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**How Many Countries Have You Visited?**

 I chose the question, “How many countries have you visited?” The reason why I chose this is because I would like to see how much people actually leave their home countries to travel for vacation, work, etc. This question could be used by other people, besides myself, for the world in general, because if they find that many people are traveling a lot on average, then they may need to up their tourist attractions to get more people to come to their country, or if the traveling is low, to slow down the work they are doing on tourist attractions to save the money for when the influx is greater. Before the statistical data has been analyzed, I believe that there is going to be a low number with the people traveling because it’s expensive to travel for vacation, and the only reason why it may be higher, or have outliers, is because of the people that have to travel for work and/or the like.

 There were 371 entries overall for this study, and to gather statistical data, only 30 of those responses needed to be used. How I got to thirty responses was taking the total, 371, and dividing it by 30, to get around 12, which means after every 12th entry, at the beginning of the data set that was collected, I chose a number to be added into the sample. After I obtained the 30 random samples, I then calculated the mean (2.1) and the standard deviation (3.34). A five-number summary was also calculated, which was the minimum value (0), Q1 (0), median (1), Q3 (2) and maximum value (15). After that data was collected and calculated, a box plot and histogram were created in Excel. The box plot diagram shows that the data is highly right skewed based on the three outliers that are outside of the outlier boundary. The histogram shows the same kind of data, showing that it is right skewed based on that there are more values on the left side of the diagram compared to that of the right side. This data is not normally distributed because it is rightly skewed and does not display a normal distribution curve, or bell curve. How I came to the conclusion of needing four classes for the distribution is that I took the range of the data (15-0=15), and divided that by how many classes that I wanted, which was four, because the data was in four different chunks as a whole. Many of the values jumped from number to number to I looked at the different jumps in data and found there were four different groups. Based on the data, it seems that most people visit around 2 countries, and the outliers may be a result of people going on business trips or that they have an influx of money and are able to visit that many countries.

 Based on the statistics that have been calculated, I feel that what has been concluded is reasonable. What could make my opinion incorrect is that it does not show a normally distributed curved, or bell curve, that should be seen when having a sample size of 30 or more, but random samples may not always show a normally distributed data. What could have made the statistics incorrect is that there were so many outliers based on the outlier boundaries, the data could not have actually been random, the calculations that either I or Excel made could have been wrong or typed incorrectly, causing the data to be different than what it should be.

 The original problem here is to find out how many countries people have visited. This question could be interesting to different companies that are focused on tourism as a main part of income. They may want to find out what age groups travel the most so that they can cater towards what they like, or to implement more attractions to have more people come to their country because of the new and exciting things that have been added. What I found was that most people visit 2 countries in their lifetime, but there are many that don’t visit any country at all and few that visit many countries. This may benefit companies or organizations because if they expand their tourist attractions and make their country look more fun or appealing, then people may actually travel more and go to those countries.



