

# Factors for Seeking Treatment

## *Mental Health in Tech Companies*

Group 3 :

Daniel Jensen | Matthew Hill | Tina Peng | William Chen



# Problem Statement

## Mental Health

### Goal

Help tech companies find the important factors in determining mental health treatment

### Benefits

Creating a good workplace environment in encouraging employees to seek mental health treatment

### How

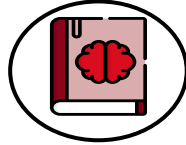
Utilizing a random forest model to see importance of variables



# Table of Contents



**Background**



**Dataset Background  
& EDA**



**Analysis & Modeling**



**Recommendations**

# Background

Mental Health is an important component of the workplace.

- Bad conditions can contribute to employee mental health issues.
- Mental Health issues can hurt productivity and communication of workers



## Frequency

Nearly  $\frac{1}{3}$  adults report having a mental illness



## Workplace Issues

84% of workers say their workplace contributes to mental health issues



## Job Hunting

81% of workers seek out mental health workplaces with mental health care

# Dataset Background

## OSMI Mental Health in Tech Survey

### Origin

Non-profit dedicated to raise awareness and provide resources to support mental wellness



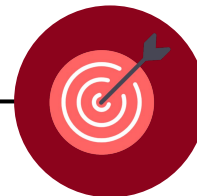
### Survey Purpose

2016 survey data aims to measure attitudes towards mental health



### Goal

Drive awareness and improving conditions for mental health disorders in Tech



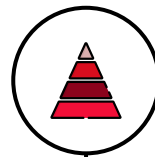
# Dataset Background

## OSMI Mental Health in Tech Survey



### Columns

- Mental Health Resources
- Previous Employer vs Current Employer
- Demographics



### Responses

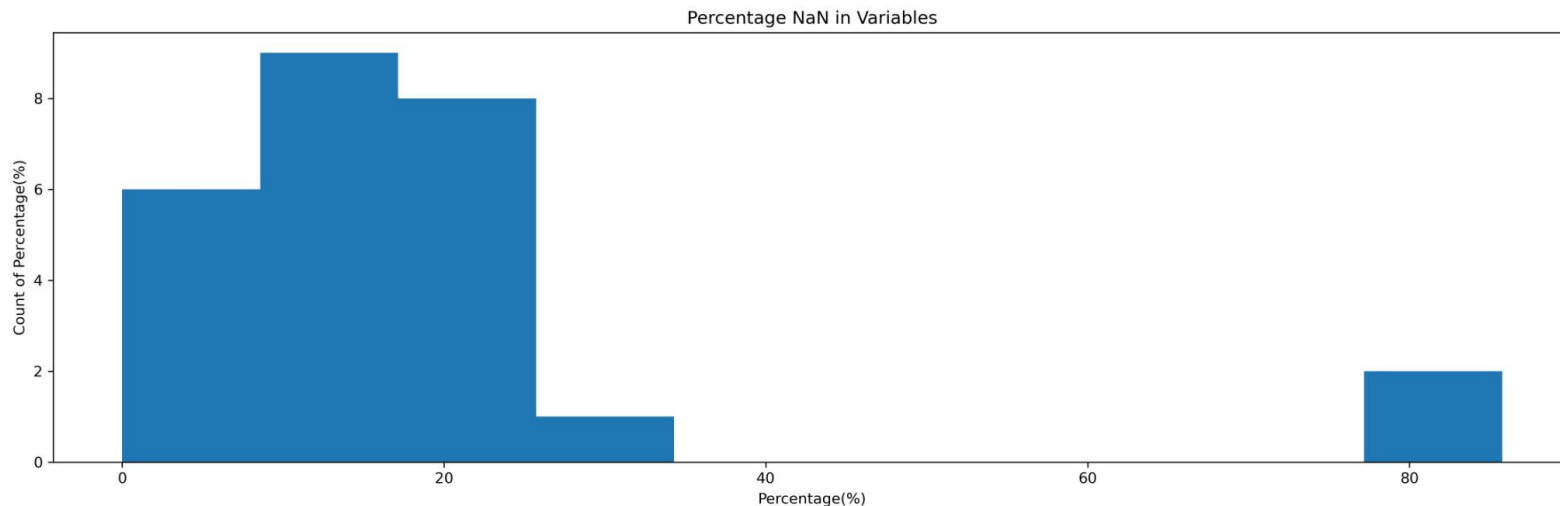
- 63 Survey Questions
- 1433 Respondents

