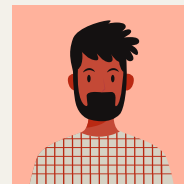
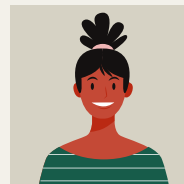
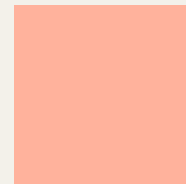
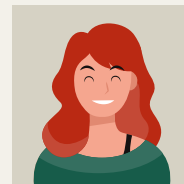
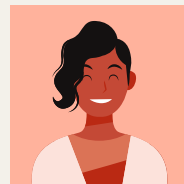
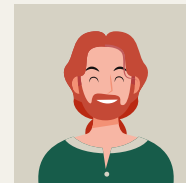
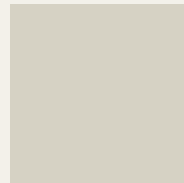
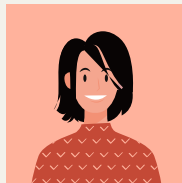
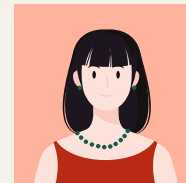
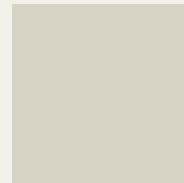
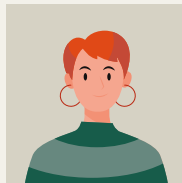


Retention and Mobilization Among Employment Equity Groups During the Pandemic

Team Statistically Significant:
Yuyan Liu, Jinyu Luo,
Yu-Chun Chien, Linxi Chen

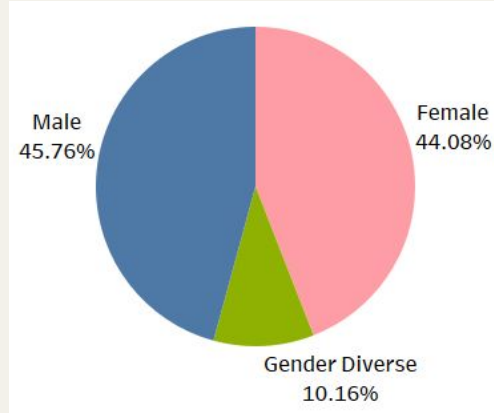


Data Manipulation

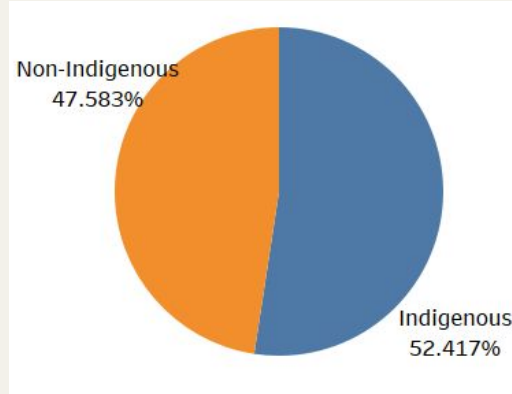
- Used 2020 data: investigate factors' influences under pandemic
- Rows with NA values were removed -- potential limitation?
- Used % of affirmative ('Agree') as measures of different questions
- Used Q53 as response variable(label):
 - Do you intend to leave your current position in the next two years?
 - Response: Yes; No; Not sure

