1. **In your own words, specify the research question(s) (2 sentences or less). [2]**

Does risk taking behavior (Risk taking scores, sensation seeking scores) change when subjects are primed with a helmet compared to a baseball cap, both when the they don’t know about the helmet and when the equipment doesn’t help?

1. **What’s the design of the experiment? Include and explain IVs, DVs. If there is more than one experiment, please specify variables for each experiment. [4]**

The experiment was a between subjects design aimed at measuring risk taking behavior differences between cap and helmet conditions. The main independent variable was eye tracker mount type (cap vs helmet) and data was also collected about age and gender. The dependent variables were risk taking (measured by the Balloon Analogue Risk Task (BART) scores), anxiety (measured using the State-Trait Anxiety Inventory (STAI) Form Y-1), Sensation seeking scores (measured by Sensation- Seeking Scale Form V). The researchers also collected information about cycling frequency and helmet wearing frequency.

1. **What methods did you use to analyze the data? And why? (e.g. if ttest, specify type of t-test) [4]**

To analyze the risk taking (BART) scores, I computed means and standard deviations and then did a non-Welch independent t-test. I used an independent groups t-test because I am comparing means from two separate groups of individuals. In this case equal variance was assumed.

To analyze the sensation seeking scores, I first computed descriptive statistics (means and standard deviations) and then computed a Welch’s independent t test. I used Welch’s because there were not equal sample sizes or variance. I used an independent groups t-test because I am comparing means from two separate groups of individuals.

To see if gender had any effect on the risk taking (BART) scores, I computed descriptive statistics for each group and then did an independent groups t-test. I used an independent groups t-test because I am comparing means from two separate groups of individuals. In this case equal variance was assumed.

1. **Include your R script as a text file. (Optional: present plot or diagram as shown in paper if present) [10]** 
   1. **Bicycle data:**
      1. **(a) Association between helmet vs. cap with higher risktaking scores;**
      2. **(b) Helmet vs. cap with sensation seeking scores;**
      3. **(c) Higher risk-taking scores between genders [be sure to report means, SDs, t-test values and p values]**