# In Text for GPT:

**Logistic Regression:** Accuracy improved from 0.3 to 0.4 after applying SMOTE.

- Confusion Matrix: 722 accurate "Burnout" predictions.
- Key Coefficients:
    - Positive: Job Roles (Sales, Software Engineer), Industry (IT, Retail), Mental Health Resources ("Yes"), Region (Asia).
    - Negative: Job Role (Designer), Industry (Healthcare), Sleep Quality (Poor), Stress Level (Medium).

**SVM:** Accuracy of 0.5.

- Confusion Matrix: High accuracy for office work, moderate for remote work, poor for hybrid. Hybrid mode is hard to predict.

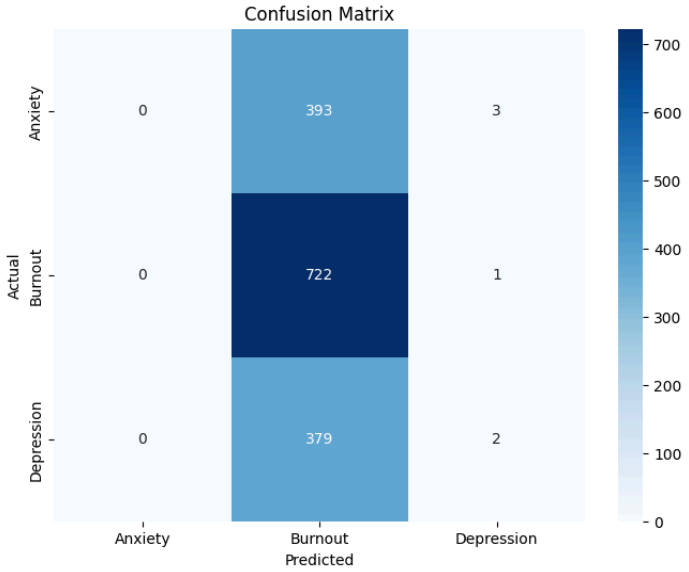
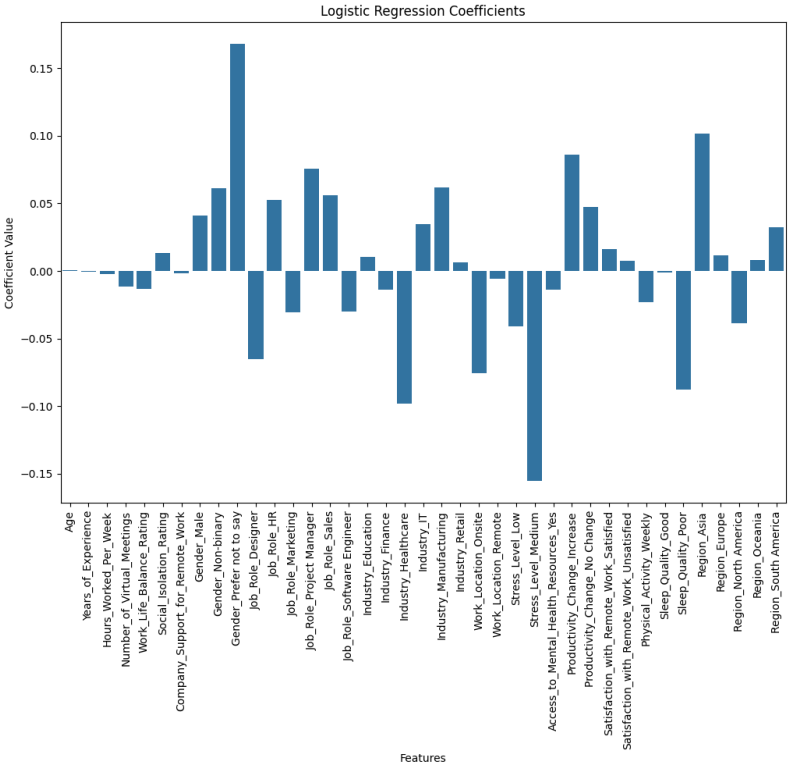
**Questionnaire Results:**

