

Burn-out is defined in ICD-11 as follows:

"Burn-out is a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. It is characterized by three dimensions:

- feelings of energy depletion or exhaustion;
- increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and
- reduced professional efficacy.

Burn-out refers specifically to phenomena in the occupational context and should not be applied to describe experiences in other areas of life."

Source: https://www.who.int/

## **Project Motivation:**

The choice of this subject is driven by:

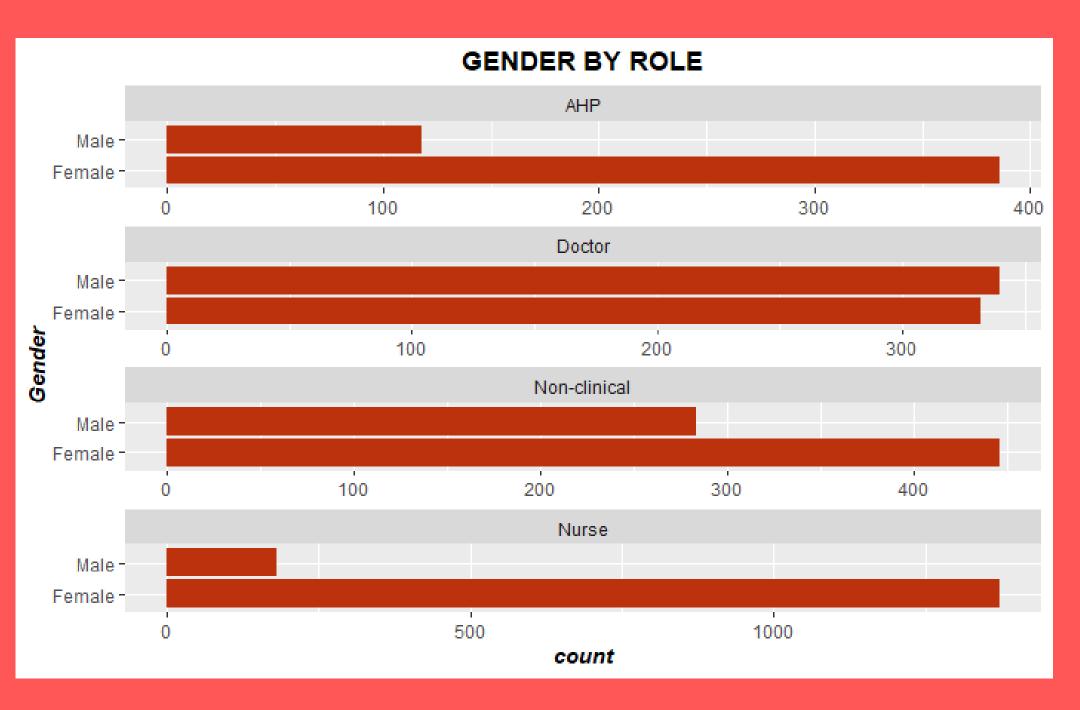
- A perception that the importance of mental health diseases in the work place is underemphasized.
- Burnout as a form of mental health has only officially recognized by the WHO as a diagnosable medical condition in 2021.
- Personal experience with work related burnout.

Note: For the purpose of this presentation "burnout' will be used to describe occupation related burnout as defined by the WHO.

