Hand Size vs Typing Speed
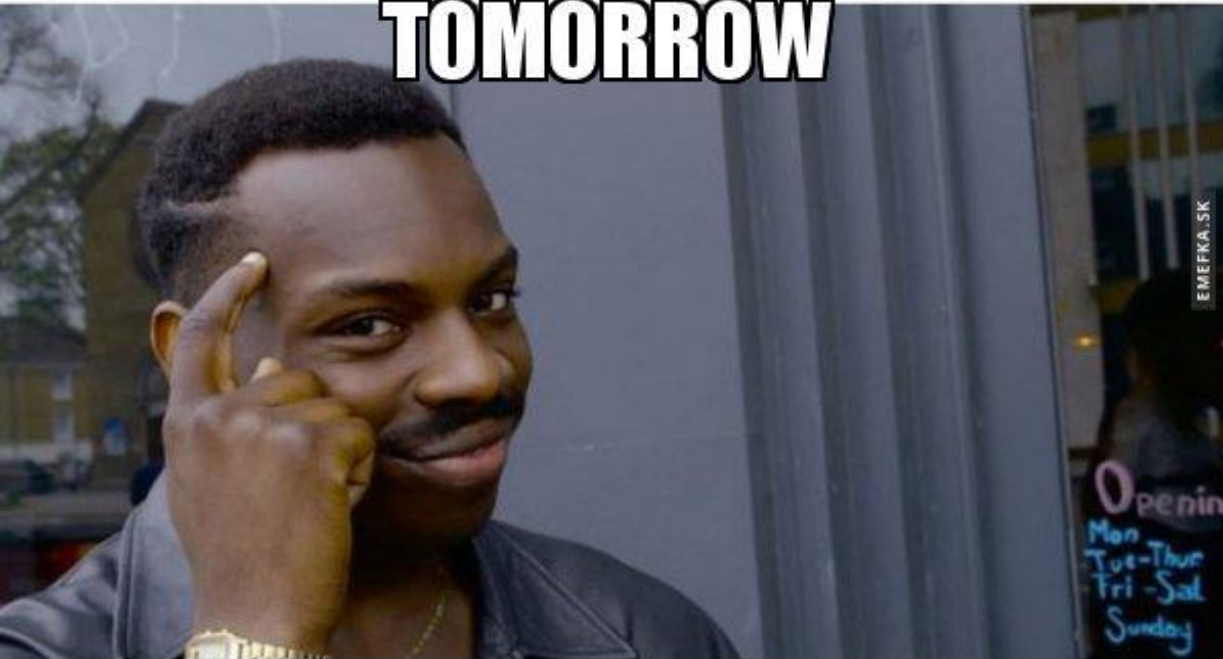
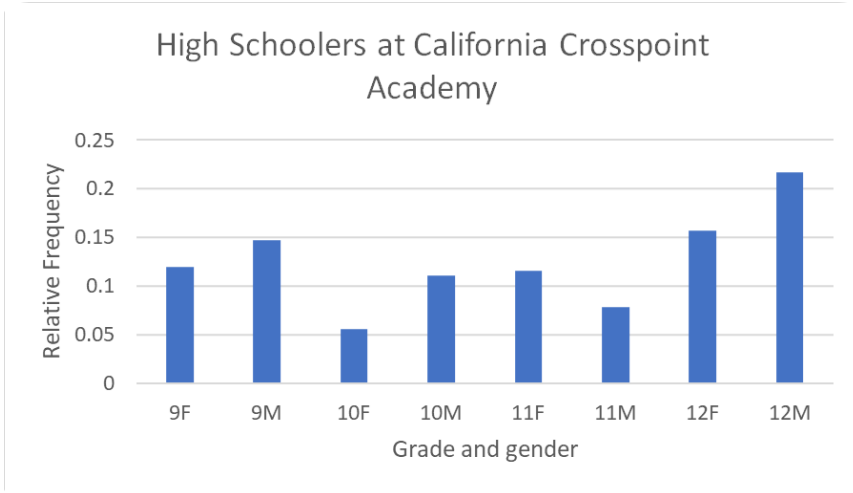James Ding

