



# Predicting Myers- Briggs Type Based on Tweets

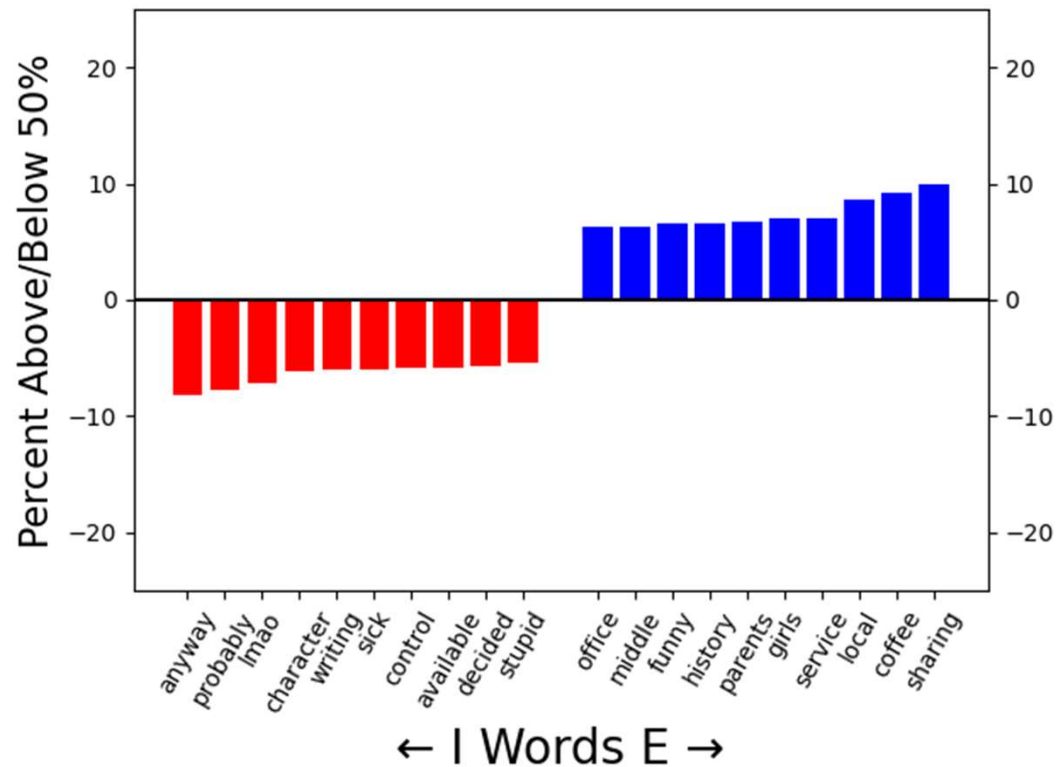
BARRETT BRISTER

# The Myers-Briggs Type Indicator

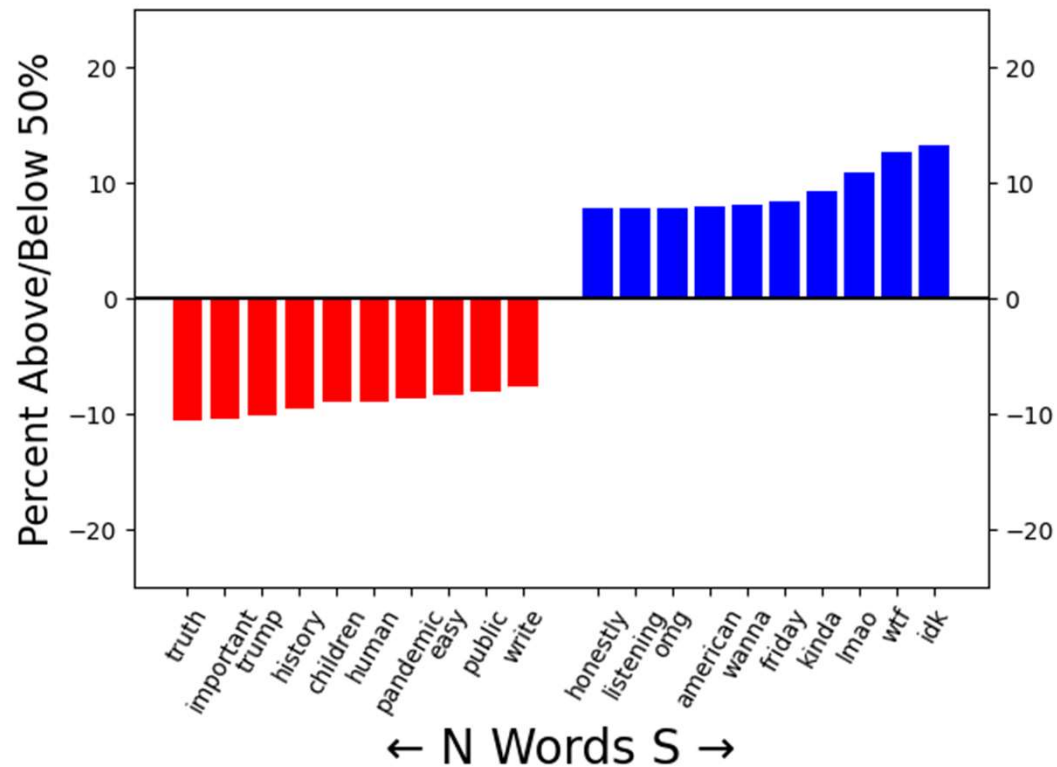
- ▶ History
- ▶ Axes of human personality: E vs. I, S vs. N, F vs. T, and J vs. P
