IOWA STATE UNIVERSITY **University Honors Program**

Jacob Veatch

An Analysis of Comedy College: A look into the data of students and their comedy. Callback vs Non-Callback Joke Reactions How do jokes that use callbacks measure up with the crowd reaction of jokes that do not make callbacks?

Objectives

- Watch and collect data from recorded Comedy College standups
- Visualize data in an analyzable format
- Determine correlations in data to figure out what makes comedians funny

Comedian PK id INTEGER Set VARCHAR name INTEGER dominant_hand VARCHAR plays INTEGER FK | comedian shirt_color VARCHAR INTEGER FK venue id sex hair_color BINARY night INTEGER order_in_night INTEGER INTEGER VARCHAR VARCHAR race year VARCHAR Callback Joke INTEGER number in set INTEGER PK id INTEGER INTEGER FK set id set id FK from_joke INTEGER TIMESTAMP TIMESTAMP INTEGER FK to_joke end time timestamp TIMESTAMP NUMERIC reaction SwearWord PK,FK set_id INTEGER uses PK,FK joke_number_in_set INTEGER TIMESTAMP timestamp VARCHAR word

Determining a Data Model

Collecting Data

- 4 Semesters
- 48 Comedians
- 399 Minutes
- 690 Jokes
- 106 Swear Words
- 26 Callbacks