Ellie Ku

Hannah Li

Intro

Hypothesis: People with larger hands tend to type faster

Intro-Confounding Variables

- Familiarity – typing faster on a keyboard they're familiar with

- Personal laptop – provided by the student

- School laptop - Lenovo 300e 2nd Gen 81M9 R91339FX

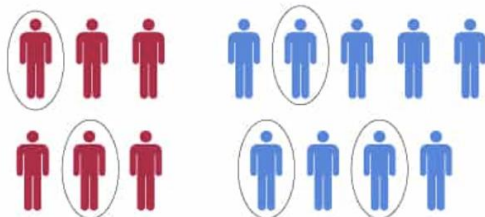High Schoolers at California Crosspoint Academy

Data Collection-Sample Space

- Stratified random sample by grade and gender
  - Representative of our school population
  - RNG to choose students
- Convenience Sample
  - Mainly juniors and seniors
- Randomized surveyors
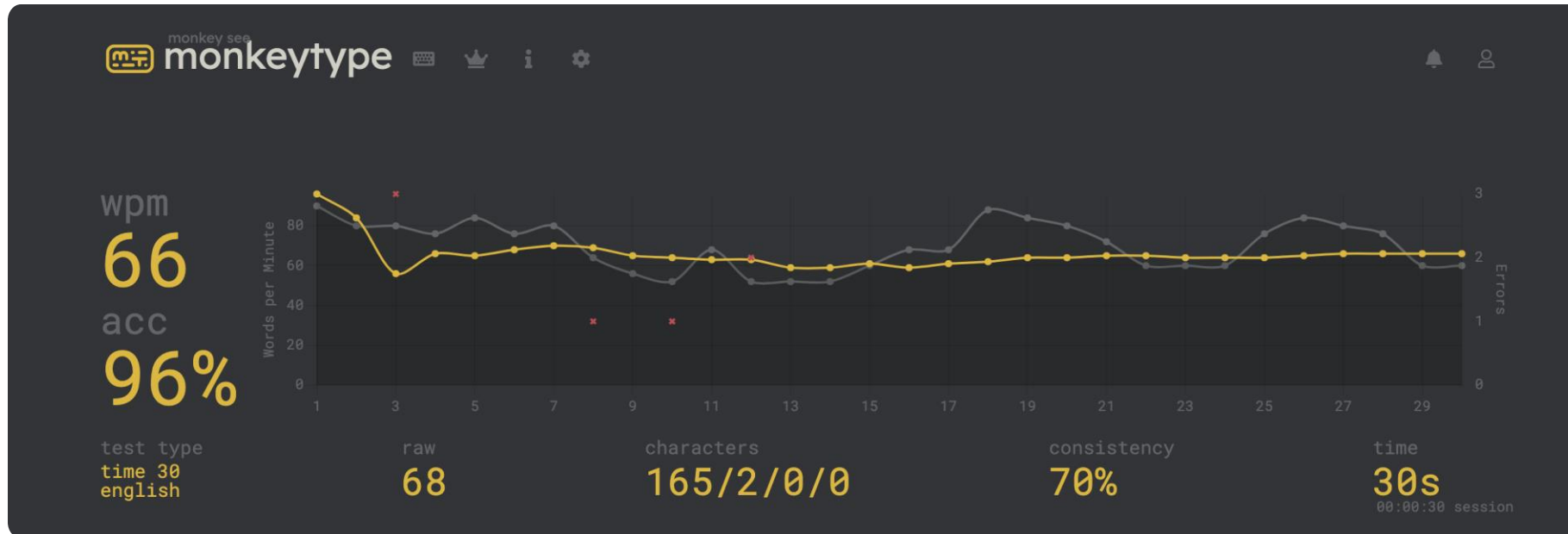 - Minimize response bias