  1. E vs. I
  2. S vs. N
  3. F vs. T
  4. J vs. P

# Process

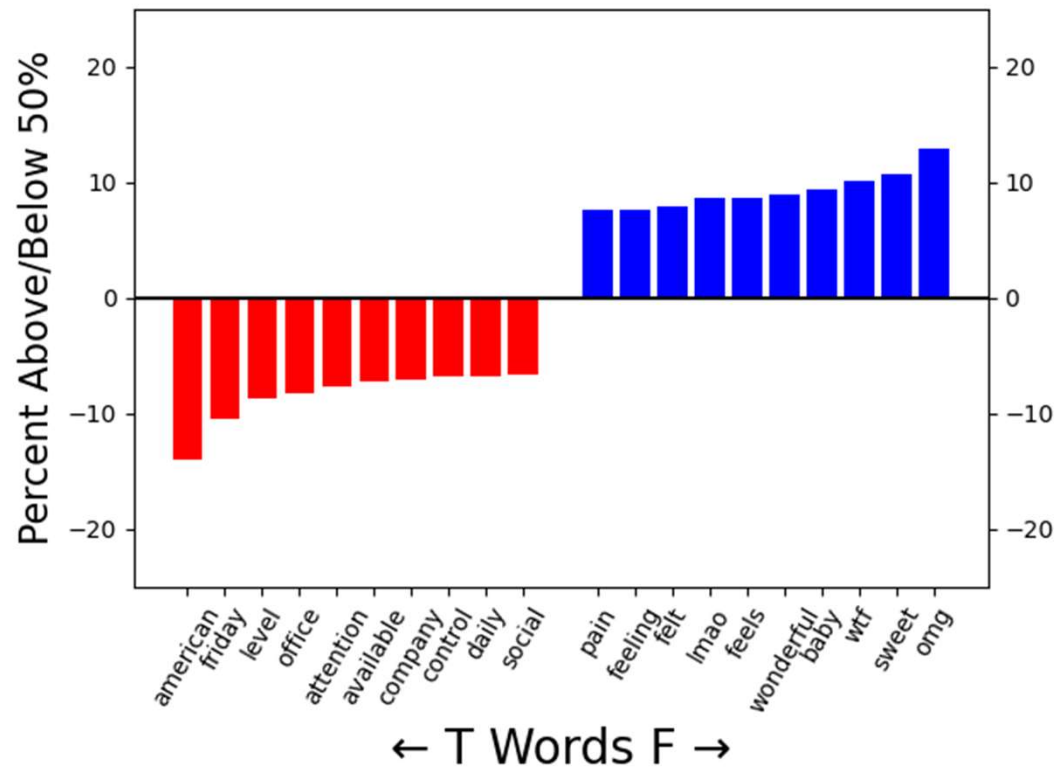
- ▶ Objective
  - ▶ Bag of words
  - ▶ Advertisement/business potential
- ▶ Author selection
- ▶ Assumptions
- ▶ Predictive words



