BENNETT UNIVERSITY

EMPLOYEE WELLNES ANALYSIS

AN EXPLORATORY DATA ANALYSIS PROJECT TO IMPROVE WORKPLACE MENTAL HEALTH

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PROJECT BACKGROUND

Problem Statement:

A drastic thing happened and XYZ Technical Solutions have lost one of their important employees. The company is now very concerned about the health of their employees and would want you to find that set of employees who are in need or may be in need of treatment, taking into account multiple attributes that are already stored in the database. The goal is to help the organization to better understand the factors that contribute to employee health and wellbeing. By identifying areas where interventions may be needed, design targeted wellness programs that can improve employee health and productivity.

Goal:

Identify employees in need of mental health support and uncover factors affecting wellness at the workplace.

OBJECTIVES

- **Analyze mental health trends and workplace stressors**
  Understand how factors like workload, remote work, and organizational support affect employee wellness.

- **Identify potential at-risk employees**
  Use data-driven indicators to highlight employees who may need intervention.

- **Recommend wellness strategies for intervention**
  Propose actionable steps such as policy changes, awareness programs, or supervisor training.

- **Improve productivity by promoting mental well-being**
  Help the organization foster a healthier, happier, and more engaged workforce.

- **Evaluate awareness and access to mental health resources**
  Assess how well employees know about and utilize the available wellness programs.

- **Understand stigma and willingness to discuss mental health**
  Examine how open employees are with coworkers, supervisors, or during interviews.
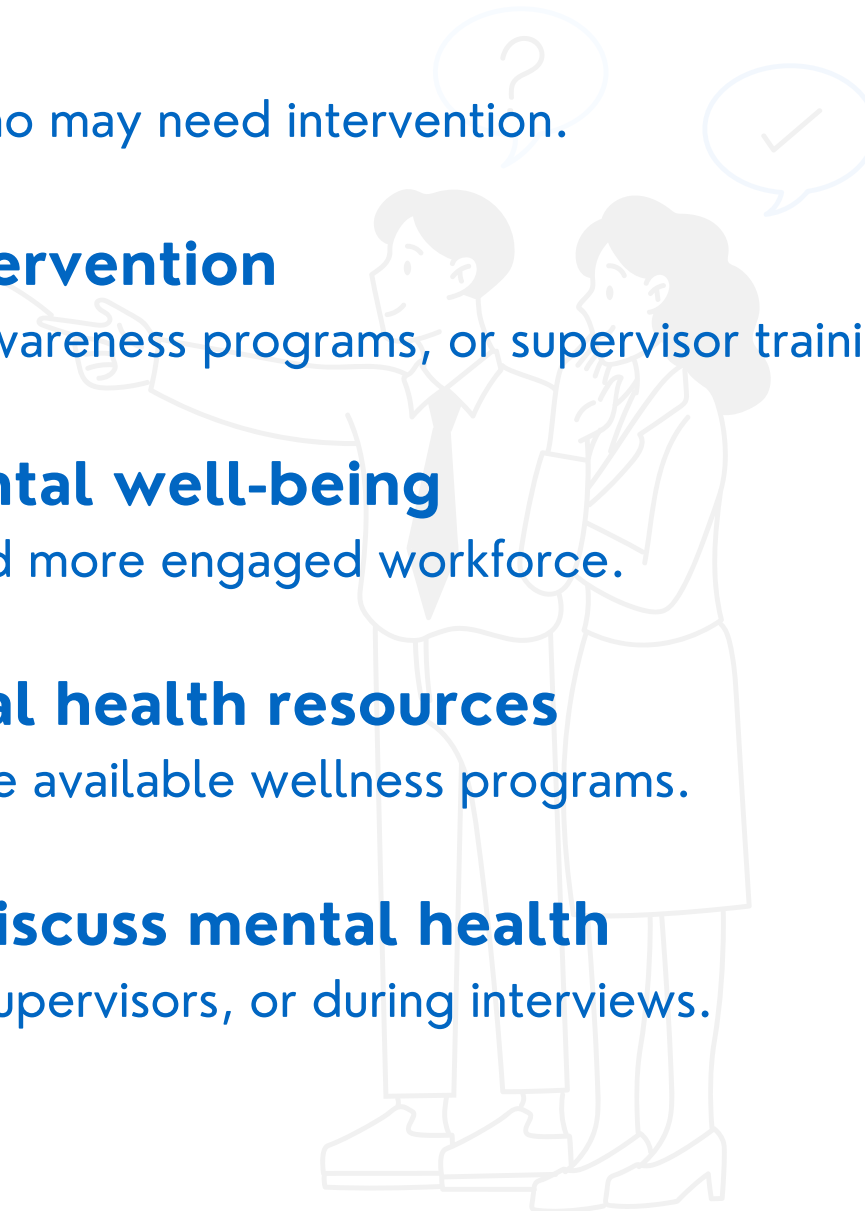
DATASET OVERVIEW

