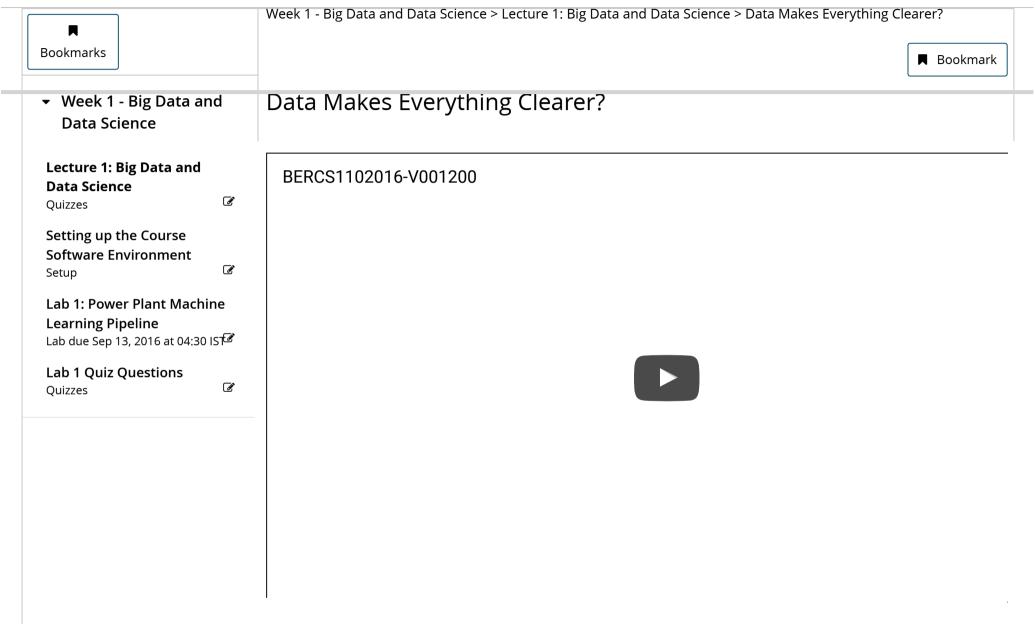


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Seven Countries Study Q1

(1/1 point)

What would Fischer say is a potential flaw of the Seven Countries Study?

- "Causation does not imply correlation"
- "Correlation implies causation"
- "Correlation does not imply causation"
- "Causation implies correlation"

EXPLANATION

The Seven Countries Study incorrectly drew the conclusion that dietary fat causes heart disease, based on the apparent correlation between the percentage of diet that was from fat calories and the rate of degenerative heart disease deaths.

Seven Countries Study Q2

(1/1 point)

What other lessons can a data scientist take away from the Seven Countries Study?

🗹 Use more data 🛛 🗸

Use less data

Explore more types of data/factors



Note: Make sure you select all of the correct options—there may be more than one!

EXPLANATION

The Seven Countries Study only studied a subset of 7 out of 21 countries with available data, and it failed to include other important factors such as annual sugar consumption in pounds. Including additional data or factors would have likely led Ancel Keys to a different conclusion.

Snow's Analysis

(1/1 point)

Was Snow's Spot Map a convincing scientific argument that contaminated water caused Cholera?

- Yes, the map along with his analyses of the anomalies proved that contaminated water caused
 Cholera
- Yes, and this is why scientists at the Centers for Disease Control ask each other "Where's the pump handle?"
- No, the map only demonstrated a correlation and provided a hypothesis as to the cause of
 Cholera
- On No, the map contained anomalies and this means it can not be used as scientfic proof

EXPLANATION

While Snow's map was effective in convincing the authorities to remove the pump handle, it was only a hypothesis that contaminated water caused Cholera. Scientific proof required an unbiased observation that removed potential confounding factors.

Social Networking Paper

(1/1 point)

What are the flaws in the social networking paper?

Correlation does not imply causation

- ☐ Causation does not imply correlation
- You have to identify all the important factors
- Princeton will have no students by 2021



Note: Make sure you select all of the correct options—there may be more than one!

EXPLANATION

The paper arrives at its erronous conclusion because the authors only considered one factor, search terms, in developing their model. As the parody response from Facebook shows, it is possible to jump the wrong conclusion by not considering all the factors.

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