Percentage of People Intending to Leave

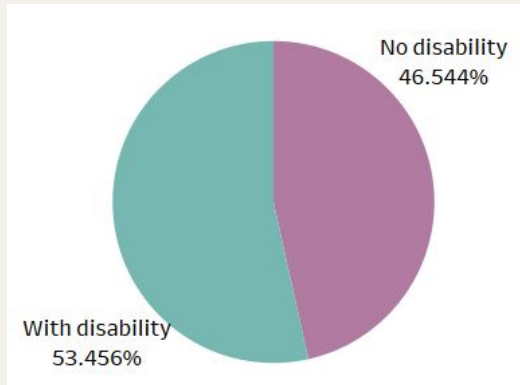
Gender Identity



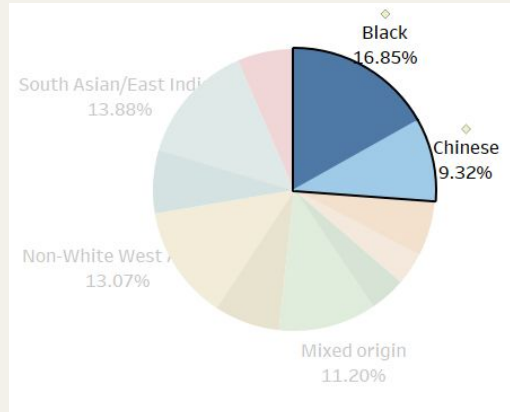
Indigenous Identity



Disability Identity



Minority Identity

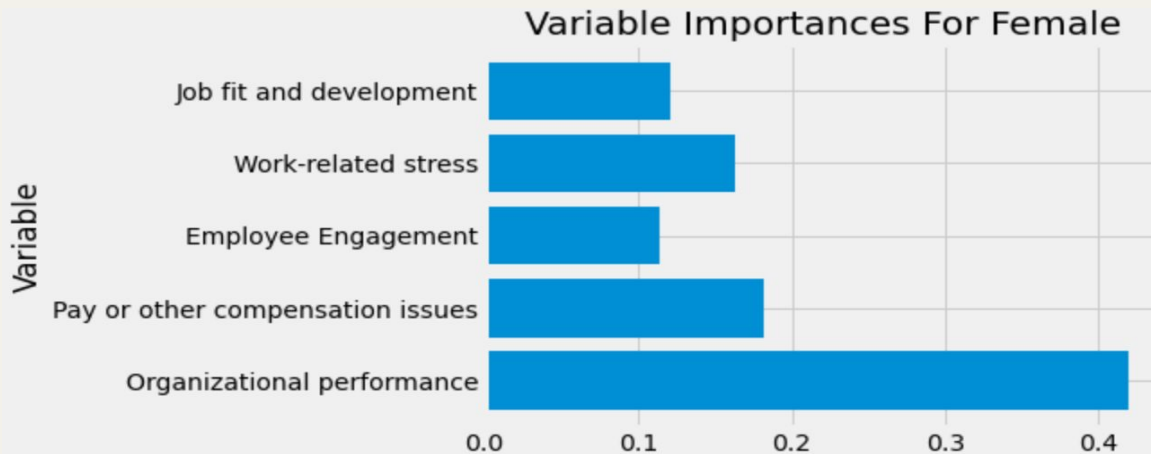


Modelling

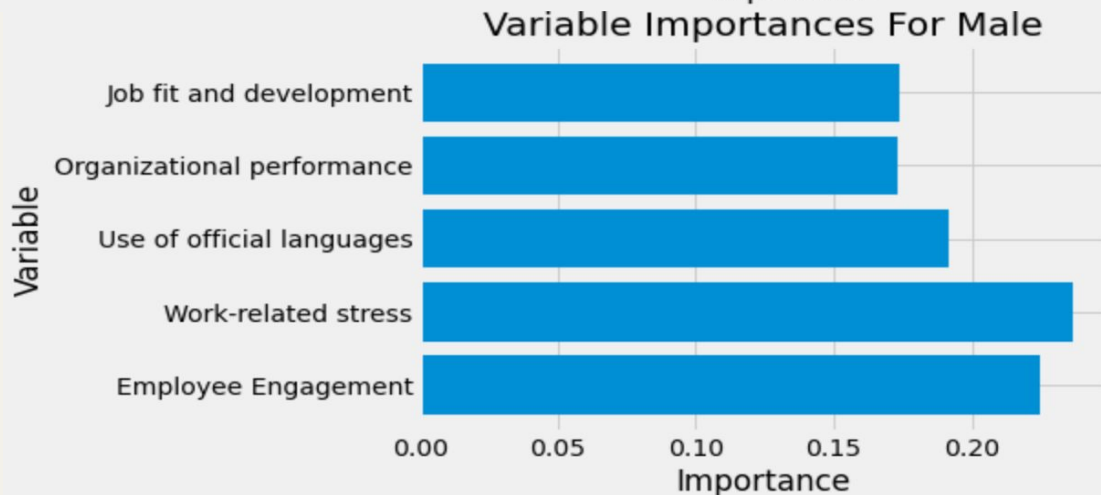
- Random forest regression
- 4 Categories x 2 Groups = 8 Models
 - Categories: Gender, Minority, Disability, Indigenous
 - Female vs. Male, Black and Chinese, With vs. Without Disability, Indigenous vs. Not Indigenous
- Feature: Department, Average Answer of Each Sub-indicator
- Label: Answering “Yes” for Q53
- Fit all variables → examine the top 5 most important variable → refit model by only using the top 5 most important variable → compare accuracy, visualize the important variable