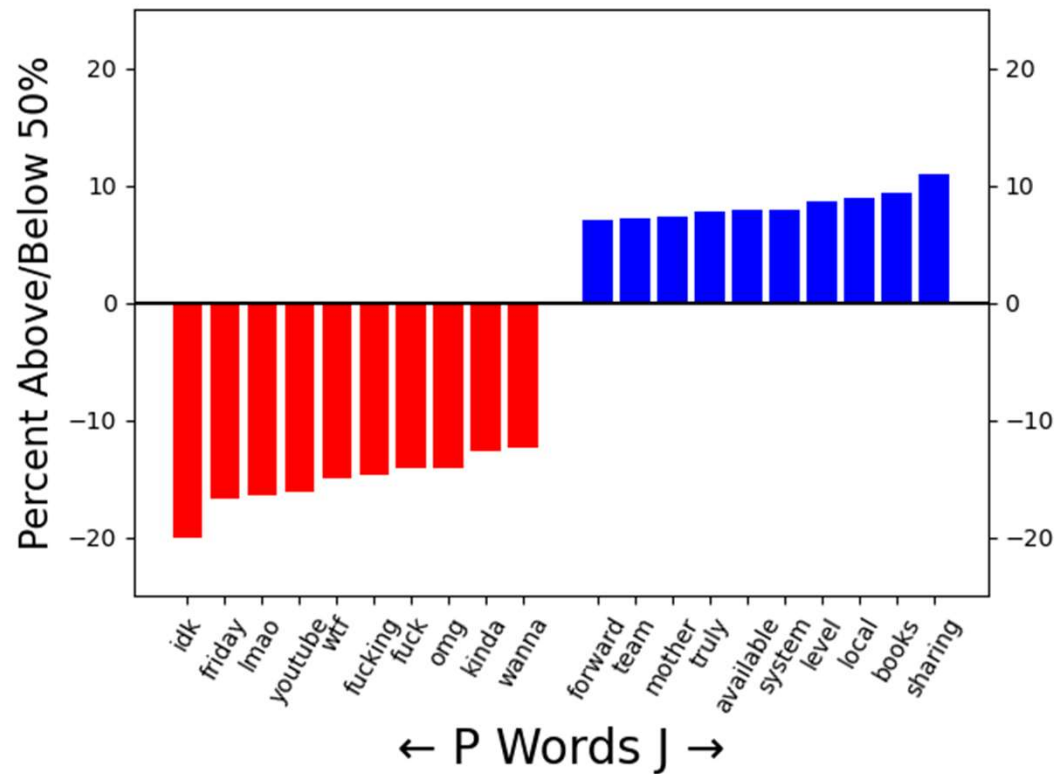
Predictive  
Words:  
I vs. E



Predictive  
Words:  
N vs. S



Predictive  
Words:  
T vs. F



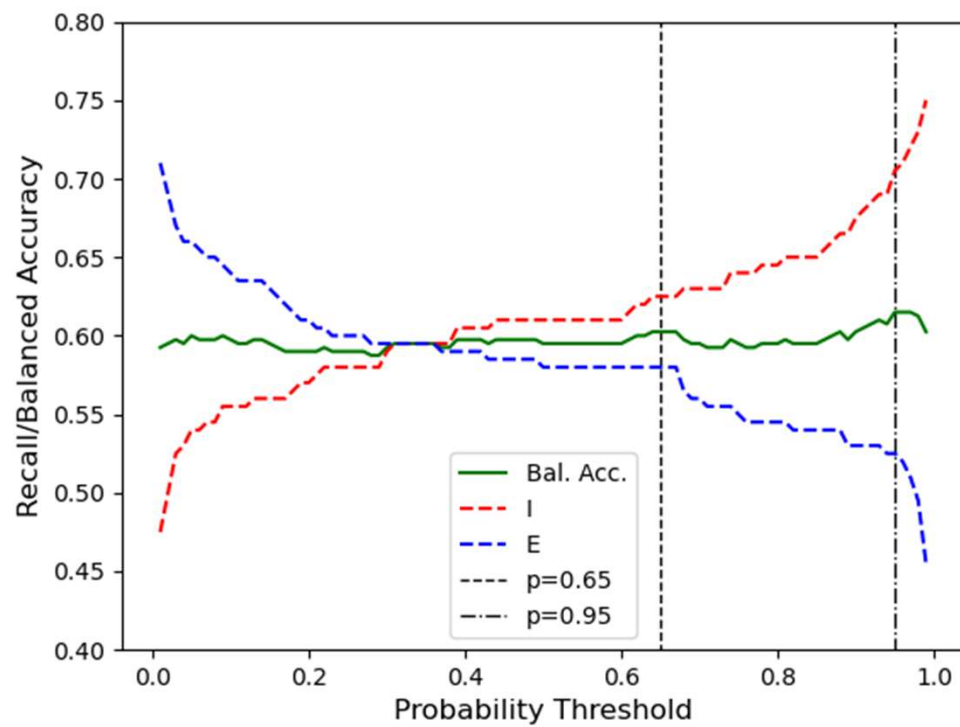
Predictive  
Words:  
P vs. J



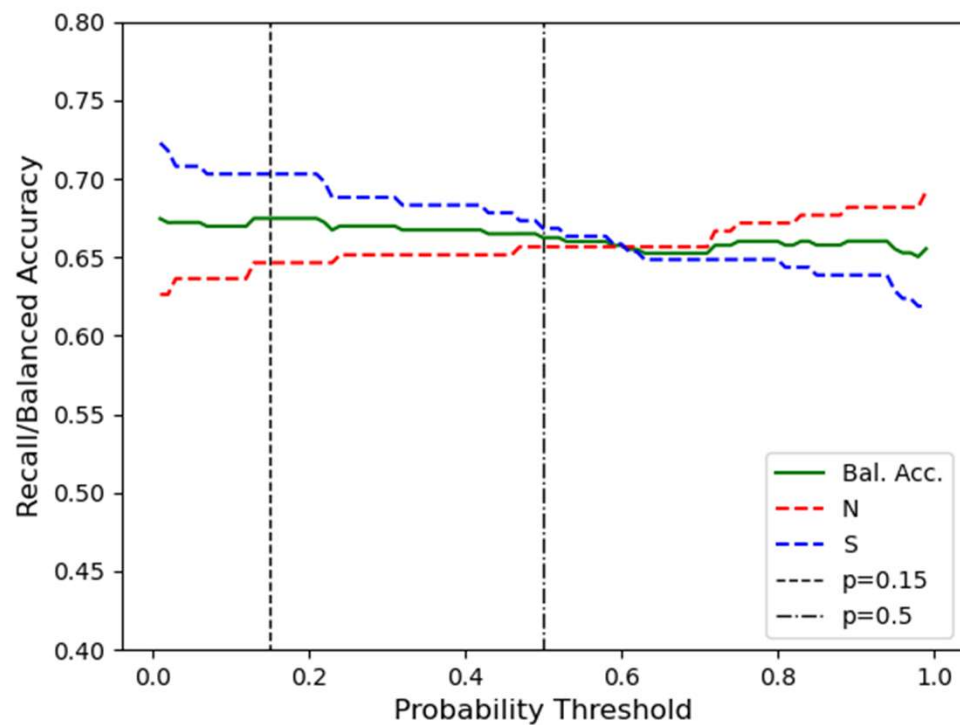
# Modeling

- ▶ Undue weighting of tweets: Problem and solution
- ▶ Classifiers
  - ▶ Classifiers considered
  - ▶ Classifier selected
- ▶ Likelihood probabilities
- ▶ Measures of success
  - ▶ Recall
  - ▶ Balanced accuracy