- **The dataset contains over 1,200 survey responses.**

- **It focuses on employee demographics, mental health, workplace support, and perceived stigma.**

- **It includes 27 attributes such as:**

    Age, Gender, Country

    Mental health treatment

    Family history

    Work-life support

    Interview behavior

    Consequences and comments

DATA CLEANING STEPS

- **Initial Challenges:**

  Inconsistent values (Yes/yes/Y, Male/M/male).

  Missing entries.

  Unrealistic ages (e.g., 5, 200)

  Duplicates

- **Steps Taken:**

  Removed duplicates and empty rows

  Handled missing values using imputation and mode

  Standardized categorical responses

  Filtered valid age range (18–100)

  Cleaned and grouped gender values into Male, Female, and Other

DEMOGRAPHICS

- **Age Distribution:**

    Majority of respondents are aged between 20–35

    Young workforce may indicate higher work stress adaptation issues

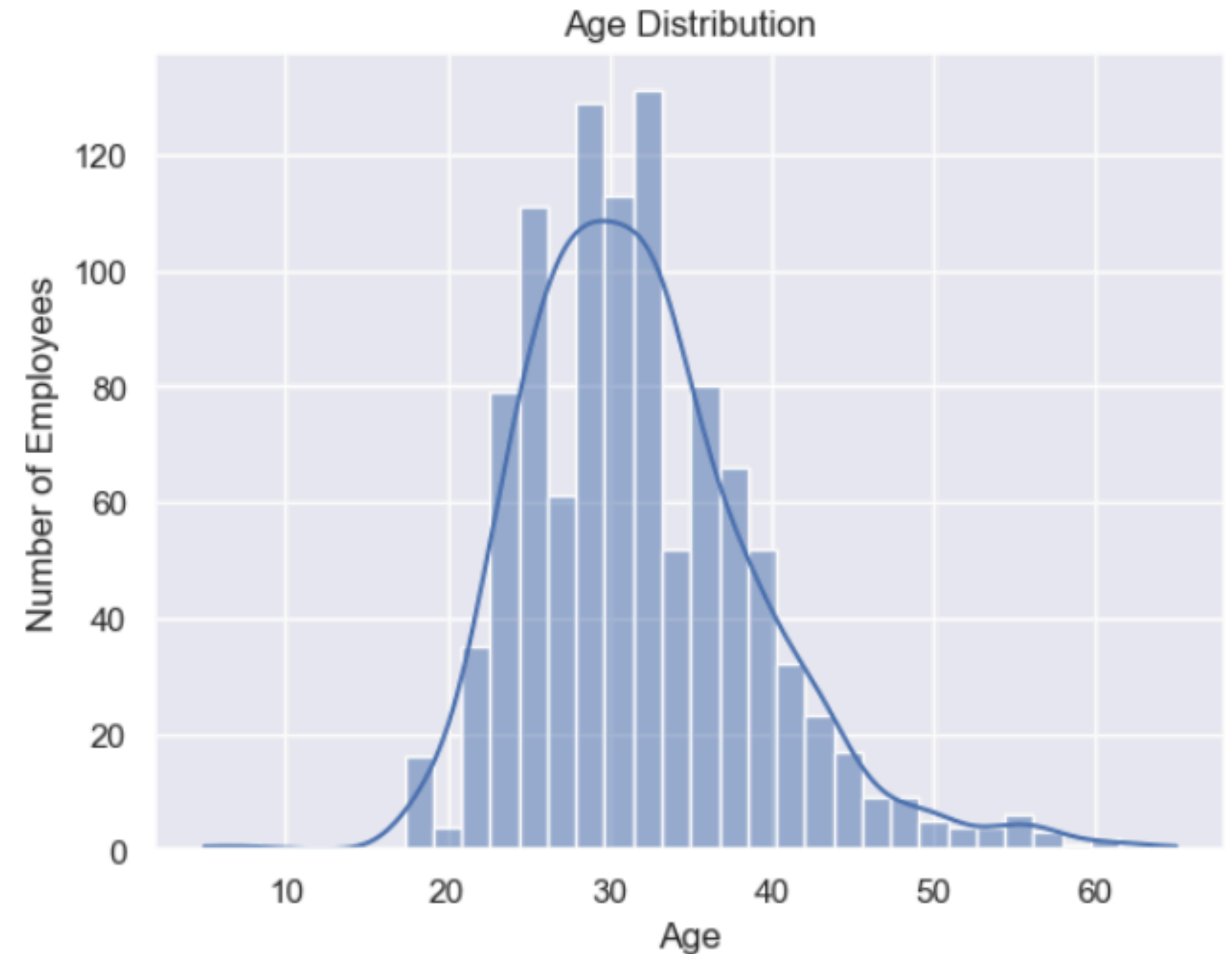- **Gender Distribution:**

    More male respondents than female

    Small group of non-binary/other gender identities

- **Country-wise Spread:**

    Most responses from the United States

    Some representation from UK, Canada, India, Germany, etc.