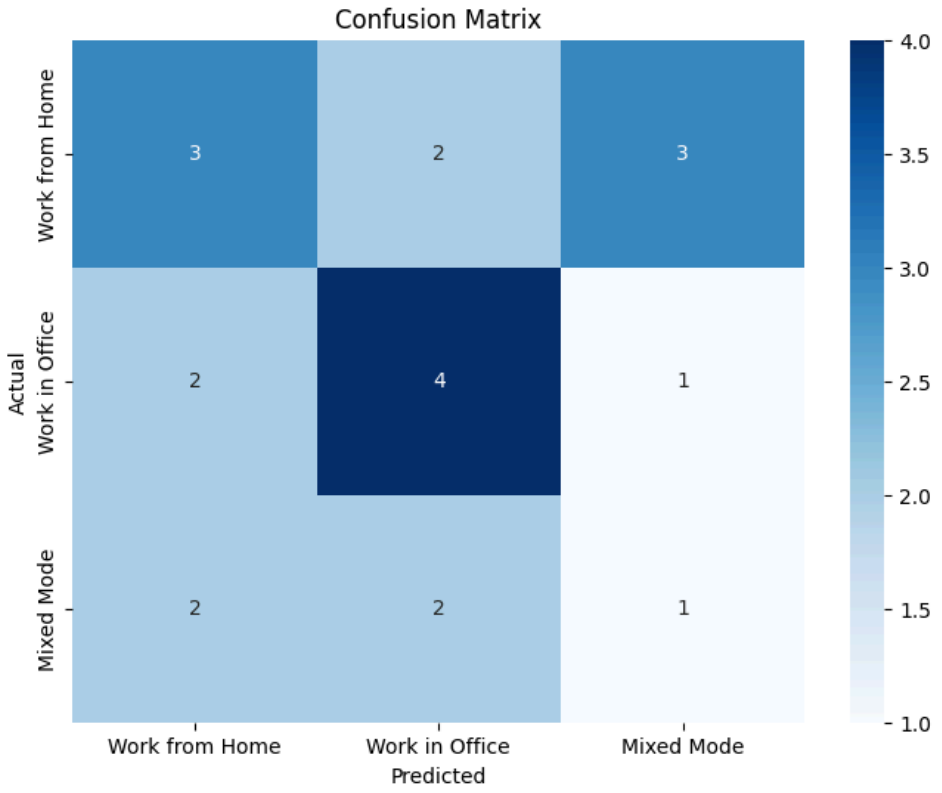
- **Work from Home Experience:** 40% Yes, 60% No.
- **Work From Home Increases Productivity:** 70% Yes, 30% No.
- **Work From Home Prevents Going Out:** 70% Yes, 30% No.
- **Work From Home GIves Flexibility:** 100% Yes.
- **Work From Home Saves Time:** 40% Yes, 60% No.
- **Causes Mental Disorders:** 30% Office, 70% Remote.
- **Work From Home Reduces Social Interaction:** 70% Yes, 30% No.
- **Focus:** 60% Office, 40% Remote.
- **Preference:** 50% Hybrid, 30% Office, 20% Remote.

**Hypotheses from Logistic Regression:**

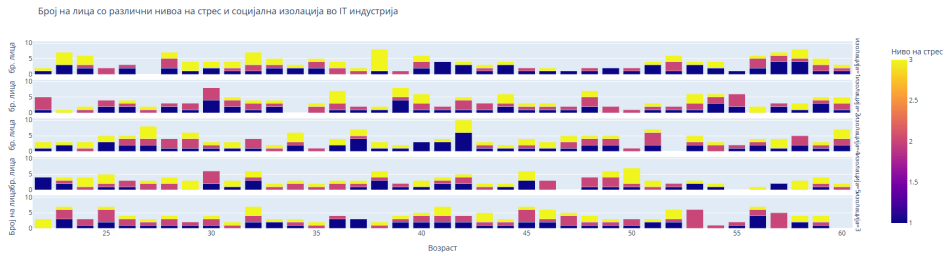
- High job satisfaction reduces mental health issues: True.
- Mental health better onsite: Mixed.
- Mental health better remote: False.
- Stress and isolation increase mental health issues: True.

# Visualizations from experiments:

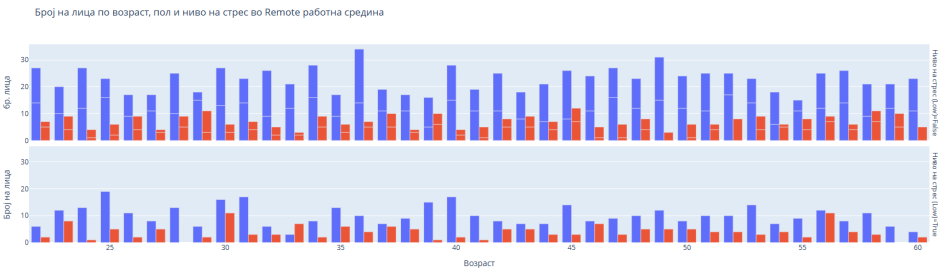
| Graph | Meaning |
| --- | --- |
|   | Logistic Regression Confusion Matrix -<br>It tells which value can be predicted the most accurately, in this result the most accurate prediction from the dataset is for `Burnout` which has a coefficient of 722 (very high). |
|   | Logistic Regression Coefficients -<br>Tells which values affect `Mental Health Conditions` the most, positive values bring positive mental health and negative values mean worse mental health |




SVM Machine -
Shows that by using the SVM machine method we can predict work in office most succesfully

