UT-Austin Professors' Salaries and Student Evaluations

Julia DeLaHunt, Veda Govindan, Ysabella Yumul

Purpose

Should student evaluations of professors be considered when determining faculty compensation and promotion?

- We collected the following data on 94 UT-Austin professors in order to analyze and draw conclusions on key relationships:
    - Teaching Evaluation Score
        - 1 = very unsatisfactory, 5 = excellent
    - Beauty Score
        - Average = 0, range from -2 (ugly) to +2 (beautiful)
    - Gender
        - Male or female
    - Age
    - Minority
    - Tenure
    - Native English Speaker
    - Division
    - Credits
    - Number of Students
    - Number of Student Responses
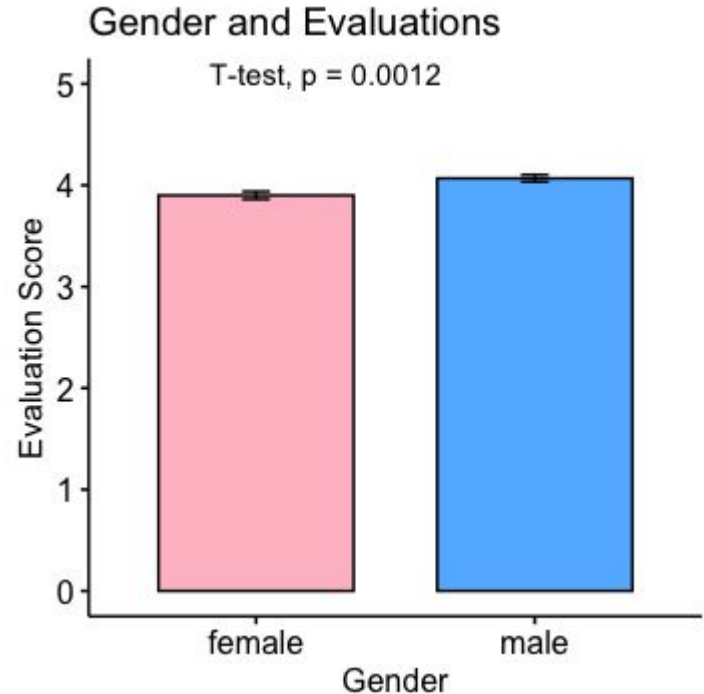
Action

- Analyzed data collected by University of Texas at Austin (2000-2002)

- Questions Investigated:
    - Is there a significant difference in student evaluation scores between genders?
    - Are there correlations between physical appearance of professors (beauty scores), age of professors, and student evaluation scores of professors?
    - Does physical appearance of professors (beauty scores) predict student evaluation scores of professors?

Analysis 1:
Is there a significant difference in student evaluation scores between genders?

Independent T Test

- Mean Evaluation Scores
    - Females: 3.90
    - Males: 4.07
- The mean student evaluation scores are significantly different between female and male professors

Gender and Evaluations
T-test, p = 0.0012

$t(425) = -3.2667$, $p < 0.01$, df = 425.76

Analysis 2: Correlation between Professors' age, beauty scores and evaluation scores

Correlation Tests

Correlations		
Variable	**Age**	**Beauty**
Beauty	**-0.30***	
Evaluation Score	-0.05	**0.19***

p-values indicated on chart (*p < 0.01)
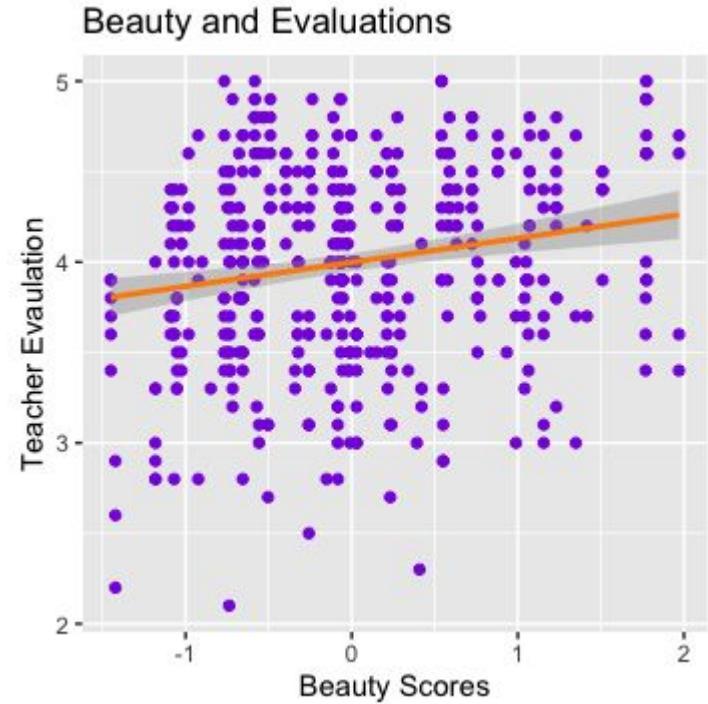
Findings

- There exists a significant negative correlation between professors' age and student-rated beauty scores for professors
- There exist a significant positive correlation between student rated beauty scores and student rated evaluation scores for professors

Analysis 3: Do beauty scores predict evaluation scores?

Regression Analysis

- Student rated beauty scores for Professors significantly predicted student evaluation scores for Professors

Beauty and Evaluations

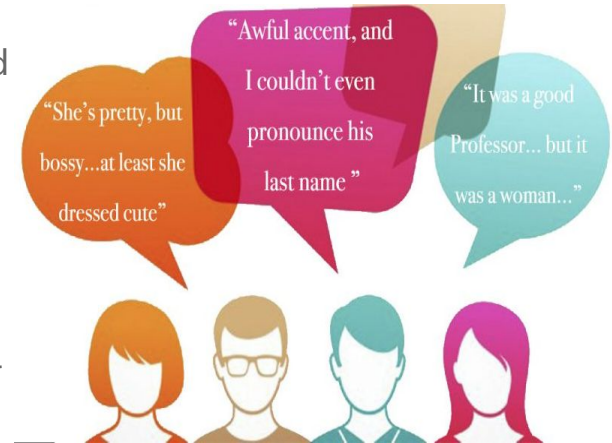$F(1, 461) = 17.08$, $p < 0.01$ y=0.13x

Impacts

Conclusion: Student evaluations of professors are not accurate predictors of Professor performance

Take Away:

Evaluation scores should be adjusted for biases when determining Professor salaries and promotions

Limitations & Future Directions

- Limited variables were explored
- Intervention Programs
    - Educate students and professors
    - Open communication
- Non-biased assessment tools
- Holistic evaluation of professor performance

Thank You

Link to dataset:

- [R: Impact of Beauty on Instructor's Teaching Ratings (vincentarelbundock.github.io)](vincentarelbundock.github.io)

References for Images Used:

- https://www.thechannels.org/news/2018/05/07/studies-find-racial-gender-bias-in-student-evaluations-of-faculty/
- https://www.everydayhealth.com/adhd/adhd-research.aspx