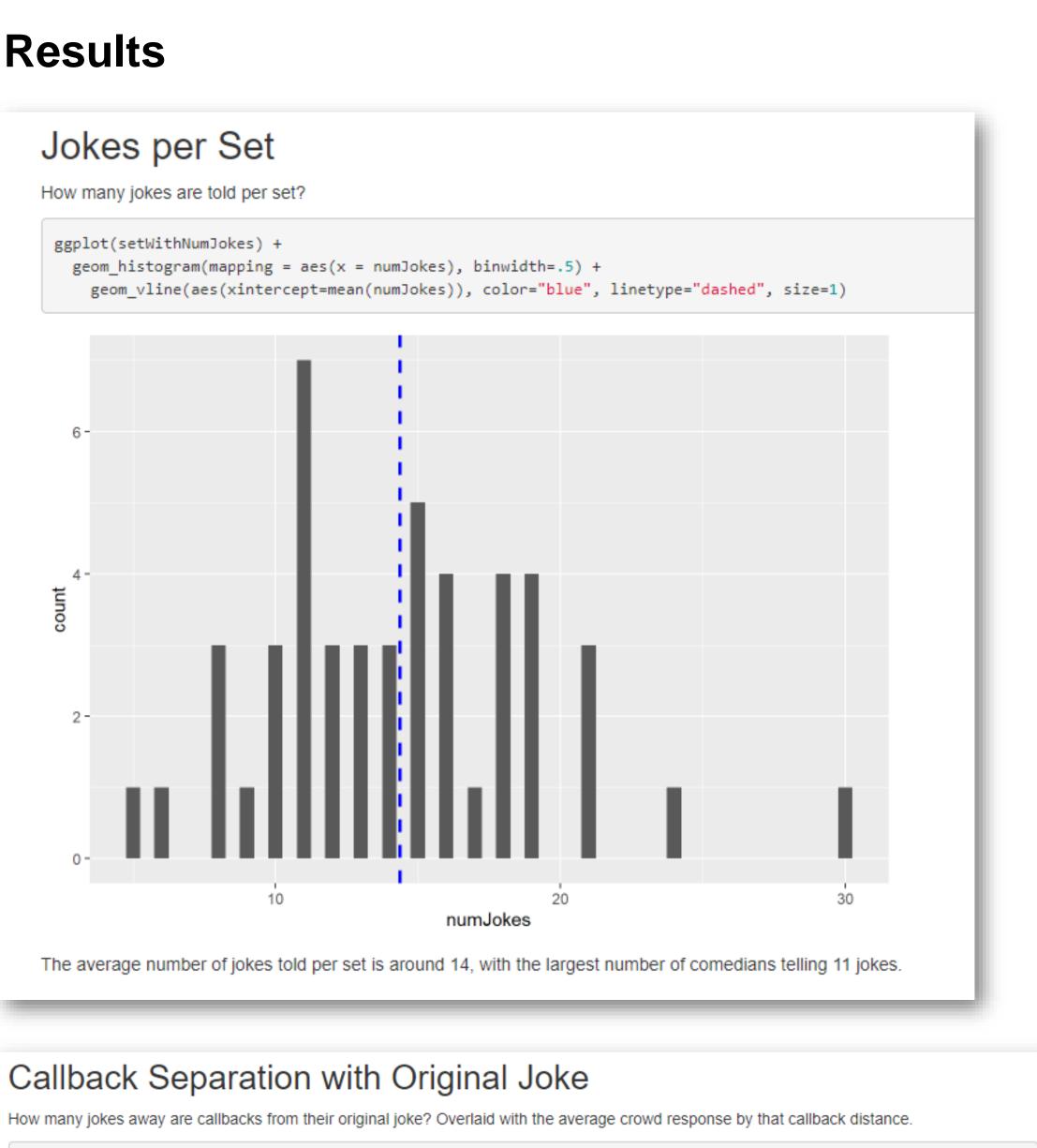
Crowd Response

Measure of the crowd reacting to a joke from a scale 1-10 (1 being horrible, 10 being the best).

Visualizing Data

- R Programming Language
- R Markdown
- Tidyverse (ggplot2 for graphing)

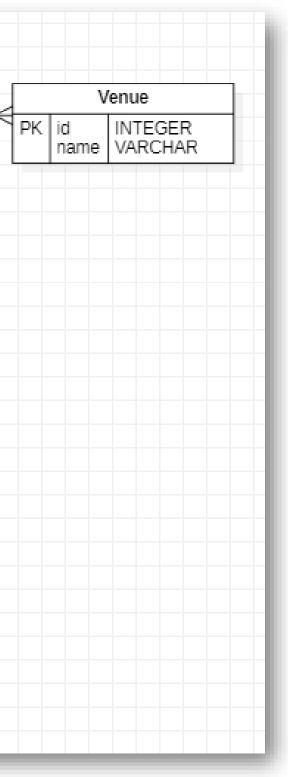
Results



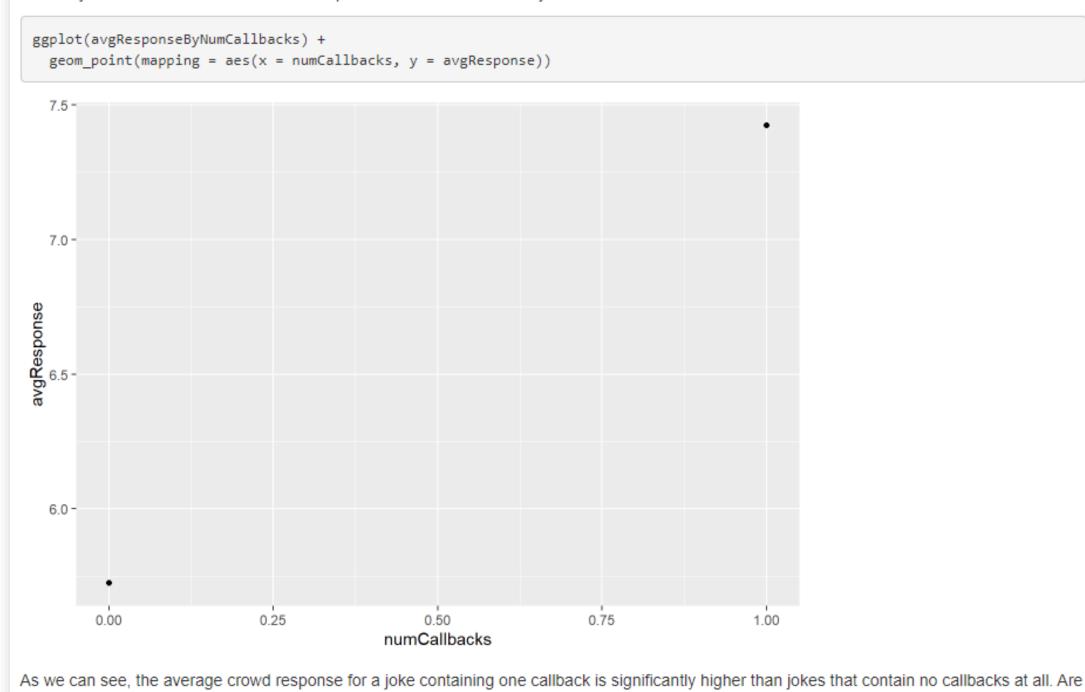
ggplot(distanceCallbackWithResponse) + geom_histogram(mapping = aes(x = callbackDistance), binwidth=.5) + geom_vline(aes(xintercept=mean(callbackDistance)), color="blue", linetype="dashed", size=1) + geom_point(data = avgResponseCallbackDist, aes(x = callbackDistance, y = avgResponse, color = "Average Crowd Response")) + scale_color_manual(name = "", breaks = c("Average Crowd Response"), values = c("Average Crowd Response" = "red")) 10.0 -. . . 7.5 -5.0 -Average Crowd Response