Age Distribution

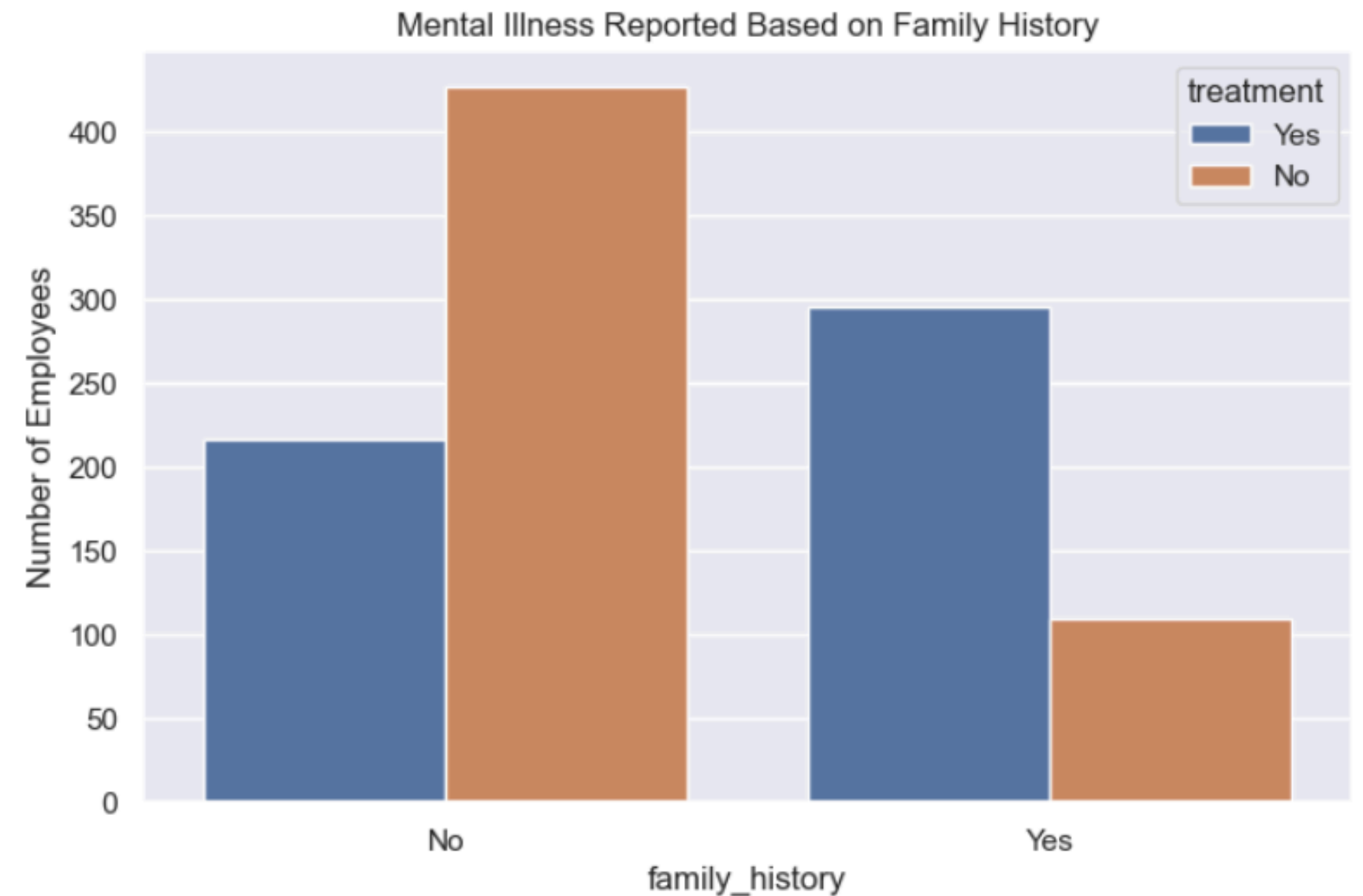# MENTAL HEALTH AND WORK INTERFERENCE

- **34%+ have sought mental health treatment**

- **Work Interference:**

    Those who report work interference are more likely to seek treatment

- **Family History:**

    Individuals with a family history are twice as likely to seek treatment