# Exploratory Data Analysis

## NaN Values in Survey Answers



**About 70% of columns have NaN values  
With some having over 80%**



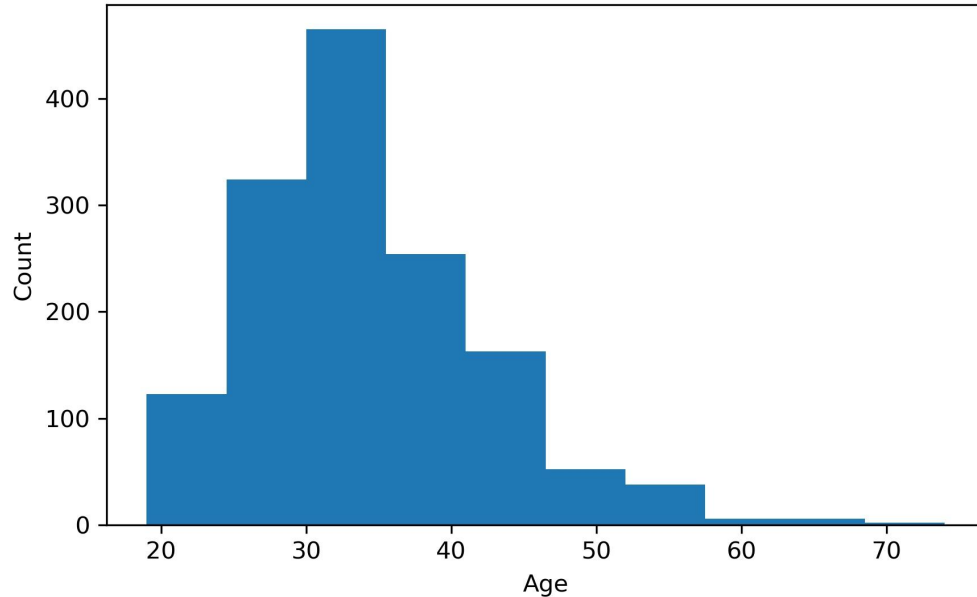
# Exploratory Data Analysis

## Respondent Age Demographic



The mean age of respondents is 34 years old

Age Distribution



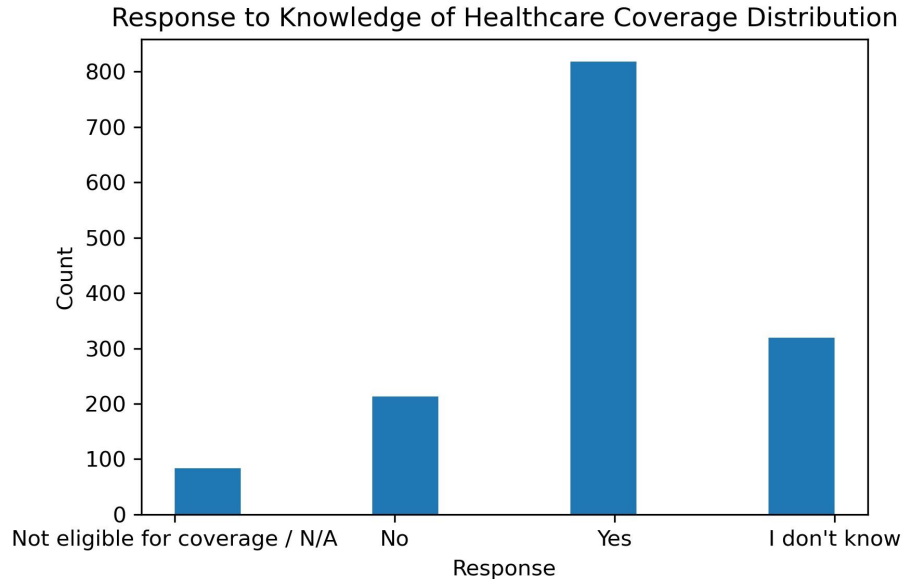


# Exploratory Data Analysis

## Knowledge of Mental Health Benefits



**About 57% of