Gender

Accuracy: 84.79%



Accuracy: 68.56%

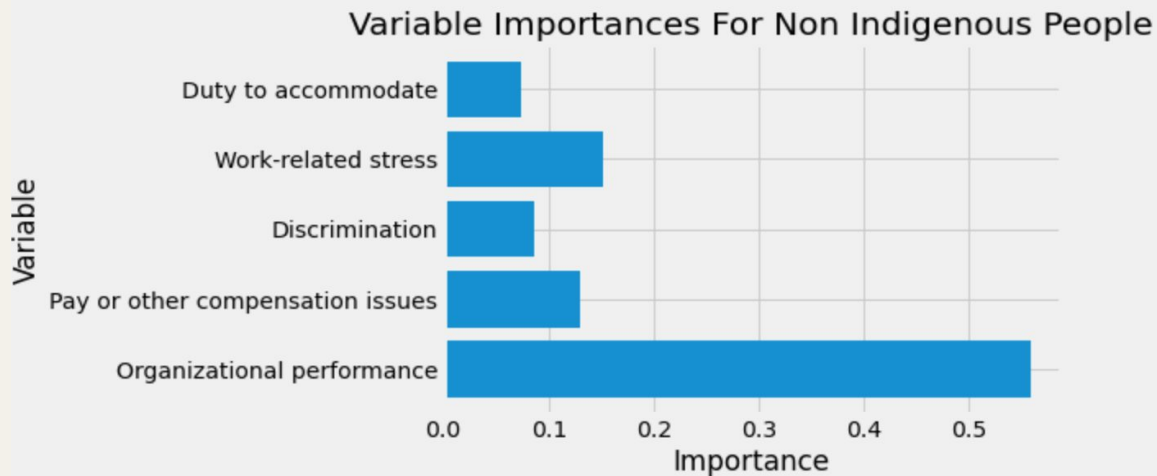


Top 5 factors that are most predictive for the intent to leave

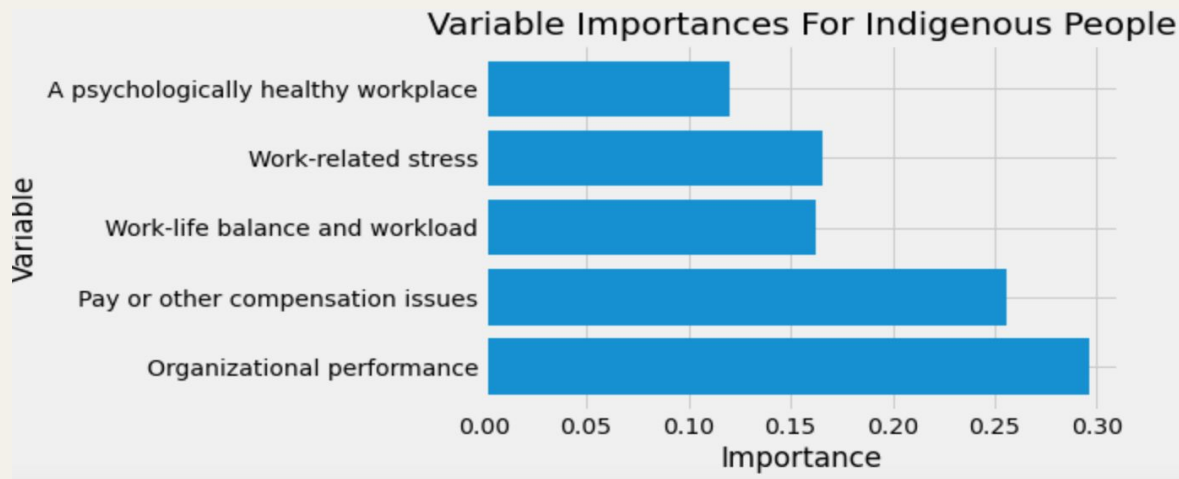
Indigenous Identity

Accuracy: 81.96%

Top 5 factors that are most predictive for the intent to leave

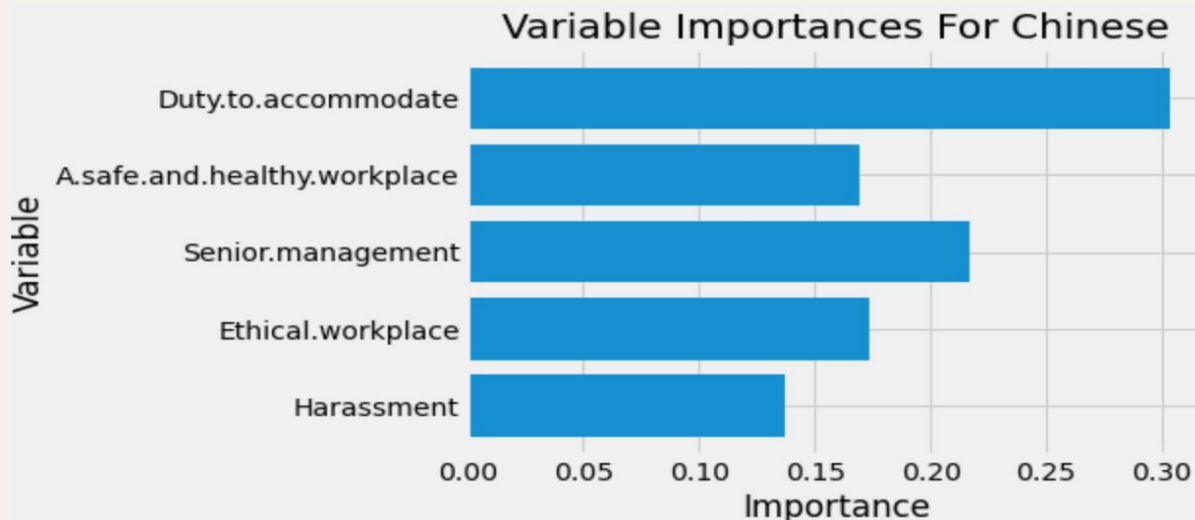


Accuracy: 65.49%

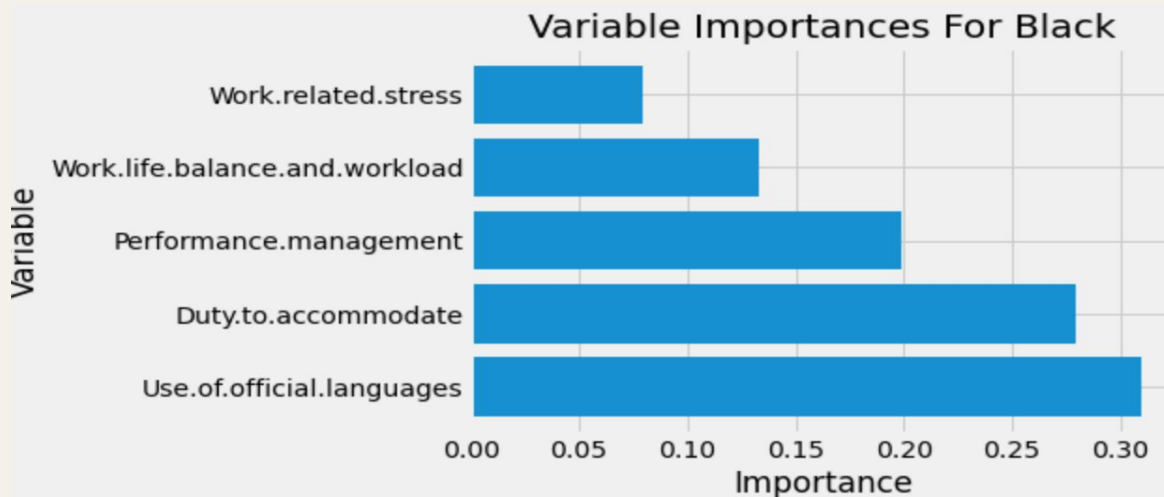


Visible Minority

