**Name(s)**

Ruby Marron

**Project Number**

# S1011

**Project Title**

## Higility

**Abstract**

**Objectives/Goals**

The purpose of my investigation was to figure out the relationship between height and agility. My hypothesis was that tall athletes have the ability to run better on long distances, and short athletes would have a better performance on short distances.

**Methods/Materials**

Materials:

1. Stopwatch
2. Measuring tape
3. Pencil &paper
4. A group (10) of short teenage athletes (1.5 meters and lower). [girls]
5. A group (10) of tall teenage athletes (1.65 meters and higher). [girls]
6. A track

Procedures:

1. Measure and record athlete#s height.
2. Make 2 groups: each with 5 tall and 5 tall people.
3. Race and time the first group, one lap (400 meters),
4. Next race and time the second group.
5. Repeat 2 more times with resting periods in between each trial.
6. Race and time the first group again, only 5 yards this time,
   however, they have to go slide from side to side
   (Goal: Go up and back twice).
7. Next race the second group.
8. Repeat 2 more times with resting periods in between each trial.

**Results**

From both the short and long distance tests, the shorter people had a better averaged time overall.

**Conclusions/Discussion**

My hypothesis was that tall athletes have the ability to run long distances, and short athletes perform better in shorter distances. My hypothesis was incorrect; from my results it showed that shorter people are better at both long and short distances. I believed that taller people had a better stride, and that it would take shorter people two or more steps for their stride to equal that of a tall athlete. However, in both my long distance and short distance races, the short peoples' averages were the best.

**Summary Statement**

The purpose of my project was to figure out what group, tall or short people, would have a better performance on long and/or short distances.

**Help Received**

My friend Denise helped with the title, Dad helped with materials, Mr. Callaway helped me with the thinking process.