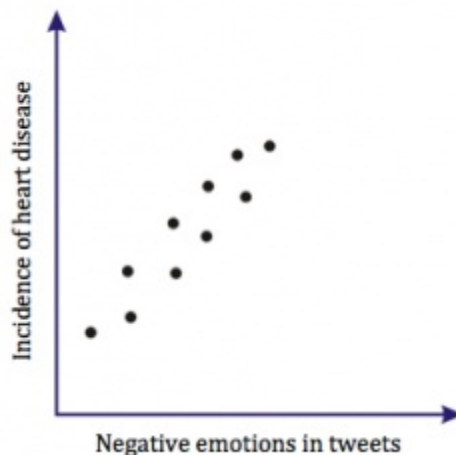


Solution to practice exercise:

1. A positive correlation was found between the aggregate number of negative emotions expressed in tweets sent over a ten month period and heart disease mortality among people who live in 1347 counties.
- 2.



Relationship between negative emotions in tweets and incidence of heart disease

Relationship between negative emotions in tweets and incidence of heart disease

3. Yes, the researchers investigated whether the correlation was influenced by income and education.
4. The researchers believe that the content of tweets reveal the psychological character of the community, which in turn predicts health outcomes like the incidence of heart disease. They point out that the tweets would have been sent by younger adults and not those people who suffer from heart disease. The researchers seem to suggest that negative emotion in tweets is a risk factor for heart disease, which suggests that the negative emotions come before the heart disease. However, it is also possible that the heart disease comes before the tweets and that poor community health leads people to community using negative emotions.
5. Another way to investigate the relationship between negative emotions and health across different communities would be to conduct an archival study by analyzing the front-page news stories of community newspapers to see if the number of negative emotions expressed in those stories predicts the number of hospital admissions in those communities.