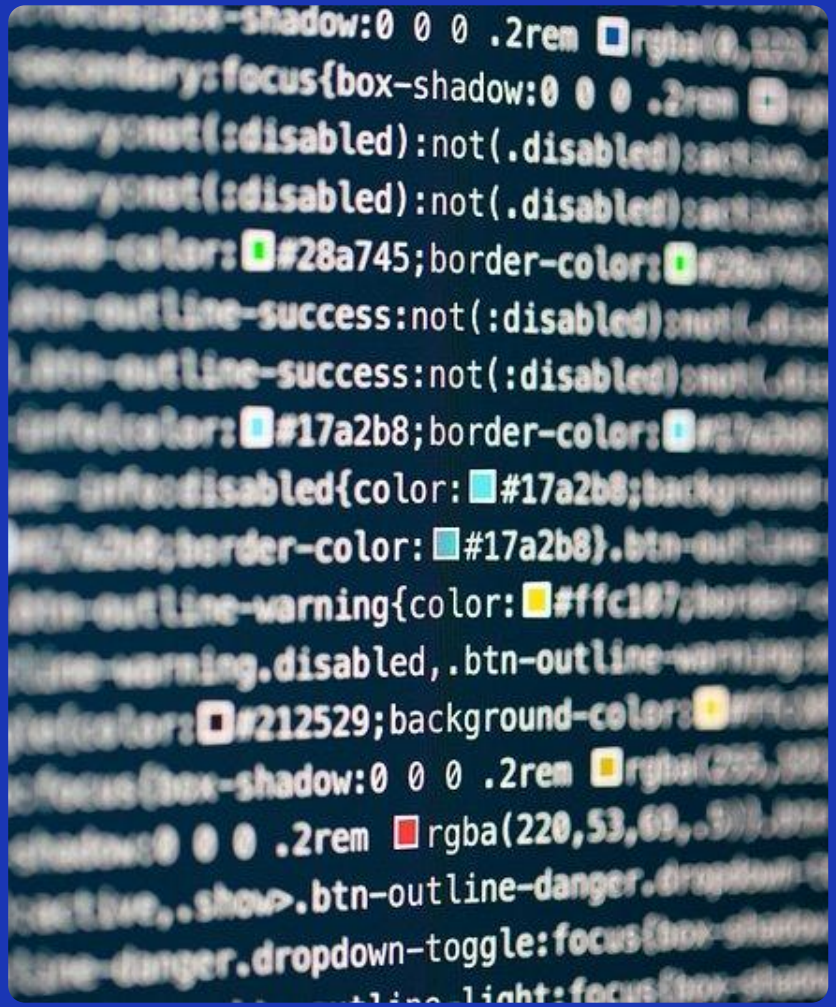
Kylie Eagan

Family Support Calls

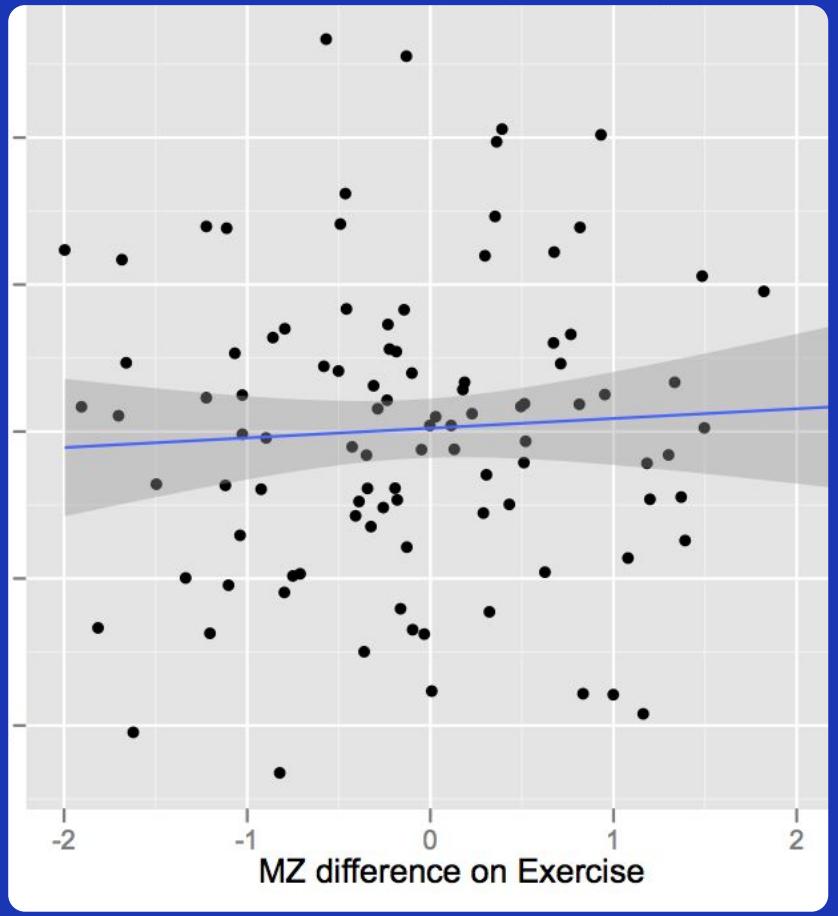


Similar Articles

Sharing Family Life Information Through Video Calls and Other Information and Communication Technologies and the Association With Family Well-Being: Population-Based Survey by Chen Shen,Man Ping Wang, Joanna TW Chu, Alice Wan, Kasisomayajula Viswanath, Sophia Siu Chee Chan, and Tai Hing Lam

