Mental Health Indicators in the Workplace



Thoa Shook DS 09/04/19

Outline



- The Problem
- Solution Proposal
- The Process
- Predictive Analysis
- Recommendations

Problem Statement

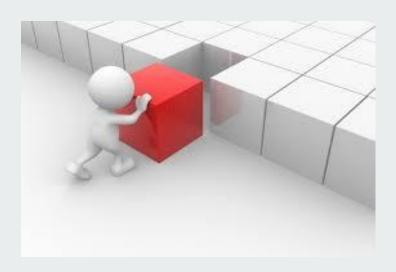


- Many risk factors are present in the workplace
 - inadequate health and safety policies
 - low control over one's area of work
 - poor communication and management practices
 - workload, inflexible working hours

 Absenteeism and disability costs have increased in the workplace due to mental illness.

 Early identification and intervention of mental health issues will have significant impact on preventing underperformance, excessive absenteeism, and other related problems.

Solution Proposal



 Conduct a predictive analysis of data from pre-screening surveys

 Use four different models to determine key indicators of mental health issues in the technology workplace.

 Propose solutions to mitigate these concerns based on the results of research conclusions.

The Process



 Selected data sources (Kaggle.com) and cleaned data

- Selected four models for analyses
 - **Logistics Regression**
 - Support Vector Machine
 - Decision Tree
 - Random Forest GridSearchCV

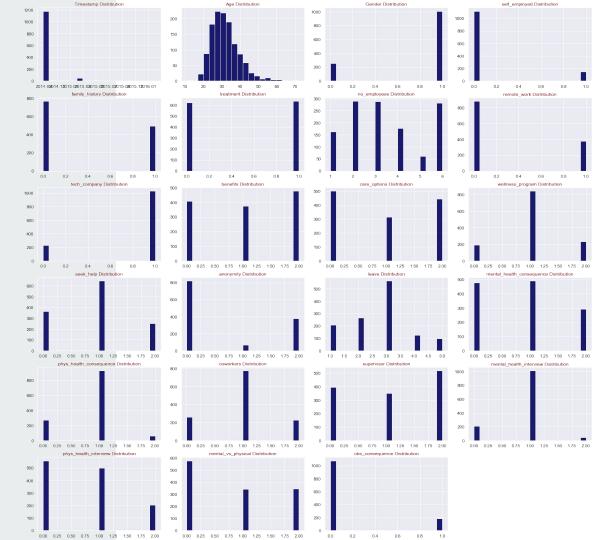
 Determined and selected the model with the best results

Analyzed results for primary indicators

Developed conclusions and recommendations

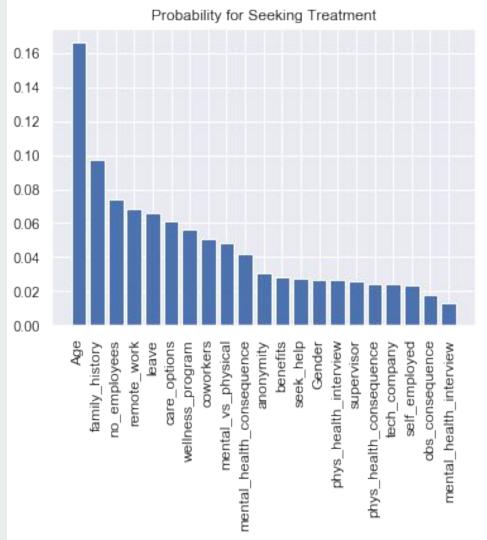
Data Distribution





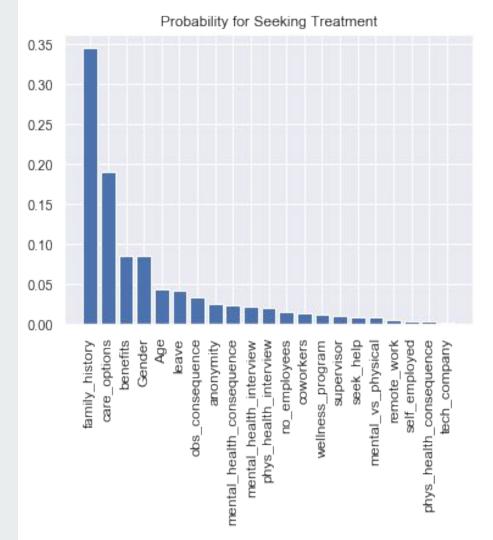
Supporting Data Decision Tree Model





Supporting Data Random Forest GridSearchCV Model





Conclusions



Based on our models, the most important indicators for a mentally healthy and stable workforce are:

Family history

Available care options

• Employee healthcare benefits, and

 A leave plan to address family related mental health issues.

Recommendations



Use the screening survey as an initial indicator of potential mental issue

 The company should retains mental health professionals and counselors on its staff.

- The company's healthcare benefits plan should include
 - Provisions for extensive non-gender specific mental healthcare
 - Leave for employees and their family members without any age limitation.



 Discuss recommendations with primary insurance providers

 Discuss recommendations with primary workforce representative

 Discuss an implementation plan and timeline with HR

Implement all recommendations



Questions