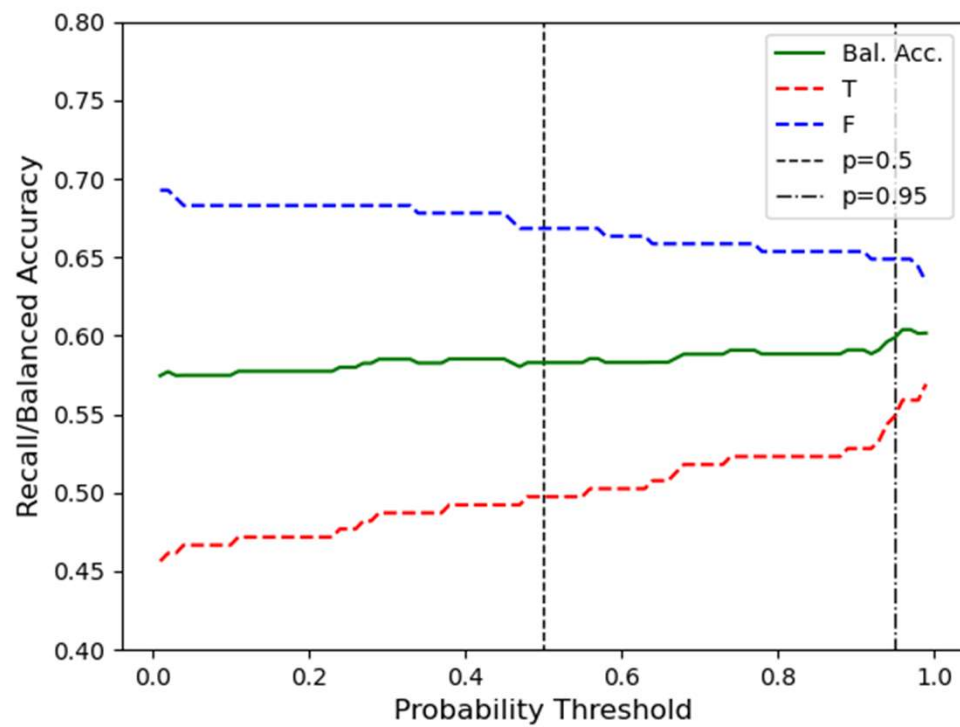




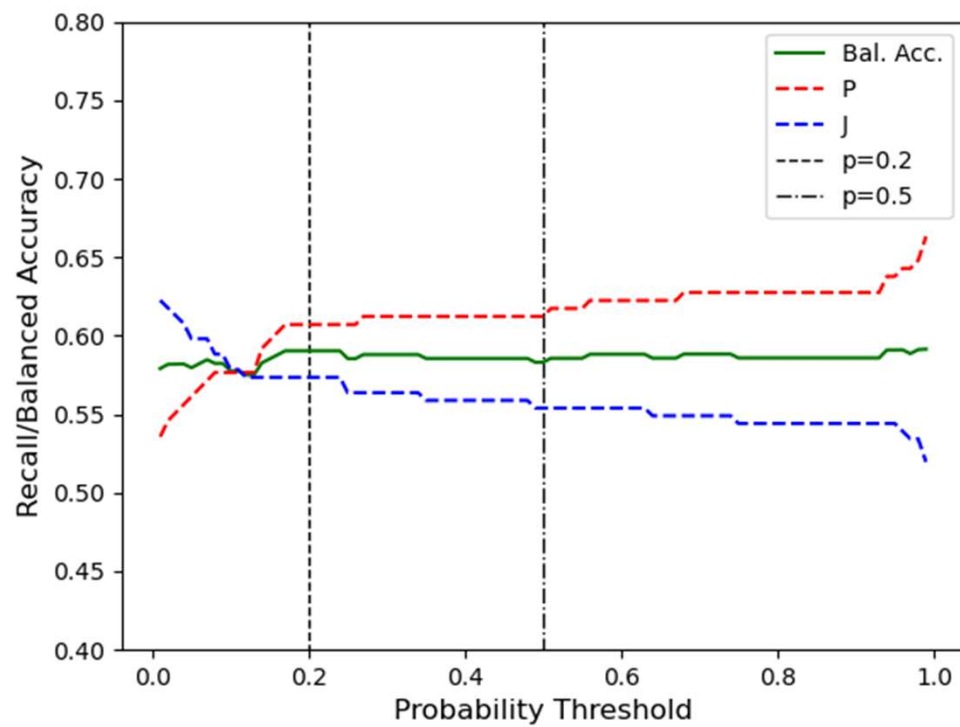
Balanced  
Accuracy:  
I vs. E



Balanced  
Accuracy:  
N vs. S



Balanced  
Accuracy:  
T vs. F



Balanced  
Accuracy:  
P vs. J

# Conclusions

- ▶ Balance accuracy results
- ▶ Ways to improve
- ▶ Applications not requiring complete accuracy
- ▶ Next steps