Mental Illness Reported Based on Family History

INSIGHT: FAMILY BACKGROUND AND WORKPLACE IMPACT ARE STRONG INDICATORS OF TREATMENT-SEEKING BEHAVIOR.

WORKPLACE SUPPORT ANALYSIS

- **Mental Health Benefits:**

  Over 60% of employees are unaware or unsure if benefit exist
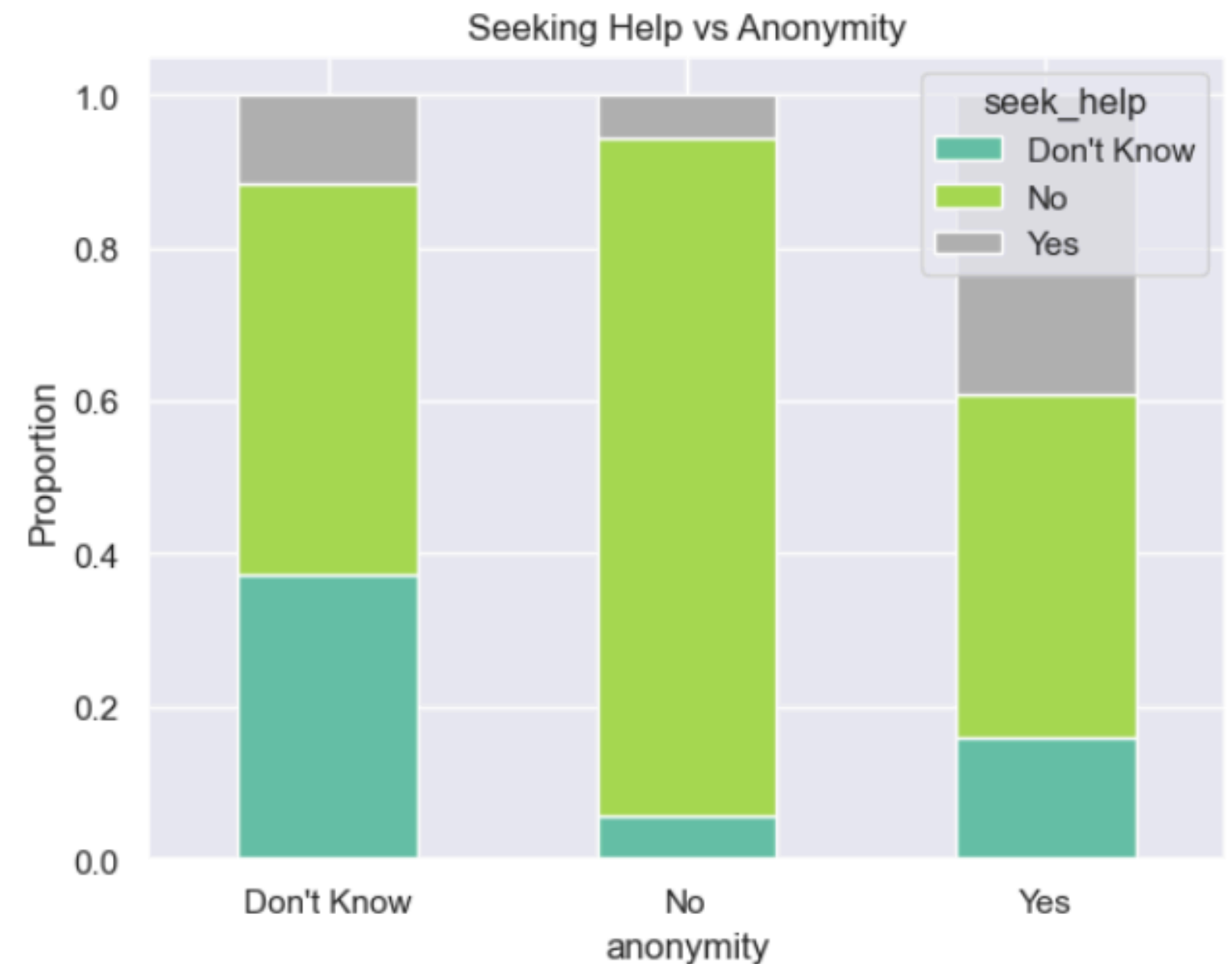
  - **Wellness Programs:**