Data Collection-Tools

- Monkey Type

- 30 Second timed test

Data Collection-Tools

WPM (Word per Minute)-The total amount of characters in the correctly typed words including spaces, divided by 5 and normalized to 60 seconds.
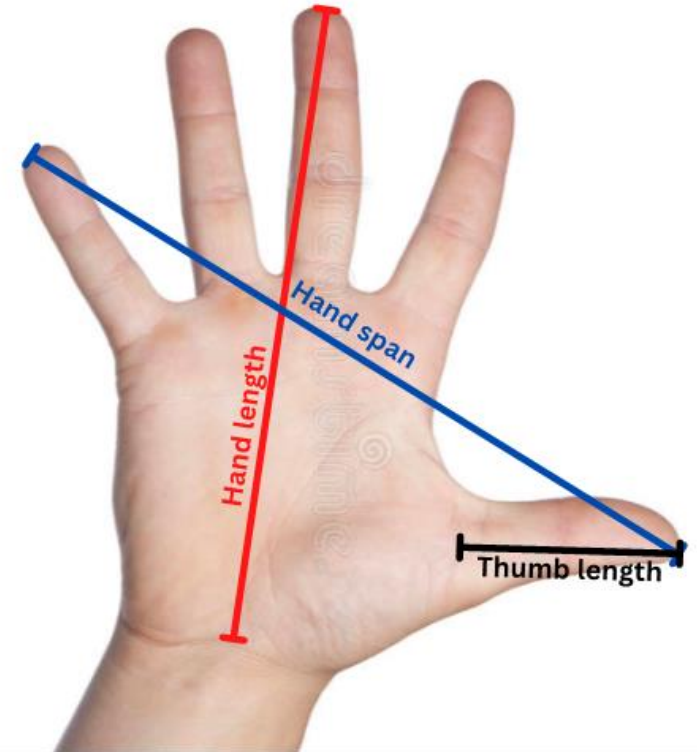
Raw WPM – Calculated just like WPM, but also includes incorrect words

Accuracy – The percentage of correctly pressed keys

Consistency – Based on the variance of your raw wpm. Closer to 100% is better. Calculated using the coefficient of variation of raw wpm and mapped onto a scale of 0 to 100.
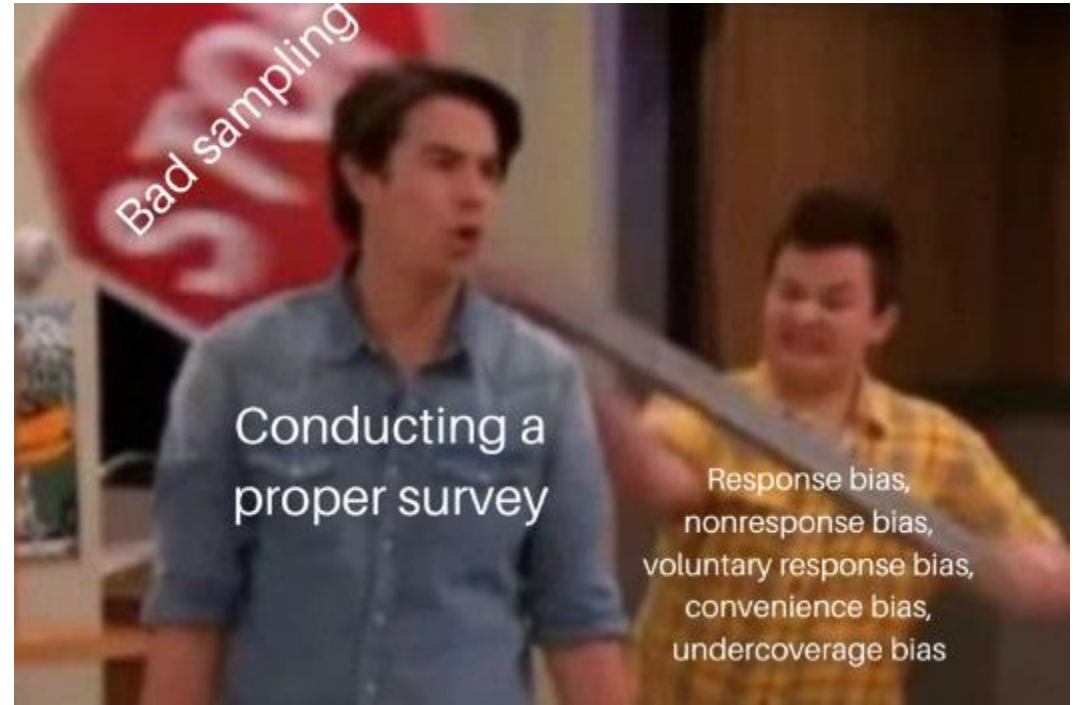
Data Collection-Methods