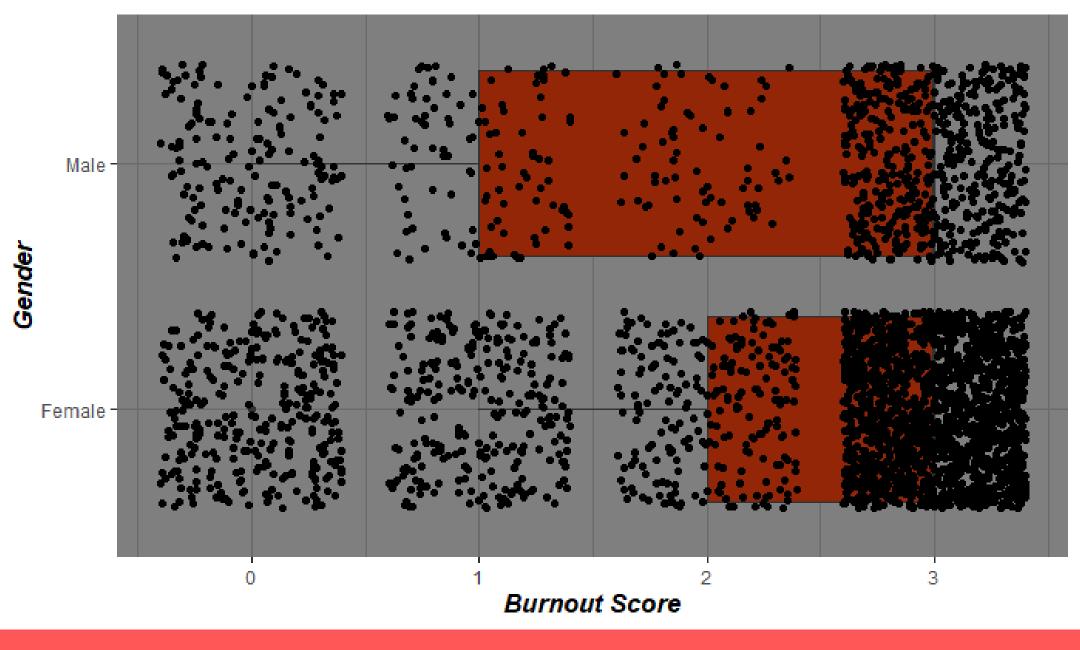
## Project Objectives:

By studying data from a survey conducted in the health care industry I will attempt to answer the following questions:

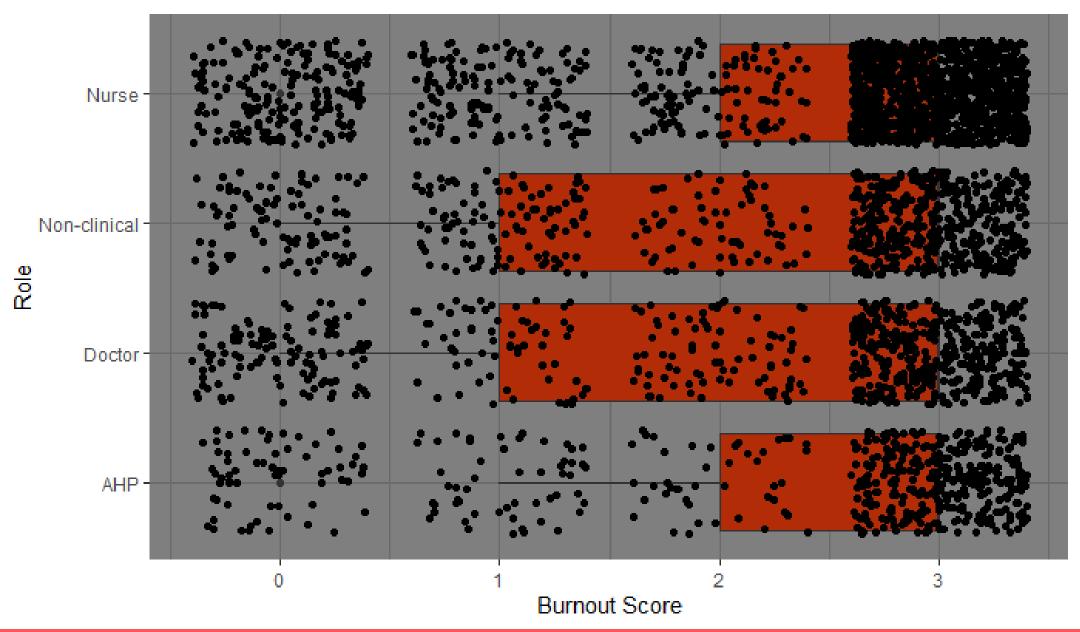
- Based on the data set should burn out be a concern to employers?
- Are males and females differently affected by burn out?
- Do the seniority of the of the job influence the likelihood of burnout



