# Mental Health in Tech

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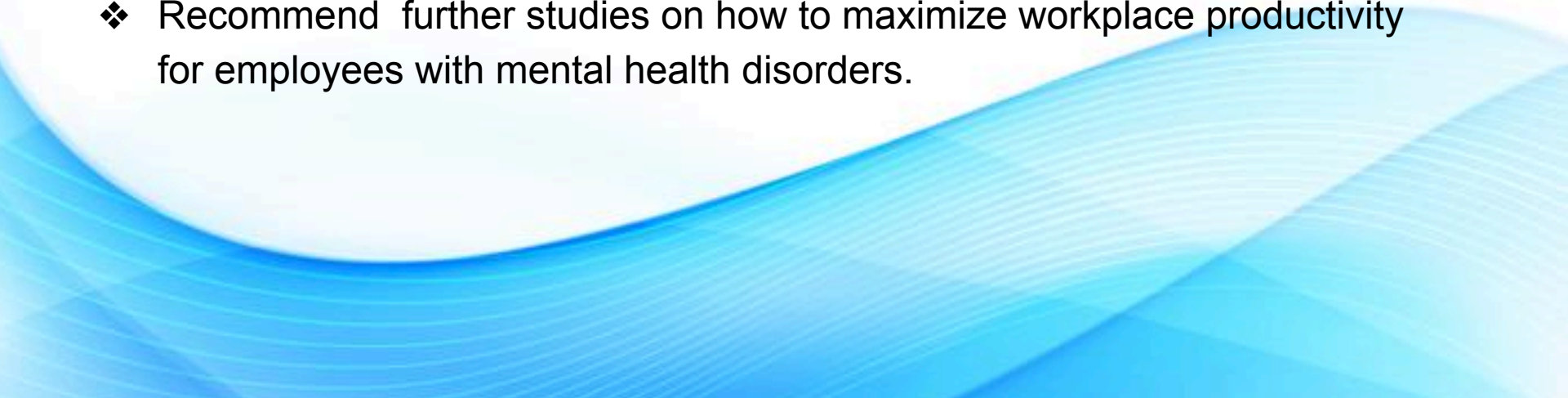
# Agenda

- ❖ Introduction
- ❖ Goal
- ❖ Methods
- ❖ Analysis
- ❖ Conclusion and Recommendations

# Introduction

❖ According to a 2020 research published by Open Sourcing Mental Illness (OSMI), people working in **tech** experience **mental health** issues at a higher rate (51%) than the general population.

❖ The study attributes this to working long hours with little sleep, and with the competitive nature of the field.

❖ If not treated, employee's with mental illness is just as critical as physical health when it comes to productivity and effectiveness.

Source https://www.businessinsider.com/open-sourcing-mental-illness-stigma-tech-2019-12

# Goals

❖ Design a model that will determine if an employee's mental health status will interfere with their job performance.

❖ Identify specific workplace variables that forecast a "yes' in mental health problems interfering with one's work.

❖ Recommend further studies on how to maximize workplace productivity for employees with mental health disorders.

# Examples of Common Mental Disorders Under the Tech Umbrella

- ❖ Depression
- ❖ Adult ADD
- ❖ Anxiety
- ❖ Drug and Alcohol abuse

- ❖ Isolation / Loneliness
- ❖ Stress Management
- ❖ Social Pressure

# Data

## Countries included

- USA
- Canada
- UK

## Company Size

- 25 & less = 36 %
- 26 to 100 = 23%
- 100 to 500 = 14%
- 500 to 1000 = 4%
- 1000 & above = 22%

## Gender

- Male  = 77%
- Female =  21%
- Queer = 1 %
- Trans = 0.1%
- Other = 0.1%

## Age

- Average Age = 32
- Min = 18
- Max = 72

# Questions asked

- ❖ Have you sought treatment for a mental health condition?
- ❖ Family History of mental illness
- ❖ Does your company offer adequate Mental Health treatment plans
- ❖ Are these plans known?
- ❖ Ease of medical leave
- ❖ Colleague sharing
- ❖ Workplace Viewpoint

# Strong Indicators of Work Interference

❖ Those who previously received treatment for mental health conditions

❖ Having a family history of mental illness

❖ Having employers who do not provide resources to learn more about mental health issues and how to seek help

❖ Not willing to discuss a mental health issue with direct supervisor(s)

❖ The belief that employers do not take mental health issues as seriously as physical health

