# Categorizing Player Behaviors
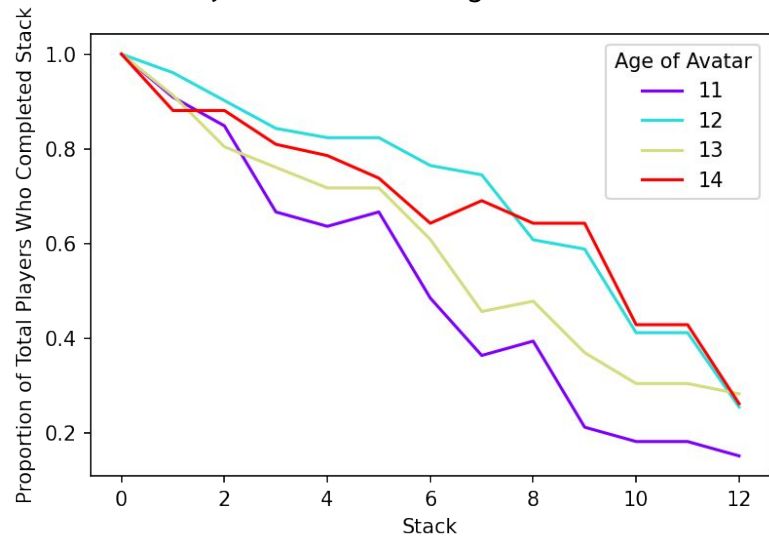
**Standard Deviants**

Avishek Ghosh
Megan Ma
Shiyu Murashima
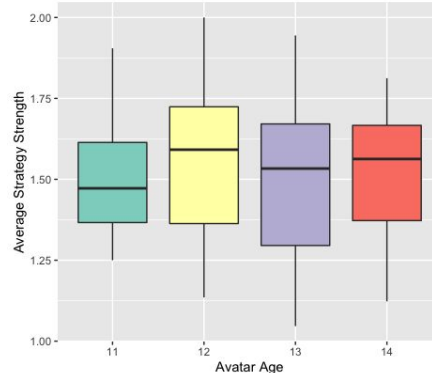Brandon Louie
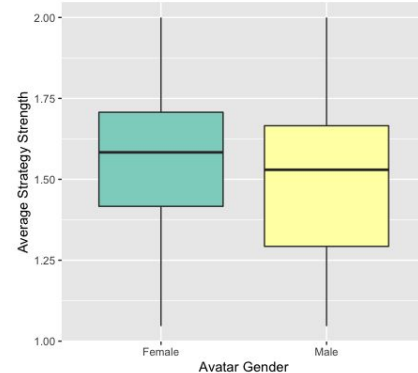Jarod Ngo

## Player Retention through the Stacks
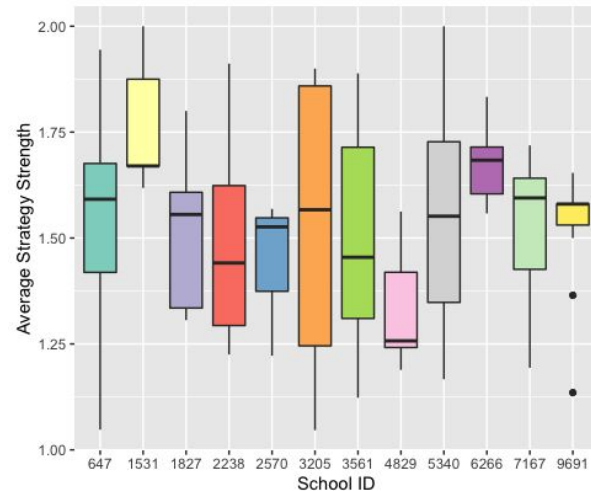
Age of Avatar
- 11
- 12
- 13
- 14

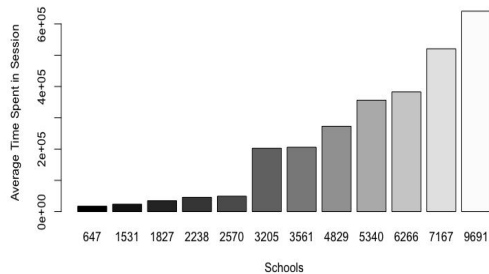## Average Strategy Strengths by Avatar Age

