

Table Number: _____

Group Name: _____

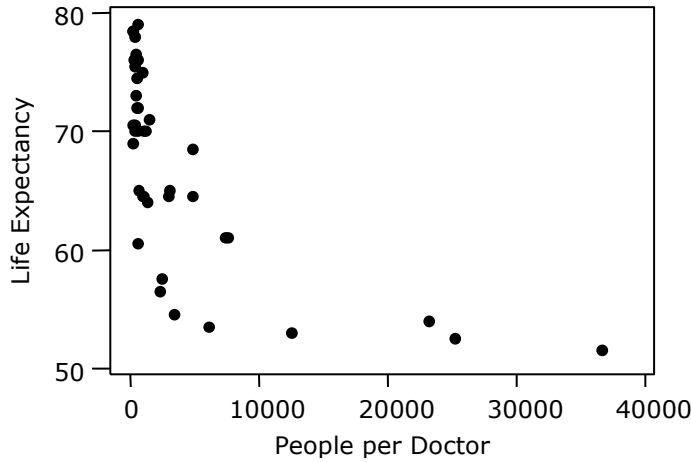
Group Members: _____

Lurking Variables

For questions #1 and #2, follow the directions given.

1.

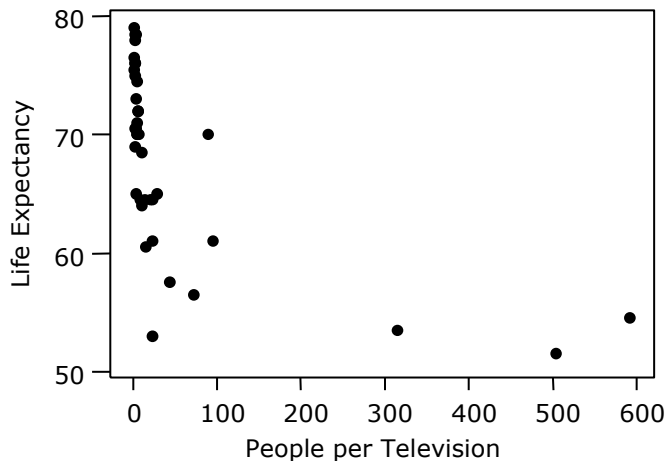
Life Expectancy and Availability of Doctors for a Sample of 40 Countries



Using the information in the plot, can you suggest what needs to be done in a country to increase the life expectancy? Explain.

2.

Life Expectancy and Availability of Televisions for a Sample of 40 Countries



Using the information in this plot, can you make another suggestion as to what needs to be done in a country to increase life expectancy?

Can you suggest another variable that is linked to life expectancy and the availability of doctors (and televisions) which explains the association between the life expectancy and the availability of doctors (and televisions)? We call this type of variable a ***lurking variable***.

For each of the scenarios described below, list at least one possible lurking variable.

3. FIRE DAMAGE AND FIRE TRUCKS
The amount of damage at the scene of a fire has a positive correlation with the number of fire trucks on the scene.

4. BUNDLED-UP BABIES AND OUTDOOR TEMPERATURE
The age at which a baby first learns to crawl has a negative correlation with outdoor temperature.

5. DANGEROUS ICE CREAM AND DROWNINGS
The number of ice cream servings consumed has a positive correlation with the number of drownings.

6. CAR COST AND GAS MILEAGE
In 2005, there was a negative correlation between car cost and gas mileage.

7. FOOT SIZE AND READING ABILITY
Foot size and reading ability have a positive correlation.

Reference