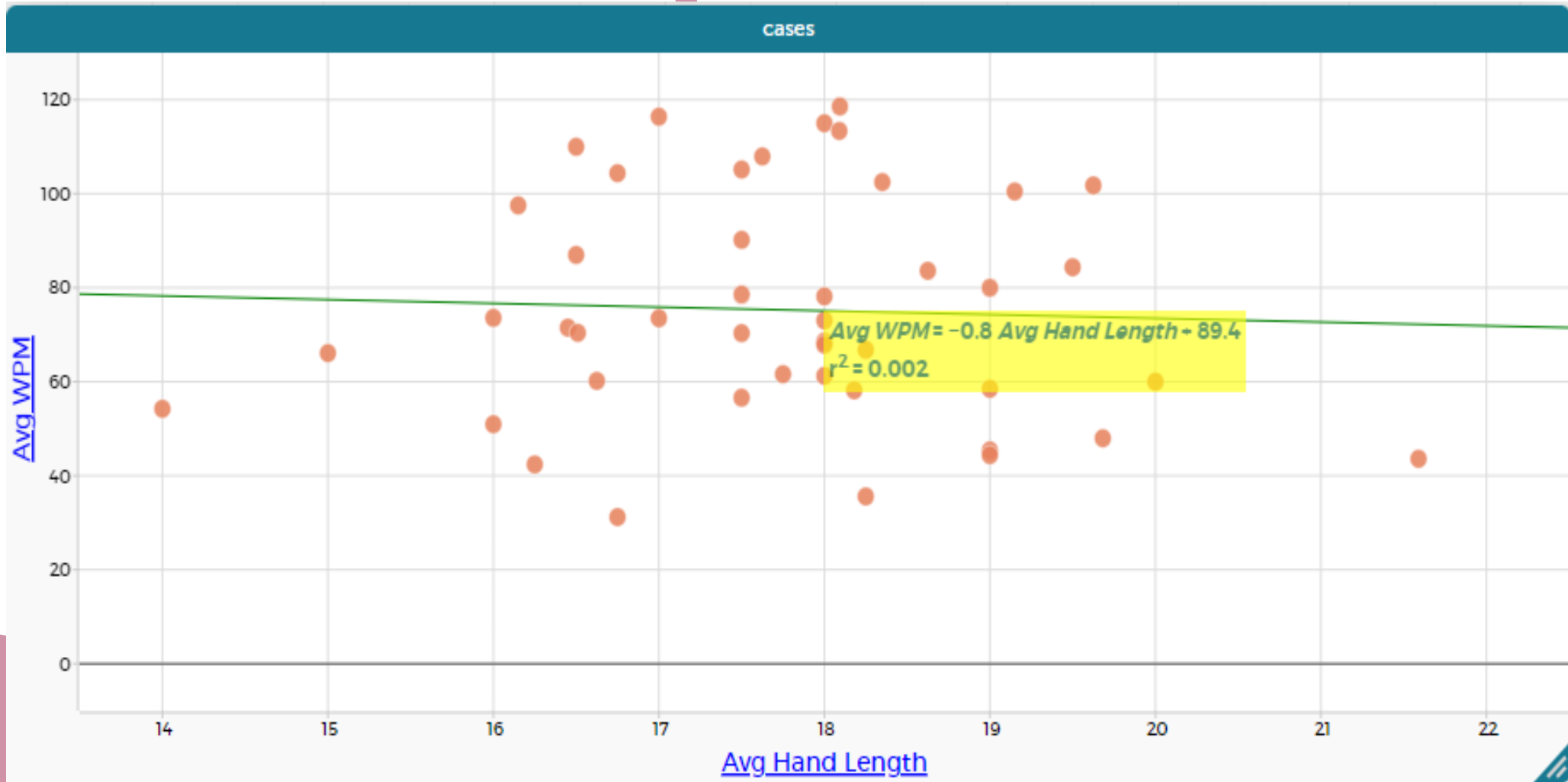- Hand length, hand span, thumb length