callbackDistance

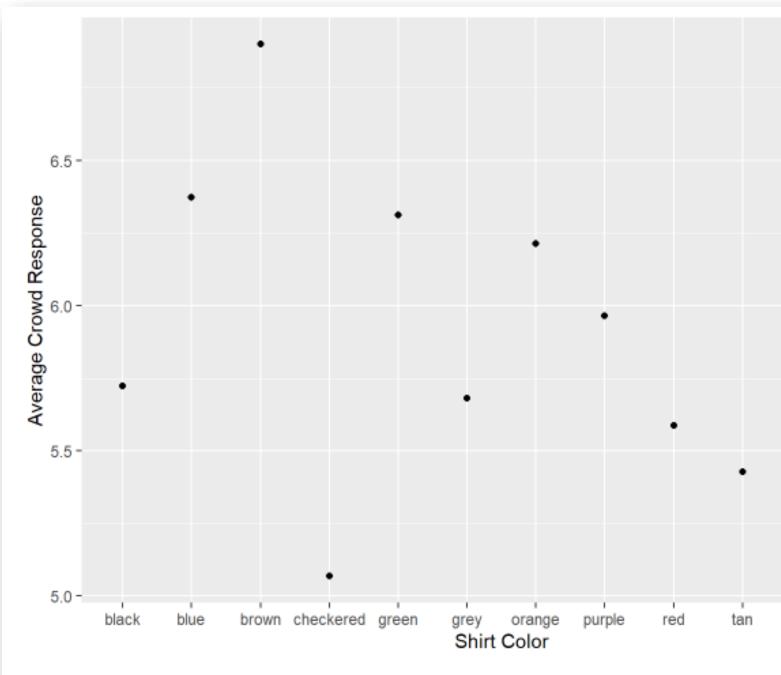
Here we can see that the most used callback distance is actually one joke away. The average callback distance is ~5 jokes away. We can see the overlaid average crowd response performing the best on average with higher distances from the original joke.