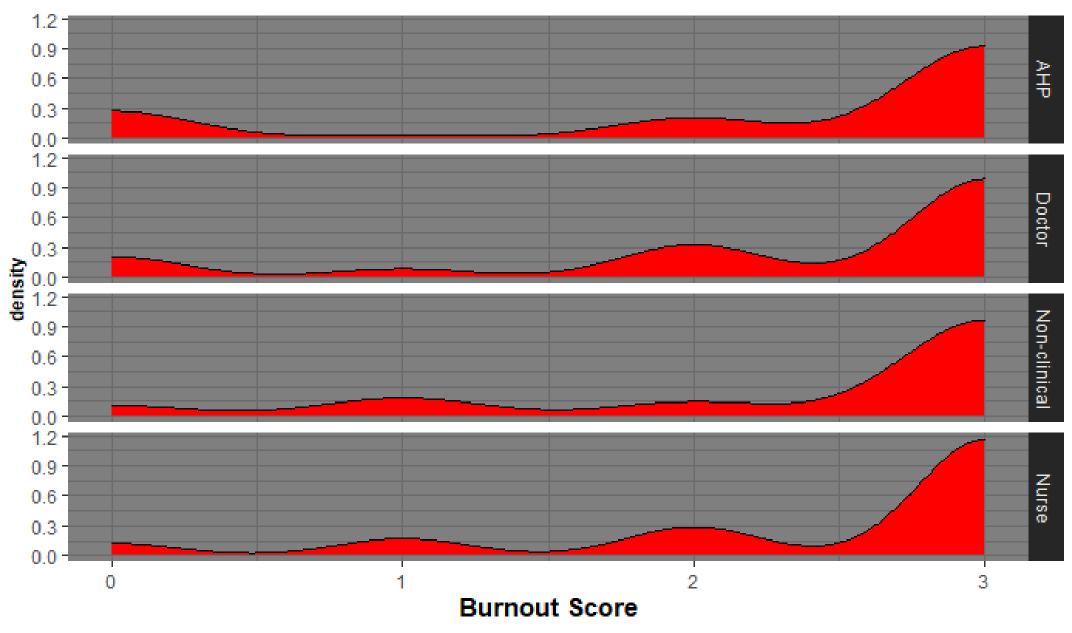
#### **BURN OUT STATS**



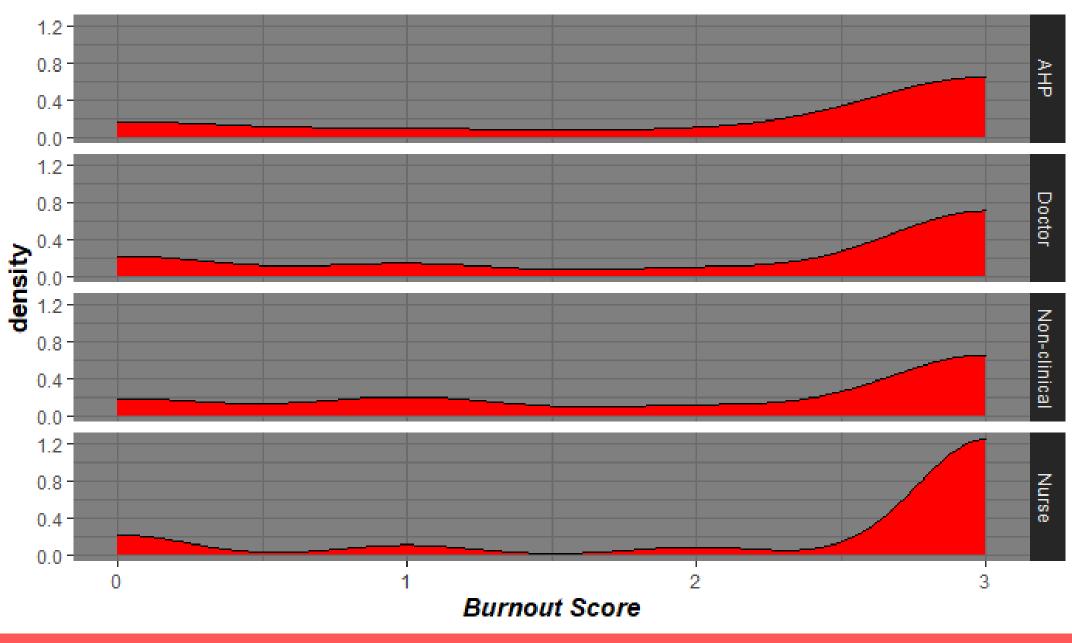
#### Burn out at role level



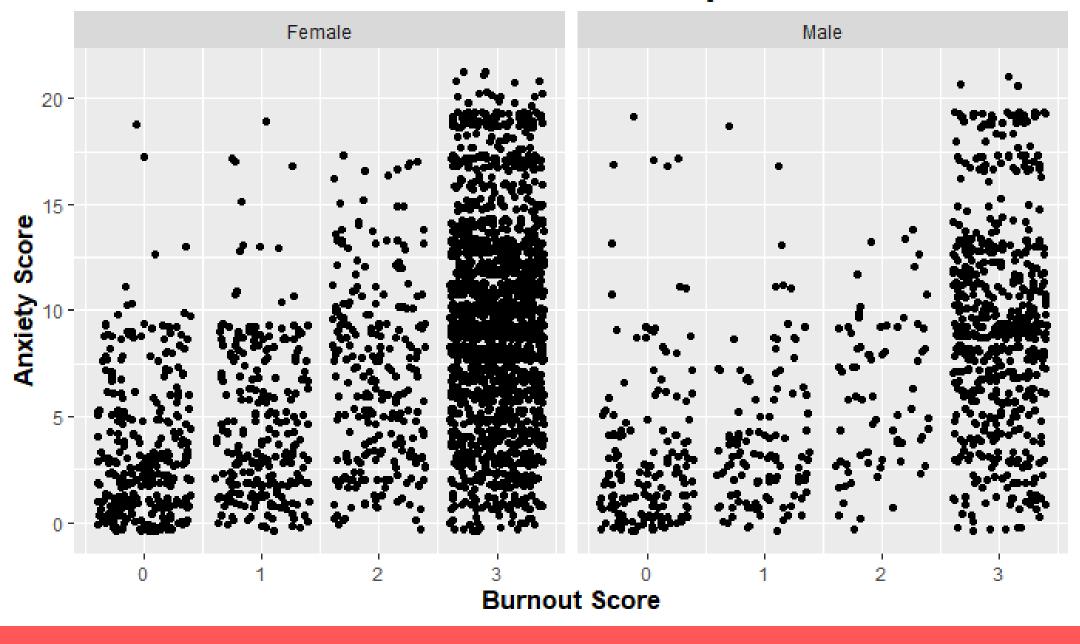
#### FEMALE DENSITY PLOT



#### MALE DENSITY PLOT

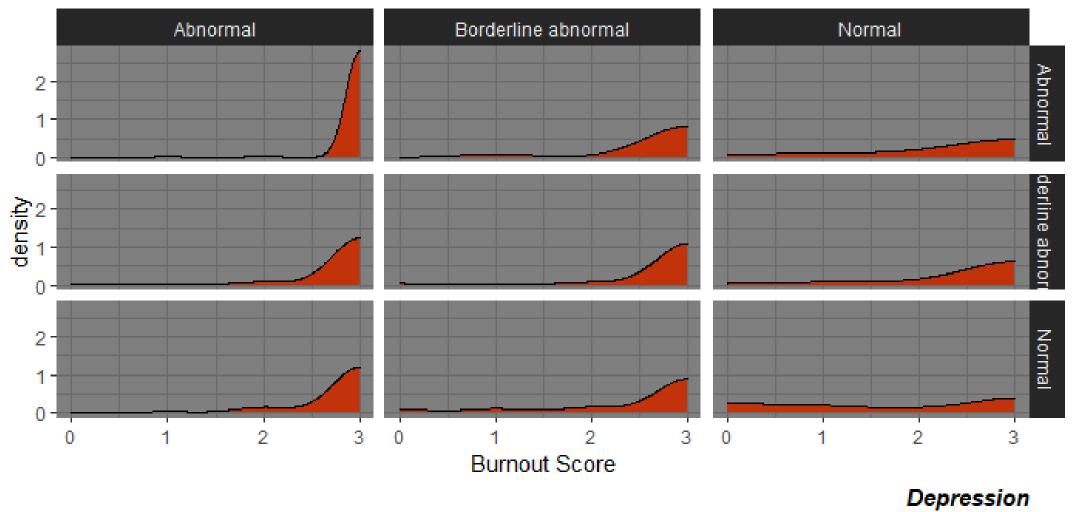


### **Burnt Out vs Anxiety**



#### Burnout, Anxiety, Depression

#### Anxiety



# Conclusions:

- Based on the data set, burnout should be a concern and receive proactive attention by employers.
- It is not conclusive that females or males are impacted less or more severely due to skewness in the data.
- From the data it would appear that all levels of seniority are impacted by burn out, although the conclusion is not conclusive due to limitations in the data.

# Further Work and Analysis:

- Building of a survey application for employers to assess and collect data to better understand the mental health of their employees.
- Regression analysis to enhance understanding of the relationship between burn out, anxiety and depression.
- Applying supervised machine learning techniques on the data collected to possibly predict when an employee is close to burn out and proactive interventions are required by HR and Wellness Departments.