respondents knows their mental health benefits in their healthcare coverage**

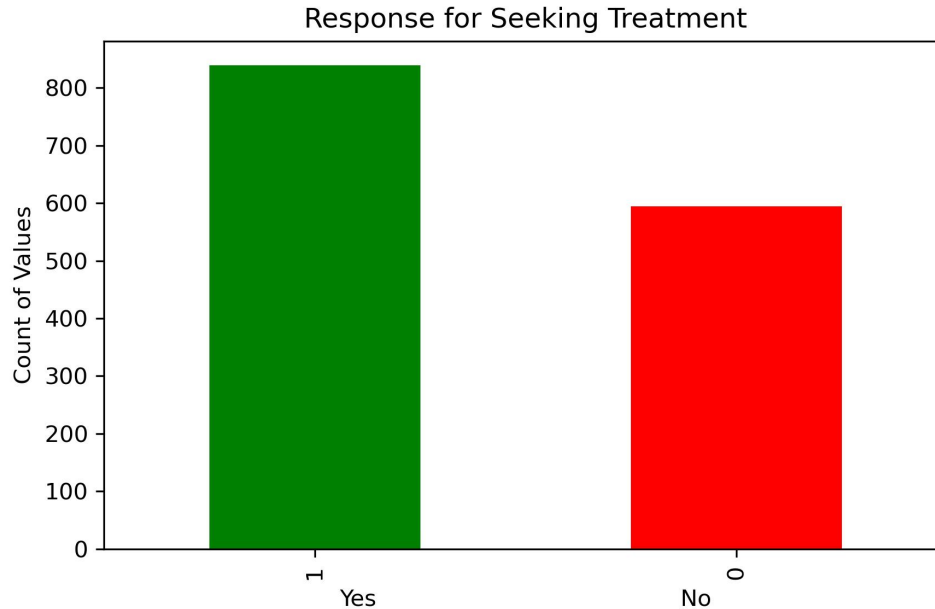


# Exploratory Data Analysis

Sought treatment for mental health



**60% of respondents have sought mental health treatment from a mental health professional**



# Modeling

## Random Forest Classifier

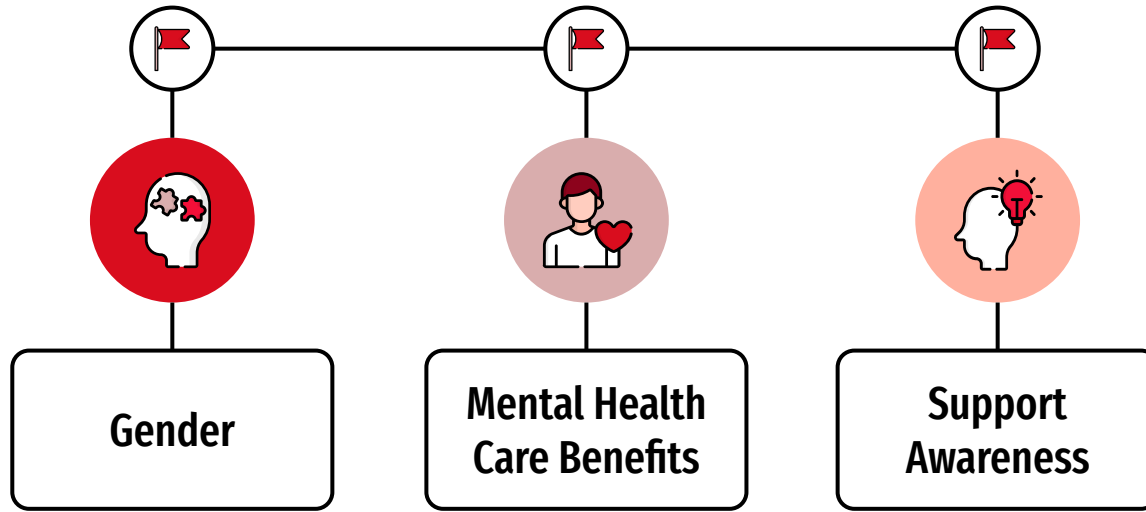
Parameters	Values
n_estimators	150, 200, <b>250</b>
max_depth	6, 7, <b>8</b>

