



**CALIFORNIA SCIENCE & ENGINEERING FAIR
2018 PROJECT SUMMARY**

Name(s) Ainsley E. Savant	Project Number 38672
Project Title Motivation vs. Actual Energy	
Abstract Objectives/Goals The objective of this study was to measure motivation and actual energy to see which drives young children and young athletes to succeed during performance. Methods/Materials 1st-3rd grade boys and girls, competitive boys hockey team, stopwatch, apple juice, food colored water, running track, hockey warmup area. Measured timed running tests with control lap, apple juice lap, and motivation lap (special water, positive words). Results School kids and athletes were both timed in multiple laps. They were tested with an energy drink and motivation. The results showed that athletes respond more to motivation. Conclusions/Discussion School aged young boys and girls did not respond to the placebo drink or encouraging words. Measuring young athletes on a team revealed a positive correlation to encouraging words and the placebo drink. The conclusion is that athletes on a team respond to motivation vs. actual energy. It is their brains and competitive nature (and possibly environment) that make them faster.	
Summary Statement After reviewing two sets of young groups, I found that young athletes on a team respond more to motivation vs actual energy.	
Help Received I interviewed a psychologist from the Cleveland Clinic (Dr. Michelle Yourkvitch) regarding the placebo effect. I designed the testing format and materials on my own as well as executing the study project. My teacher, Gena Heins, reviewed the project and prompted me to ask questions to dig deeper into the	