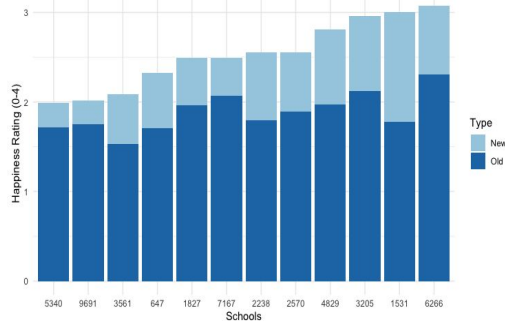## Average Strategy Strengths by Avatar Gender
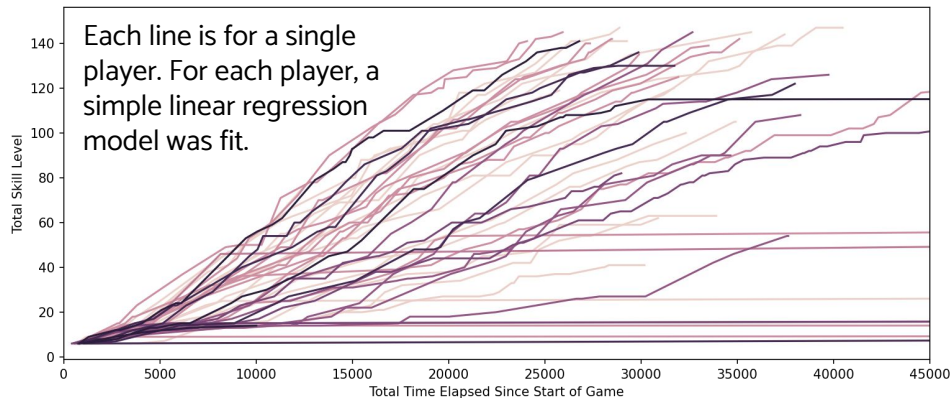
## Average Strategy Strengths by School

## Average Time Spent Playing Game by School

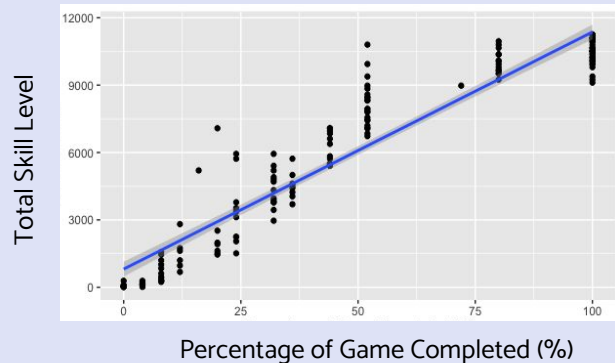## Change in Happiness Rating by School

Type
- New
- Old
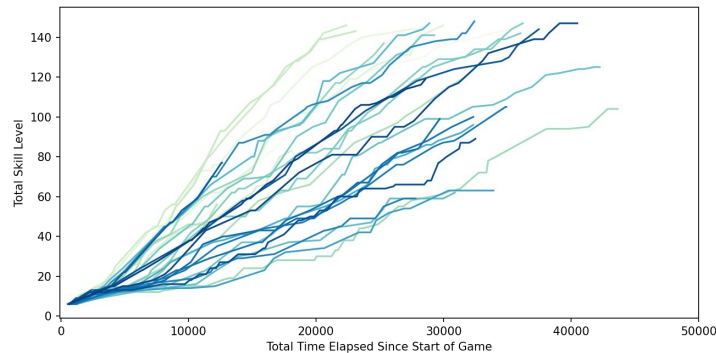
Each line is for a single player. For each player, a simple linear regression model was fit.

Total Skill Level (y-axis), Total Time Elapsed Since Start of Game (x-axis)

BoxCox Transformation of Percentage Completed vs. Total Skill

Total Skill Level (y-axis), Percentage of Game Completed (%) (x-axis)

Lambda = 2

Intercept = 808.9

Slope = 105.6

Adj. $R^2$ = 0.901

Regression Models with $R^2 < 0.8$ (25 players)

Total Skill Level (y-axis), Total Time Elapsed Since Start of Game (x-axis)
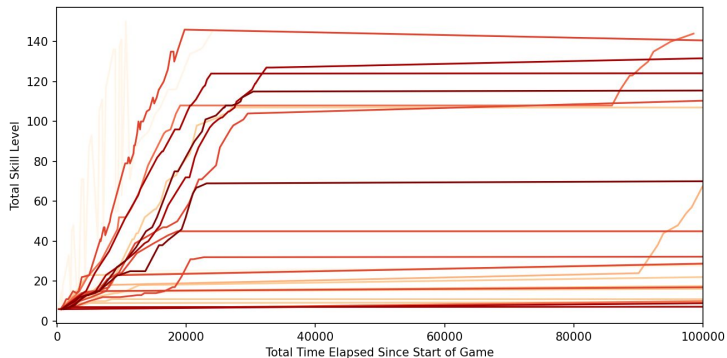
Regression Models with $R^2 > 0.95$ (107 players)

Total Skill Level (y-axis), Total Time Elapsed Since Start of Game (x-axis)

| row_id | player_id | date | session | event_time_dbl |
|--------|-----------|------|---------|----------------|
| 135206 | 6427017 | 2013-07-10 | Session 2 | 8595 |
| 135207 | 6427017 | 2013-07-15 | Session 4 | 178291 |

**Sudden time jump!**
Need to be cautious of the way time is logged.