**Ski to Sea: Which sport leg is most important?**

The Ski to Sea race is a multi-sport relay race held annually in Whatcom County, Washington. The race consists of seven legs: cross-country skiing, downhill skiing or snowboarding, running, road biking, canoeing, mountain biking, and kayaking, with each leg representing a different outdoor sport.

1. Which is a better linear predictor of money, average driving distance or average putts per round? Report the correlation.

Average Putts Per Round. r= -0.168

* 1. Plot money vs the better predictor. Is the graph appropriate to represent a linear relationship?

The graph shows some curvature and is not appropriate to represent a linear relationship.

1. Which is a better linear predictor of scoring average, driving strokes gained or putting strokes gained? Report the correlation.

Strokes gained putt. r= -0.358

* 1. Plot scoring average vs the better predictor. Is the graph appropriate to represent a linear relationship?

The graph is appropriate to represent a linear relationship.

1. Which is a better linear predictor of Fedex points, driving percentage or one putt percentage? Report the correlation.

One putt percentage. R= 0.179

* 1. Plot points vs the better predictor. Is the graph appropriate to represent a linear relationship?

The graph shows some curvature and is not appropriate to represent a linear relationship.

1. Look at the correlations between the Drive Variables and the Success Variables and do the same between the Putt Variables and the Success Variables.
   1. Between which drive variable and success variable is the correlation the strongest? Report the correlation.

Strokes Gained Drive and Average Score. r= -0.333

* 1. Also, between which putt variable and success variable is the correlation the strongest? Report the correlation.

Strokes Gained Putt and Average Score. r= -0.358

1. Write a brief interpretation of the correlation between the drive variable and success variable and the correlation between the putt variable and success variable that you found in #4.

There is a weak negative correlation between Strokes Gained Drive and Average Score, such that as Strokes Gained Drive increases, Average Score decreases. There is a stronger negative correlation between Strokes Gained Putts and Average Score, such as Strokes Gained Putts increases, Average Score decreases.

1. Overall, which success variable (Points, avgScore, and Money) is the most predictable and why?

avgScore because it has the best correlated values for drive variables and putt variables

1. In general, what is a better indicator of success, a player’s ability to drive a golf ball or their ability to putt a golf ball? Why do you think this?

Putting because the correlation between the putt variables and the success variables are much greater than the correlation between the drive variables and the success variables.