    Rarely discussed in many companies

  - **Employer Support:**

    Low percentage of employees feel supported in seeking help

    Anonymity protection is unclear to many

Seeking Help vs Anonymity

INSIGHT: LACK OF AWARENESS IS A MAJOR BARRIER TO ACCESSING SUPPORT.

INTERVIEW BEHAVIOR & STIGMA

- **Mental Health Interview Disclosure:**
  Most people avoid mentioning mental health in job interviews
- **Coworker and Supervisor Discussion:**
  Employees are more comfortable talking to coworkers than supervisors
- **Consequences:**
  Many fear negative consequences if mental health issues are discussed

Insight: Stigma still exists, especially with supervisors and hiring managers.

KEY INSIGHTS

- Age group 20–35 reports highest workplace interference

- Family history is linked with higher treatment-seeking

- Many companies do not offer or communicate mental health resources

- Anonymity concerns limit usage of mental health services

- Most employees prefer not to discuss mental health at interviews

RECOMMENDATIONS

◆ Improve communication about existing wellness programs
◆ Ensure anonymous access to resources
◆ Introduce training for managers to reduce stigma
◆ Promote open conversations and mental health days
◆ Focus on young and mid-level employees for interventions

TOOLS USED

- **Excel:**
    Initial cleaning and column standardization
- **Jupyter Notebook (Python):**
    Libraries: pandas, matplotlib, seaborn
    Used for data processing, visualization, and analysis
- **Canva:**
    Report presentation
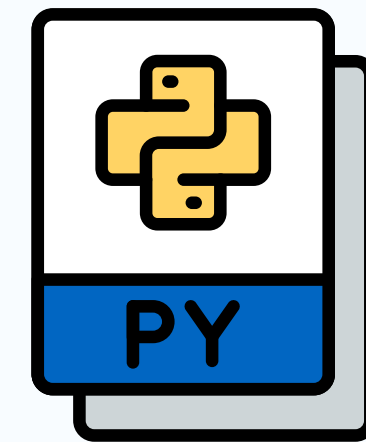
CONCLUSION

- Mental health is deeply influenced by workplace support and communication.
- Employee wellness data reveals critical gaps in awareness and employer support.
- With these insights, XYZ Tech can take actionable steps to build a healthier, more productive work environment.

THANK YOU