Tutorial 3

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Based on the data regarding the information of the athletes attending 2012 Olympic Games from the '.rmd' document of STA130 Problem Set 3, in this essay, I attempt to compare plots and summary tables. Two of the primary aspects associated with this discussion are as follows.

Firstly, I would like to mention the strengths of tables. Since the tables are composed from actual numbers after calculating, it can express values of the result accurately. Besides, in some special circumstances, like producing a spaceship, any 1 nanometre matters, we must provide a 'deeper' look into data. Furthermore, using a table can format the data consistently since what every row and line represents has already been scheduled when making it.

Secondly, I would like to mention the weaknesses of tables and compare it to the figures. While tables can be accurate, they can also be difficult to understand immediately, which contrasts with figures which are easy to be understood if it is designed well. Moreover, using a graph can help in the comparison of data in a better way since it mainly uses the visualization method which makes the feature much clearer. In contrast, although a table can still do the comparison between different datasets, it's not as apparent as the graphs.

When creating a summary table or a figure to obtain a good result, what first needs to do is to clean the data. This is the first step helping to make the analysis error not exist. Another step is to handle missing values (NAs) so that it is obvious which parts of the data are missing when creating a table or a graph. By the way, defining new variables clearly is another important thing as it's the subject when describing numbers and values.

To conclude, I think a summary table is most useful when accurate data is need and a figure is most useful when comparing major features. Therefore, choosing which one to use depends on the situation of making presentation or writing articles.