  - Centimeters
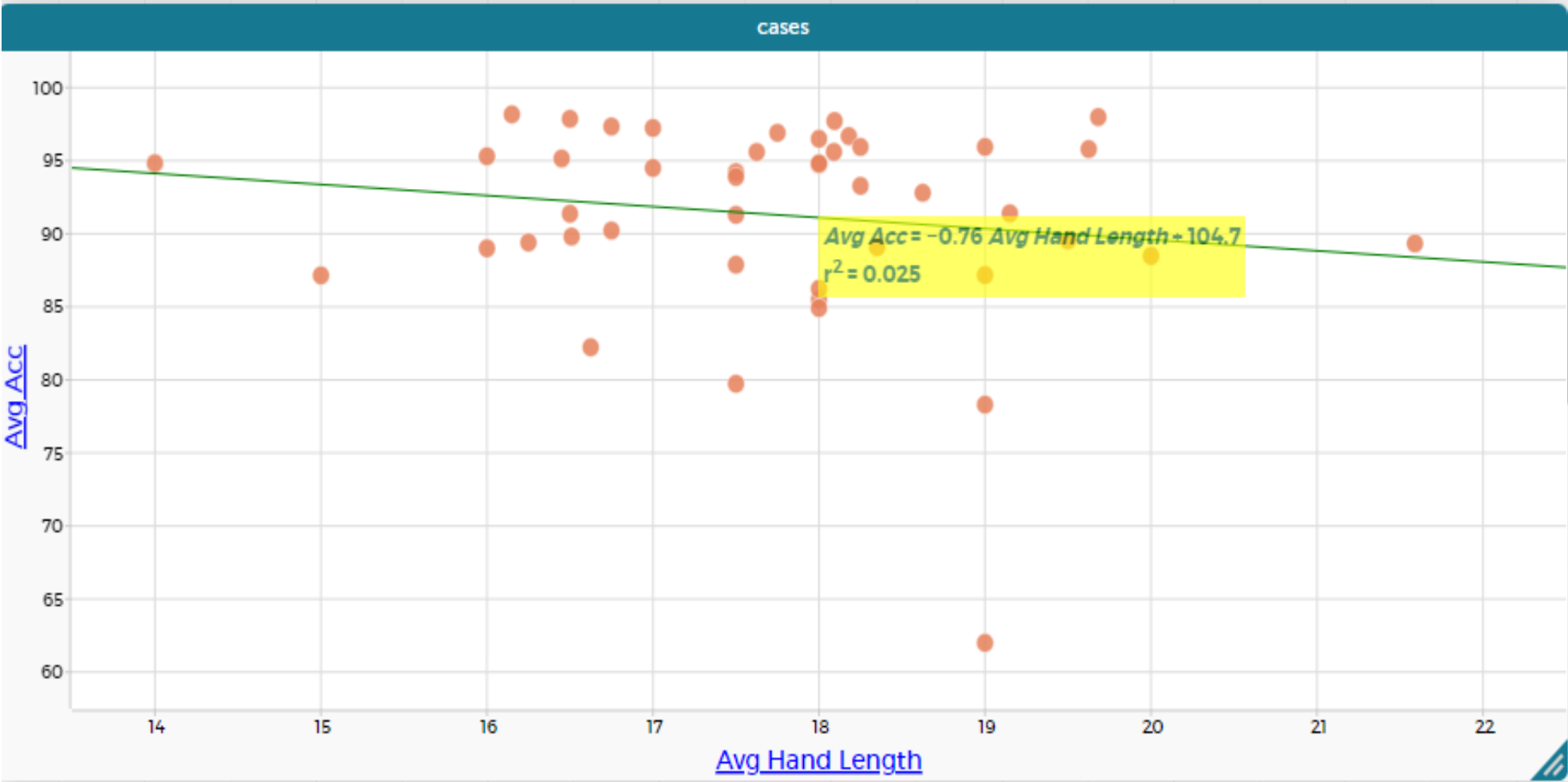- Monkeytype