Accuracy: 77.44%



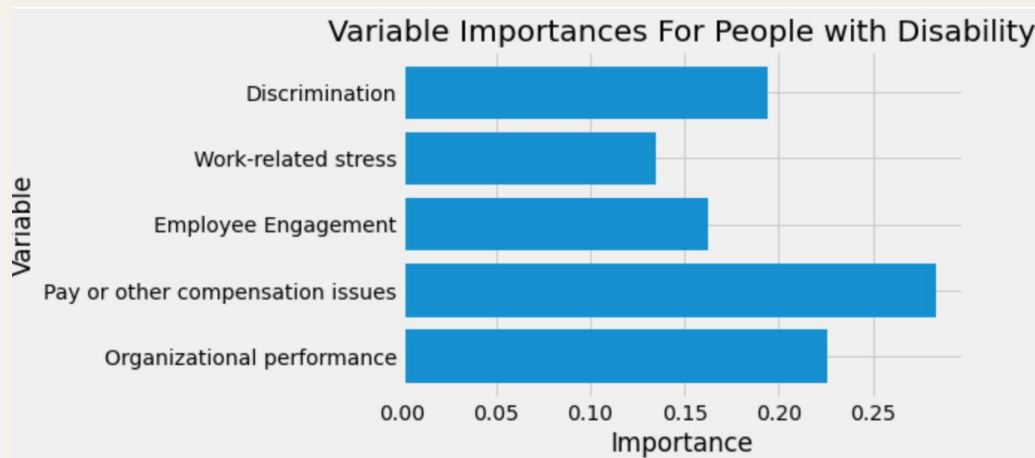
Accuracy: 81.92%



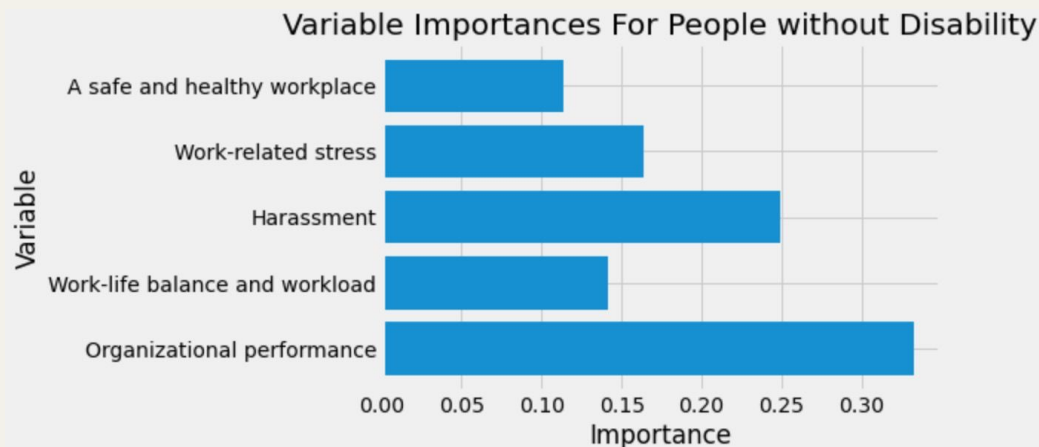
Top 5 factors that are
most predictive for the
intent to leave

Disability

Accuracy: 72.5%



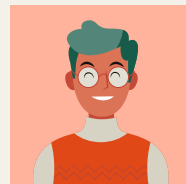
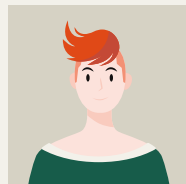
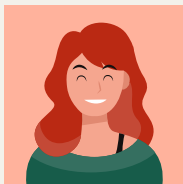
Accuracy: 87.99%



Top 5 factors that are most predictive for the intent to leave

Summary & Suggestion

- **EDI Initiative? An inclusive and discrimination free workplace? Potential Paying Gap?**
 - **Visible Minority:** duty of accommodation is important
 - **Disability:** pay or compensation issues and discrimination
 - **Indigenous:** pay or compensation issues
- **Expectation of Organizational Performance Unmet?**
 - Organizational Performance important for most groups



Thanks