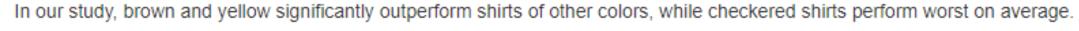


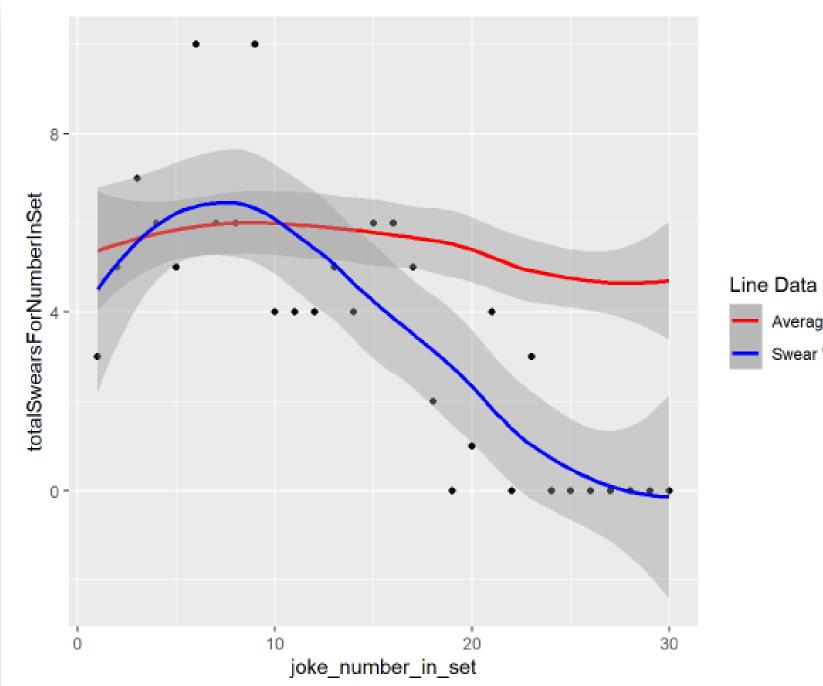
Advisors: Dr. Peter Orazem, Gavin Jerome



comedians that use callbacks naturally funnier with crowds? Do crowds like to hear callbacks?



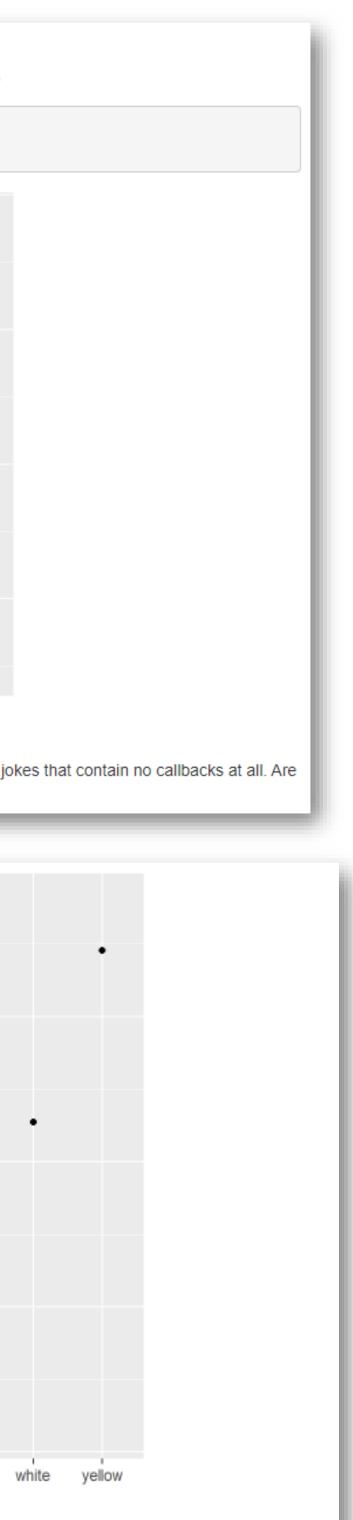




Based on our data set, we can see that the frequency of swearing actually occurs near the beginning of the set within the first ten jokes and quickly reduces as the number of jokes increases. Perhaps comedians are swearing more frequently due to stress, or to be more informal and personal with the audience.

I also overlay the average response for that number of joke in the set to show how it might be affected by the number of swears for jokes of that order in a set. It stays relatively stable across the differences in swearing.

Honors Final Project Fall 2020



 Average Response Swear Words Per Jokes