Data Collection- unexpected difficulties

- Time constraints
- Non-response
  - Replacing people who were unavailable

Data Analysis

cases

Avg WPM = −0.8 Avg Hand Length + 89.4
$r^2 = 0.002$
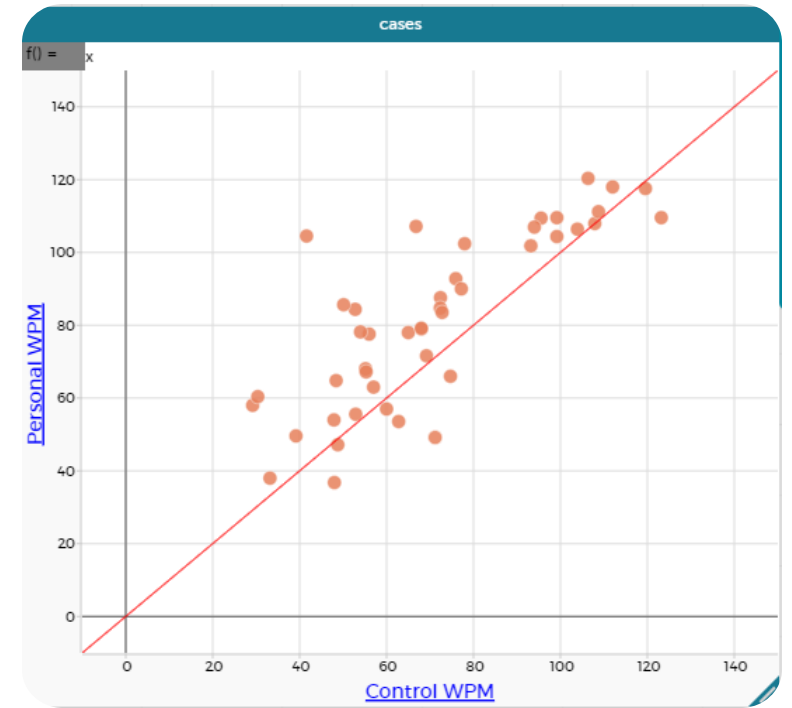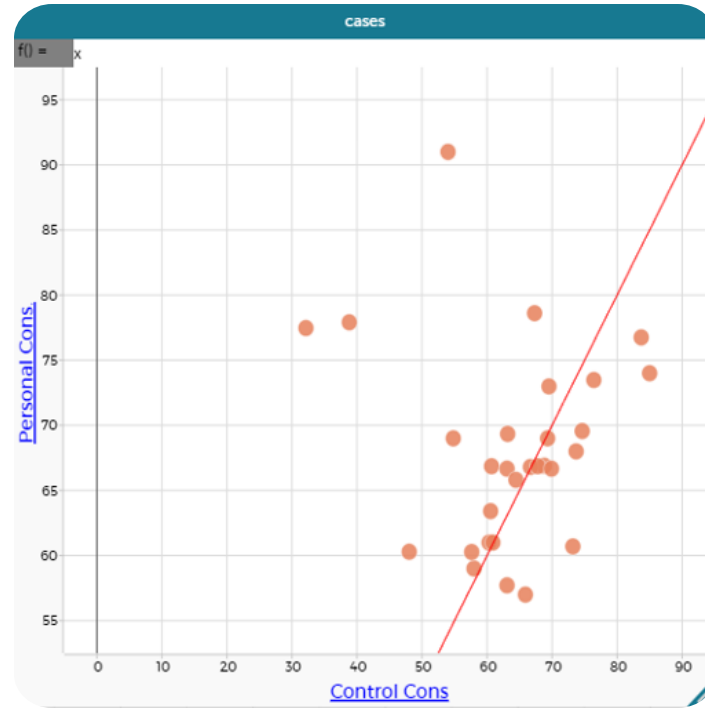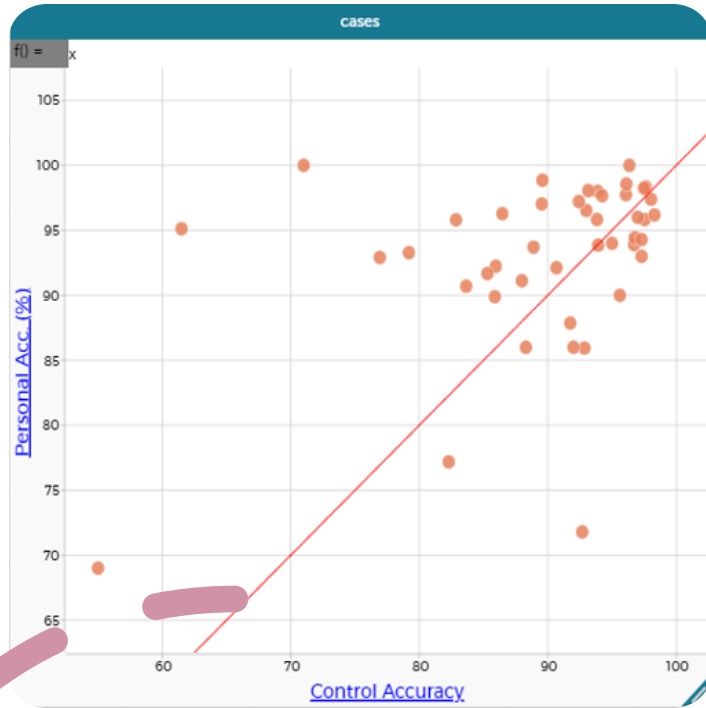
Data Analysis (continued)

Personal vs. Control

- As expected, people did better on their personal laptops
- Y=x line graphed

Conclusions

- No correlation :(
- Typing speed is a learned skill, not a natural one
- People with smaller hands can sometimes type faster than people with bigger hands

Question 2

When is the time that you should ask a question if you are confused about something?

    a. When there's a quiz coming up

    ✓ b. The first moment you are confused

    c. End of the quarter

    d. You shouldn't ask

Thank You:)