**Scores**

**72.4% Accuracy**

# Recommendations for Employers

3 Main Factors that employers should be aware of ...



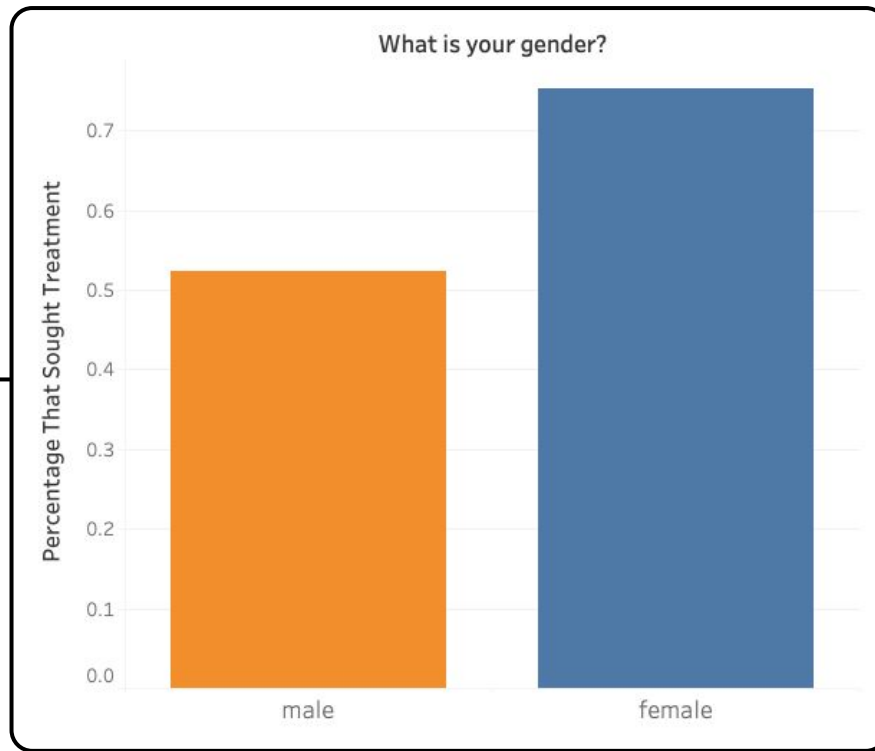


Gender



### Recommendation

Employers need to pay more attentions on supporting **male employees** to seek mental health treatment if they need one.





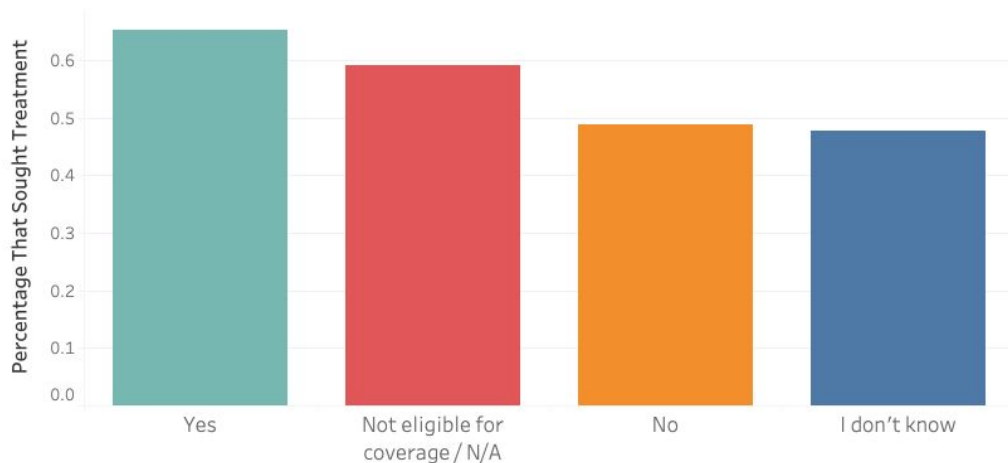
## Mental Health Care Benefits



### Recommendation

Companies should provide  
**mental health care benefits** to  
their employees.

Does your employer provide mental health benefits as part of healthcare coverage?



