

### Original Statistics

|                    |         |
|--------------------|---------|
| Mean               | 62.4186 |
| Standard Deviation | 28.3961 |
| Minimum            | 2       |
| Quartile 1         | 50      |
| Median             | 60      |
| Quartile 3         | 70      |
| Maximum            | 250     |
| IQR                | 20      |

### After removing the outlier

|                    |         |
|--------------------|---------|
| Mean               | 60.2118 |
| Standard Deviation | 19.8021 |
| Minimum            | 2       |
| Quartile 1         | 50      |
| Median             | 60      |
| Quartile 3         | 70      |
| Maximum            | 120     |
| IQR                | 20      |

### Explanations

The mean of the data is greater than the median. This is because, looking at the data, there is an outlier. All the data values are close to each other except for the value 250, which is far greater than the second largest value. This outlier makes the mean of the data to be larger than the median. Therefore, the appropriate measure of center for this distribution is the mean. This is because it takes into account the outlier available in the data. The median does not consider the outlier.

Removing the outlier reduced the mean of the data from 62.4186 to 60.2118, approximately 60. This implies that the new mean is equal to the median of the data and therefore it is easier to identify the measure of center of this data. Also, removing the outlier reduced the standard deviation from 28.39 to 19.8. This implies that removing the outlier reduced the spread of the data. There was no change in the interquartile range of the data.

From this, I can conclude that an American family income is averagely 60,000 US dollars.