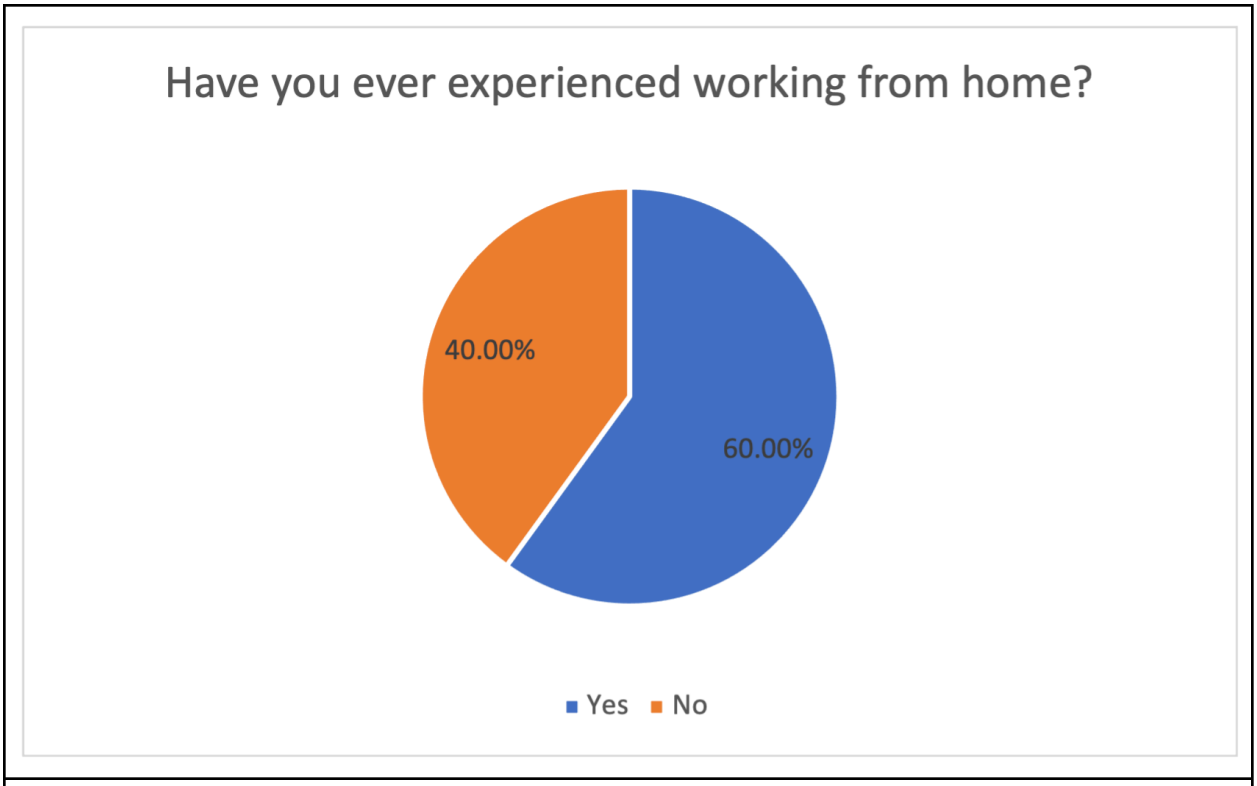


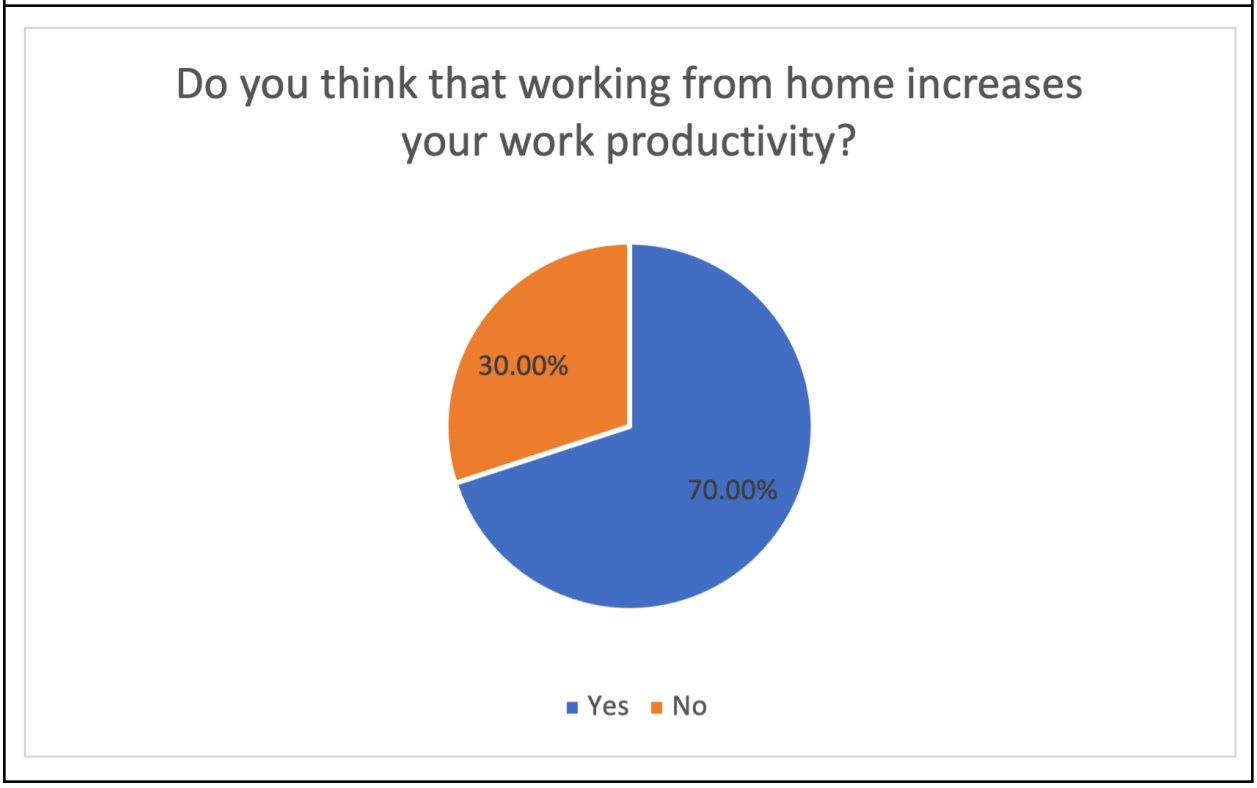

Main Dataset Visualization -
Number of people with levels of stress and social isolation within the IT industry