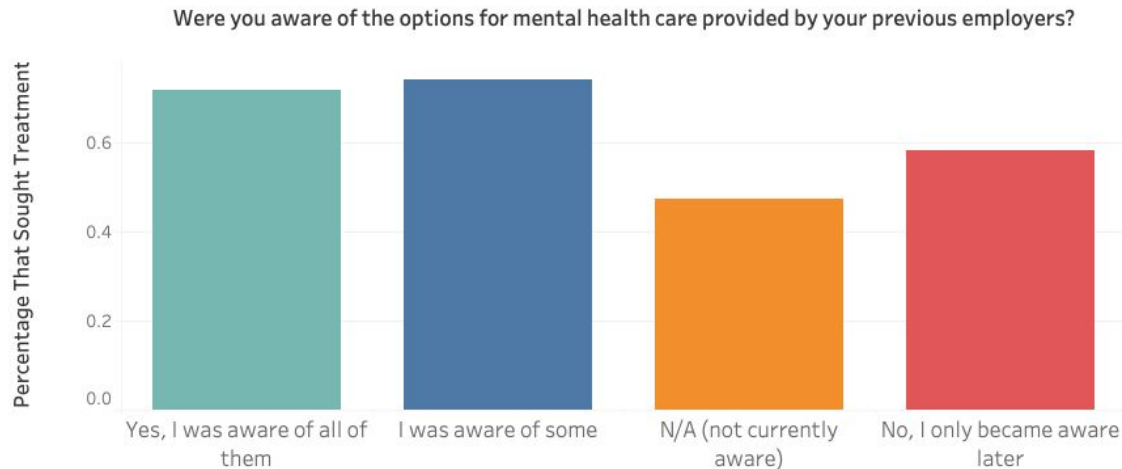


## Support Awareness



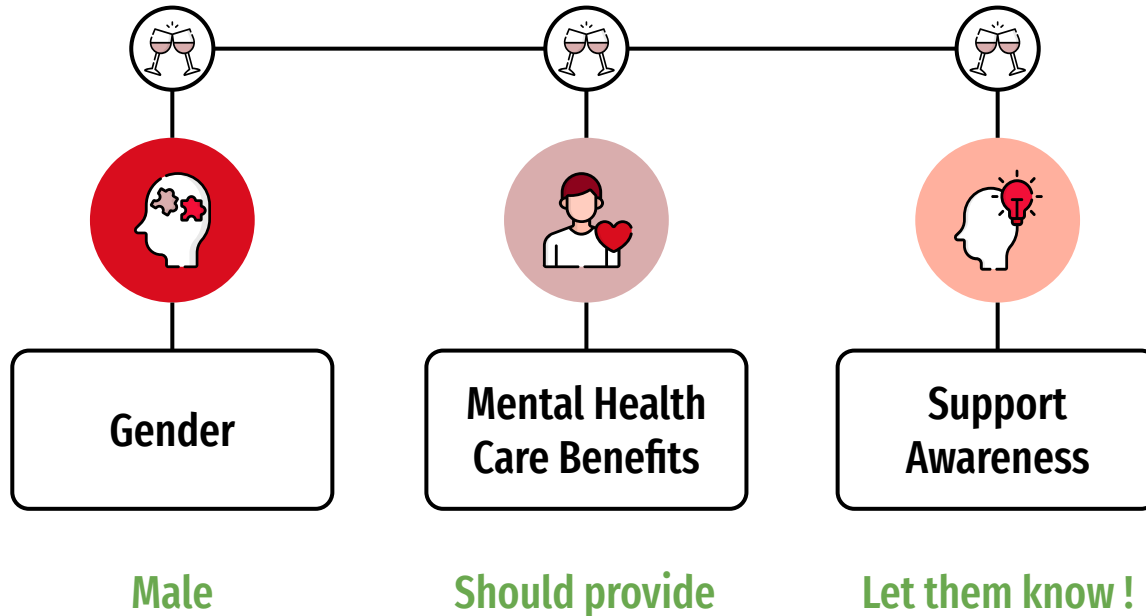
### Recommendation

Companies should clearly **show and explain** to their employees what **mental health care options** they can have.



# Recommendations for Employers

3 Main Factors that employers should be aware of ...





# Thank you!

## Any questions?