❖ Identifying as male

❖ Fear of taking medical leave for mental health conditions

# Model
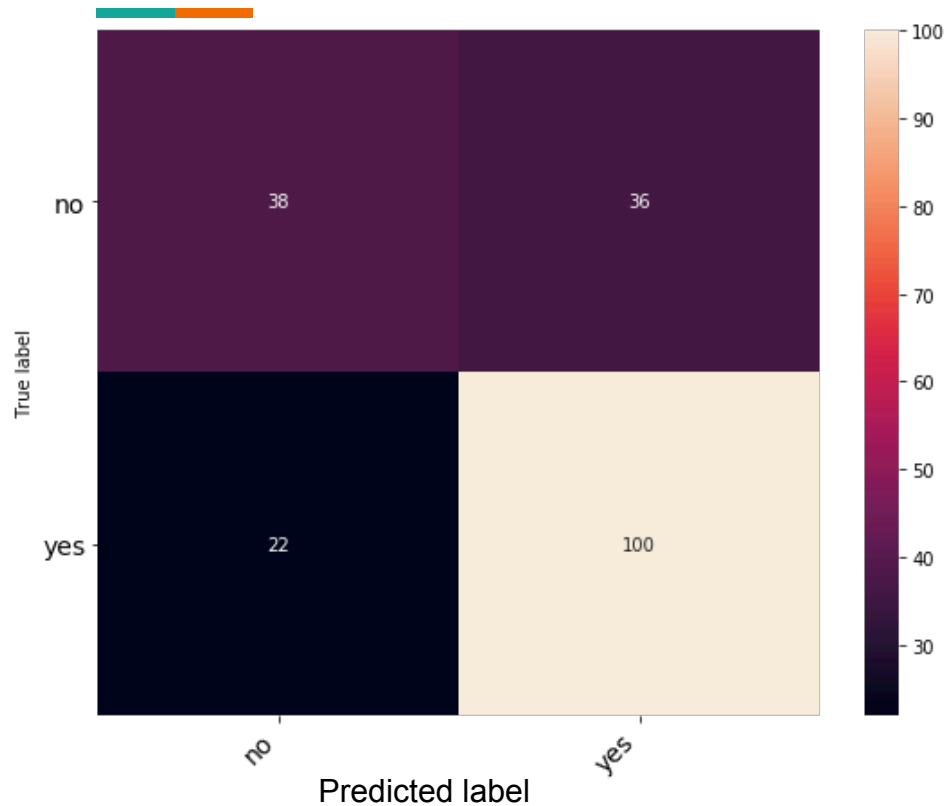


❑ **70% Accuracy**

| Work interferes | Precision | Recall | F1 score |
|---|---|---|---|
| Yes | 0.63 | 0.51 | 0.57 |
| No | 0.74 | 0.82 | 0.78 |

# Conclusion and Recommendations

- ❏ Mental health is just as critical as physical health when it comes to productivity and effectiveness.
- ❏ We recommend companies Craft and promote policies that promote wellbeing.
- ❏ Start talking about mental health
- ❏ Provide resources that help employees better manage their well being,
    - ❏ Remote work options
    - ❏ Benefit packages that include preventative care for mental health
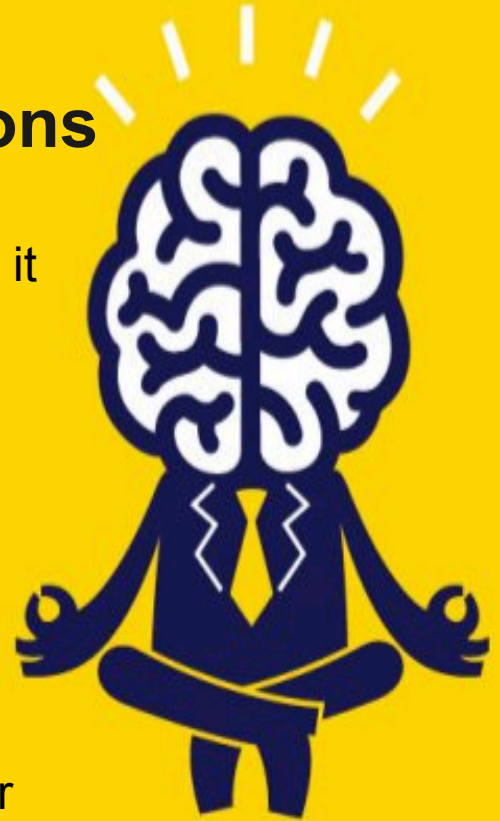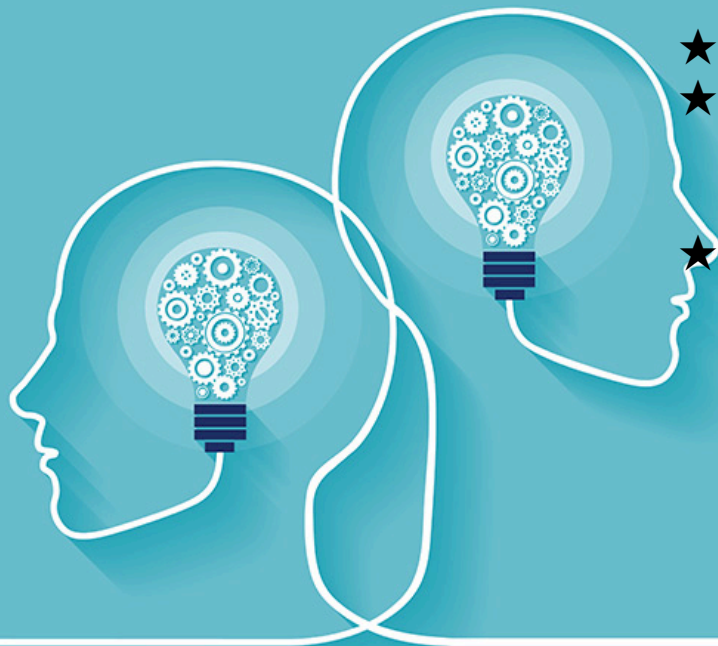
# Next Steps ..

★ We want to explore the treatment feature of the data set.
★ We would like to explore the demographic categories in our "yes" classification set to optimize workplace barriers to performance to the target group.
★ Finally test which disorders are more common in which sub classification of tech, e.g. Cybersecurity, Software Engineering, Data Science!