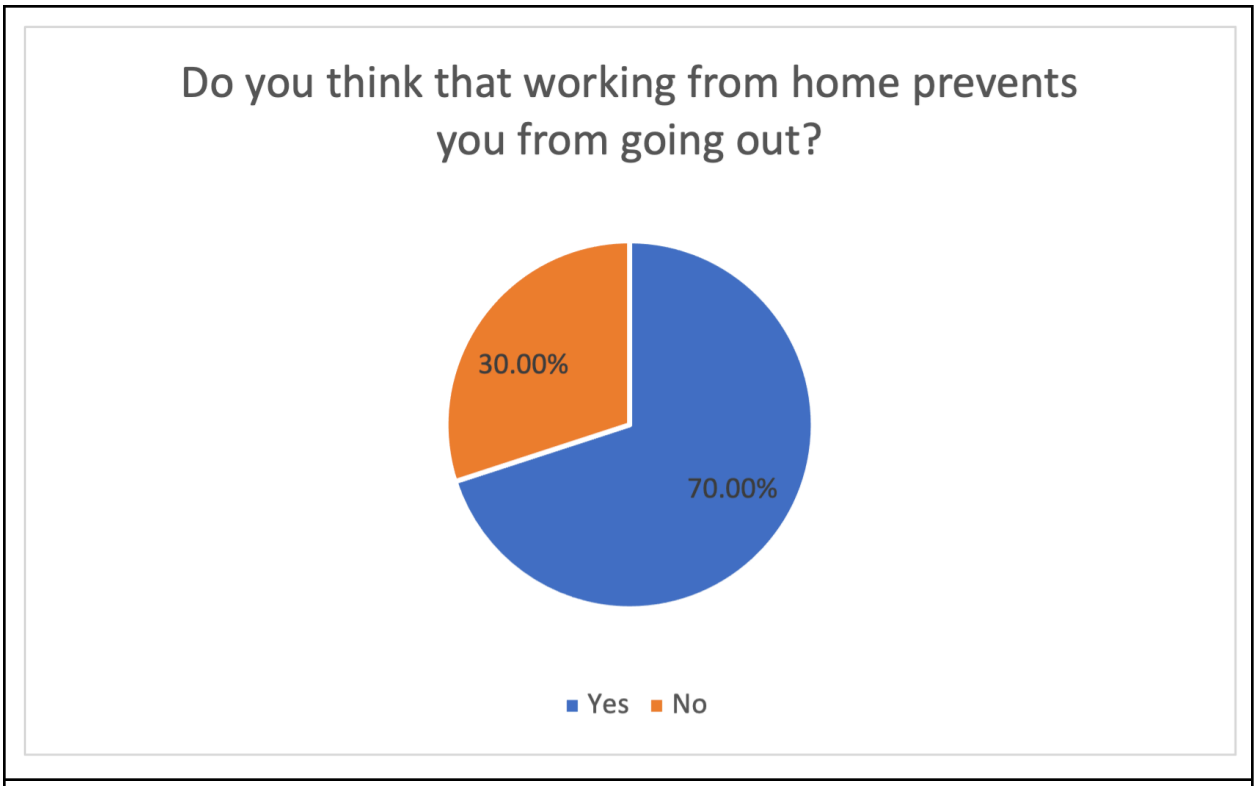


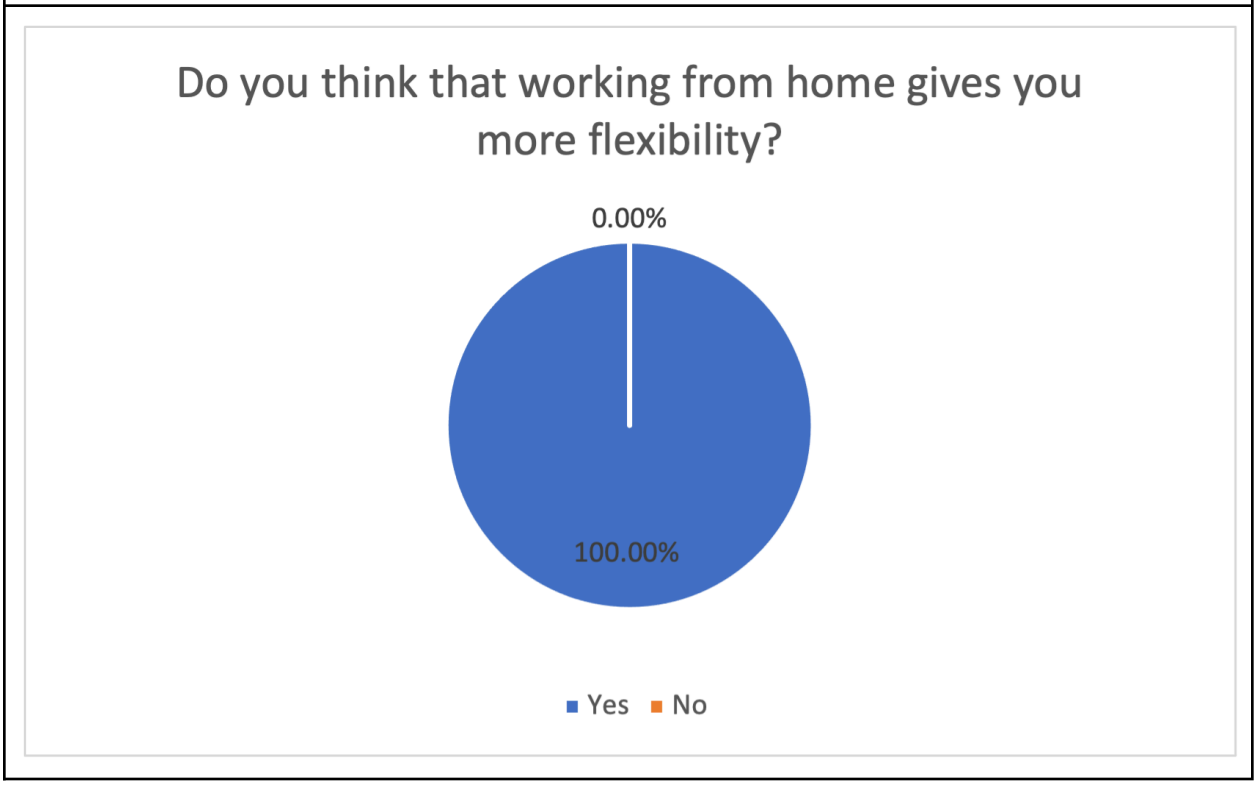

Main Dataset Visualization -
Number of people with