In A Society of Strangers, Kin Is Still Key: Identified Family Relations In Large-Scale Mobile Phone Data by Tam'as D'avid-Barrett, Sebastian Diaz, +4 authors Loreto Bravo

Multiple Linear Regression



Why this model?

- To predict the family support I get through phone calls
- Uses multiple predictor variables on the one dependent variable in same graph
- Visual representation that could be animated in a GIF

Steps

Part 1

Data Preprocessing

Reading from the CSV file for the data. Also removing rows that had missing values or NAs. Converting the predictor variables to numeric type.

Part 2

Model Type

Using the Multiple Linear Regression model.

Part 3

Animation Setup

Setting up the sequence of the values for the code, duration being the dependent variable. Computing the predictors to the dependent variable.

Part 4

Simple Linear Regression

It is important to know that this code could also be fit to a Simple Linear Regression Model if need be.

Steps

Part 5

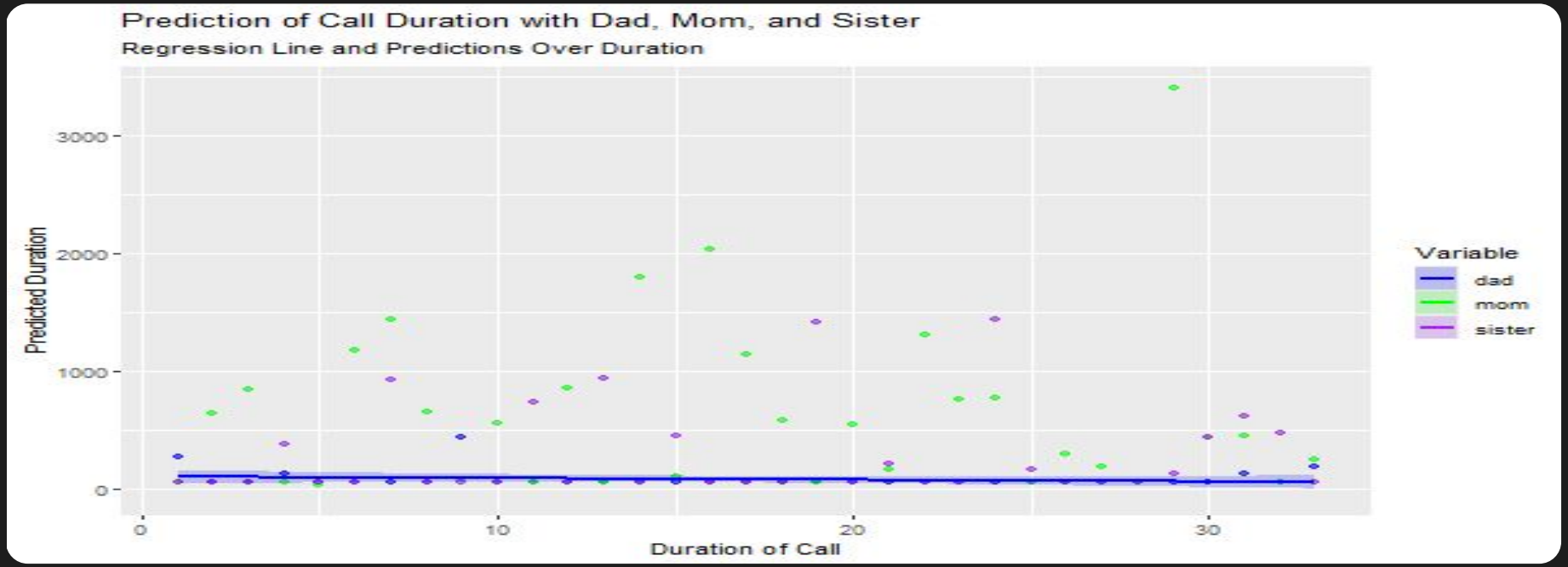
Plot

Creating the scatter points and the predictions.

Part 6

Code Animation

The code that was animated is then saved as a GIF file.



Final Model

At the end it was a Multiple Linear Regression plot that finally worked. It had taken me a few frustrating weeks to get to this point but I can say that I now know more about coding than I ever did. Every little thing needs to be just right even to the point of transition speed can make a difference in making a decent looking prediction animated plot.

Why can I use a Multiple Linear Regression Model but not a Simple Linear Regression Model?