levels of stress, age and gender which work remotly

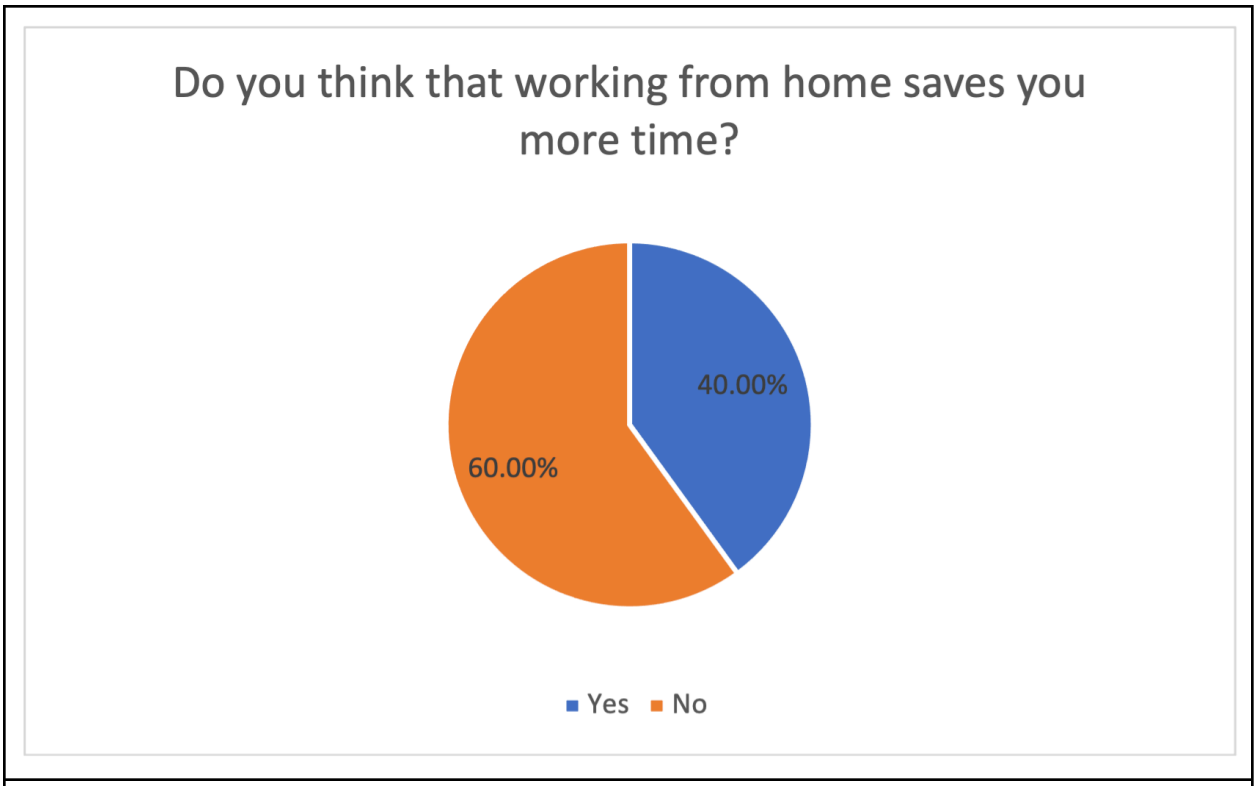
# Questionaire Visualizations Answers:

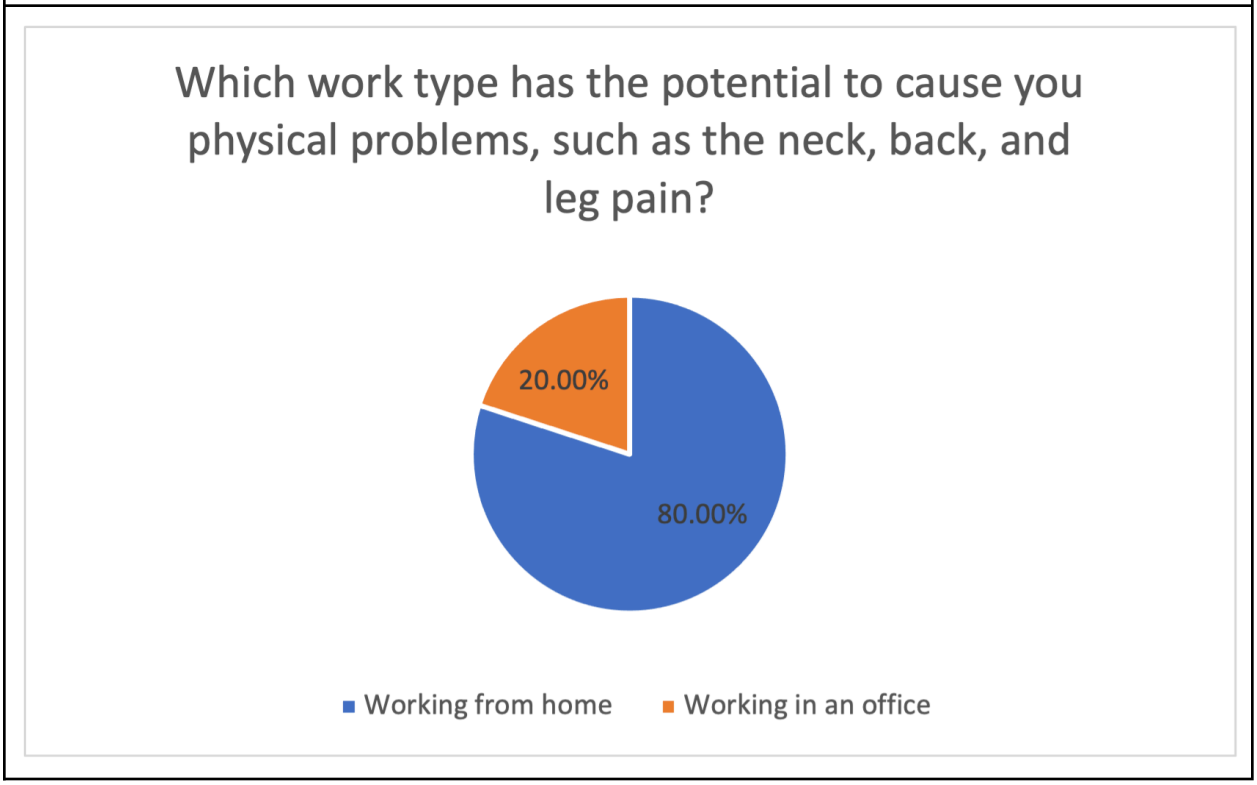


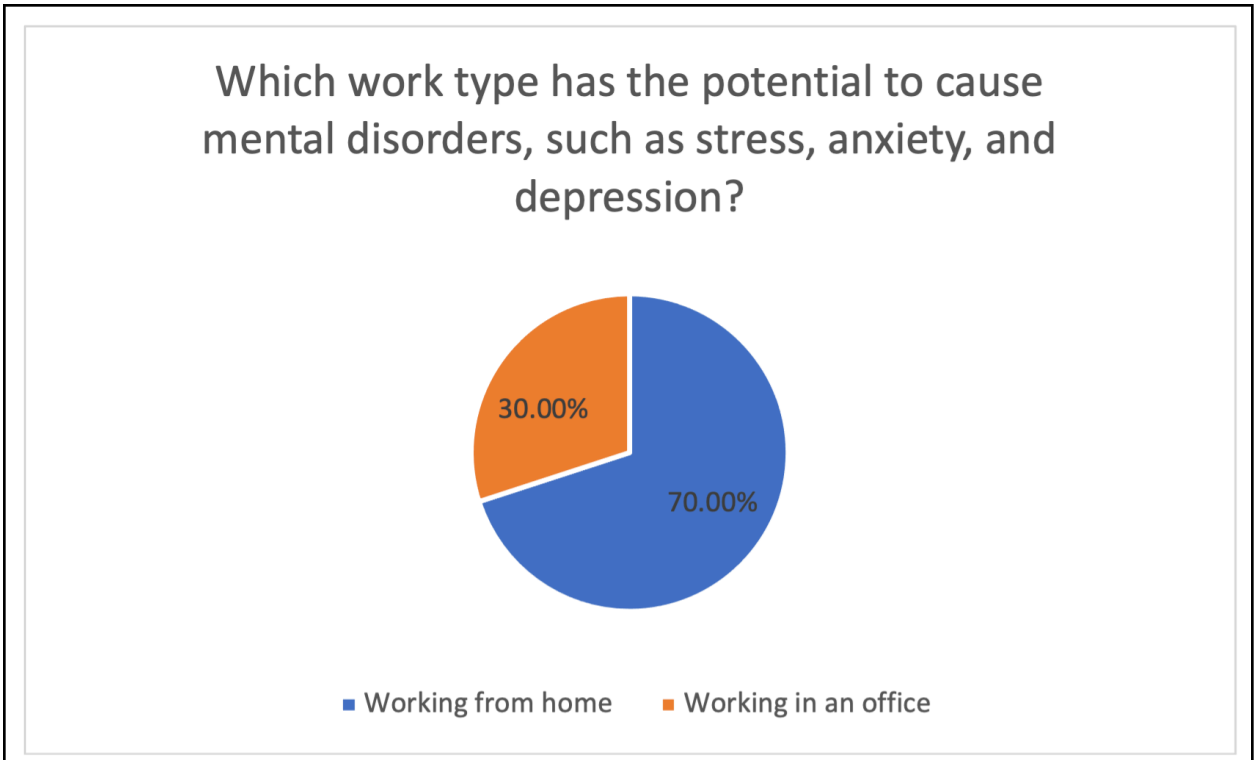



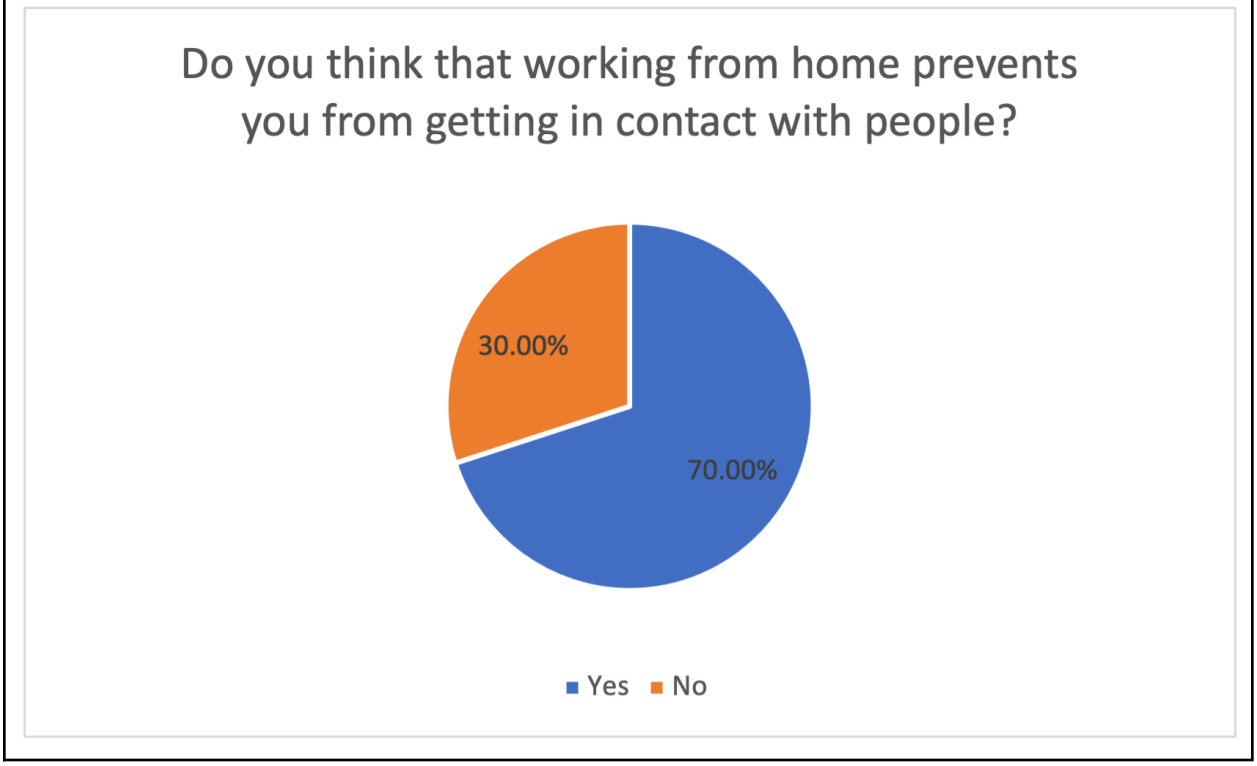

Do you think that working from home prevents you from going out?
30.00%
70.00%
Yes
No

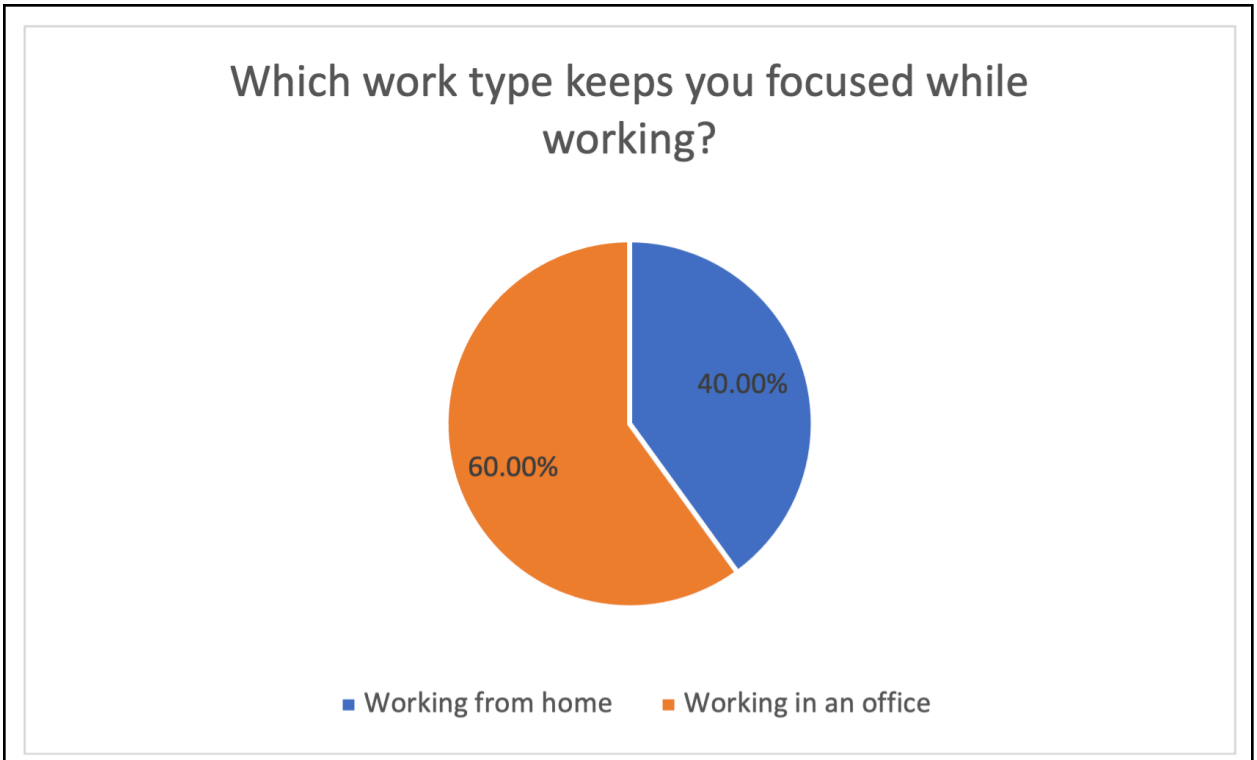

Do you think that working from home gives you more flexibility?
0.00%
100.00%
Yes
No

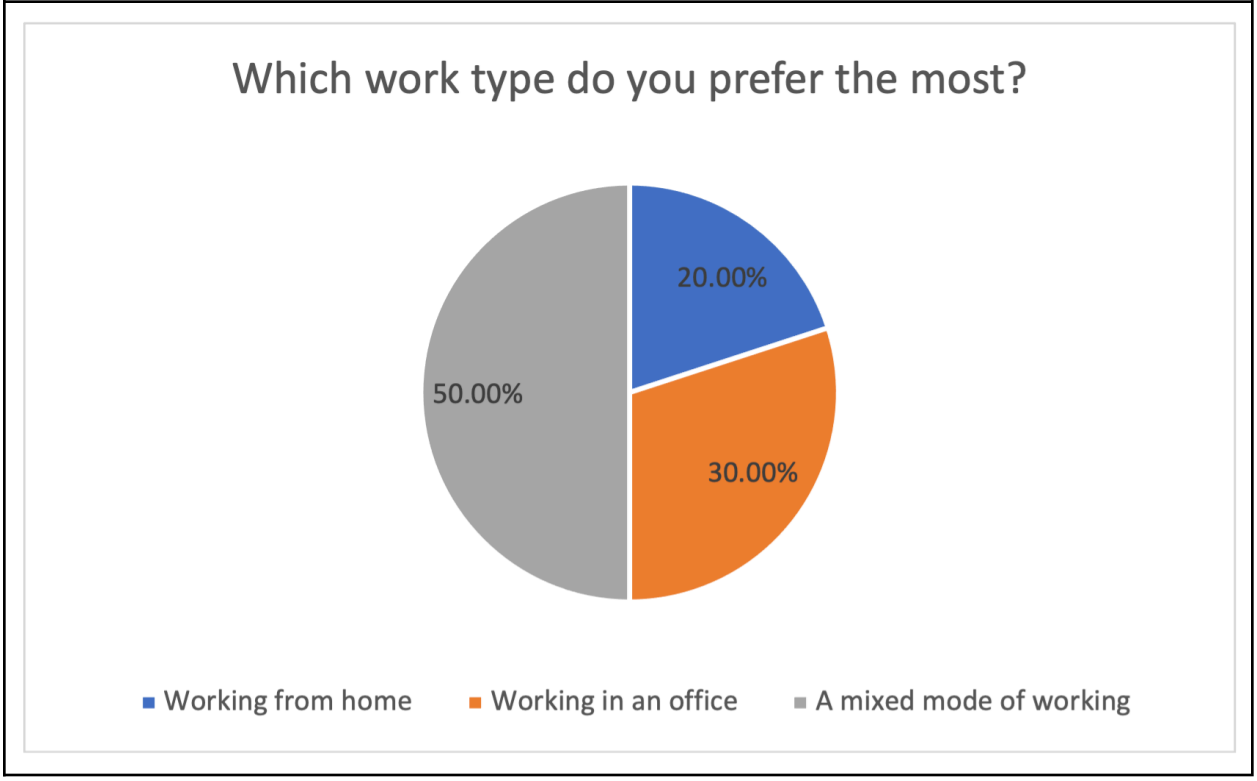

Do you think that working from home saves you more time?
40.00%
60.00%
Yes
No


Which work type has the potential to cause you physical problems, such as the neck, back, and leg pain?
20.00%
80.00%
Working from home
Working in an office


Which work type has the potential to cause mental disorders, such as stress, anxiety, and depression?
30.00%
70.00%
Working from home
Working in an office


Do you think that working from home prevents you from getting in contact with people?
30.00%
70.00%
Yes
No


Which work type keeps you focused while working?
40.00%
60.00%
Working from home
Working in an office


Which work type do you prefer the most?
20.00%
30.00%
50.00%
Working from home
Working in an office
A mixed mode of working

# Hypothesis Results:

Answers from the project hypothesis questions:

- High job satisfaction reduces mental health issues
- Mental health better onsite
- Mental health better remote
- Stress and isolation increase mental health issues