Remote
Work on
Mental
Health



# Introduction

Research Topic: Investigating the Impact of Remote Work on Mental Health using Data Science Approaches.

The shift to remote work has been accelerated due to global events like COVID-19.

This project aims to explore both qualitative and quantitative data to understand the mental health implications.

## Research Questions

1. How does remote work influence mental health indicators such as stress, isolation, and burnout?

2. Is there a statistically significant correlation between remote work and reported anxiety levels?

3. Can a predictive model be built to assess risk factors of poor mental health outcomes in remote settings?

## Methodology

Primary data collection using online surveys distributed to remote workers.

Secondary dataset sourced from publicly available mental health research databases. Statistical tools and techniques used: correlation analysis, regression modeling, and ANOVA testing.

# Data Preprocessing & Analysis

Data Cleaning:
Removed
missing/null
entries,
standardized
responses.

Used Python libraries (Pandas, NumPy) for preprocessing.

Correlation
Heatmaps,
Histograms,
and Boxplots
were used for
EDA.

Linear
Regression &
ANOVA applied
to test
hypothesis.

## Analysis & Findings

- Correlation and regression analysis
- Key findings from primary data
- Key findings from secondary data

# **Model Comparisons**

	Model	Score_Type	Score_Value
0	OLS Regression	R-squared	0.0060
1	Binary Logistic Regression	Pseudo R-squared	0.0001
2	Decision Tree	Accuracy	0.5860
3	Random Forest	Accuracy	0.6250

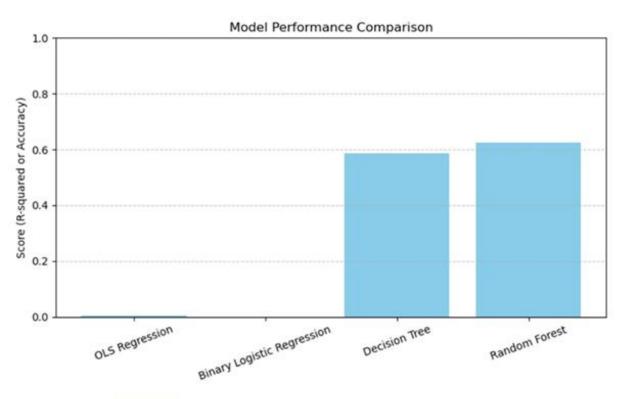


Figure 6 - Bar chart of Model Comparisons (Secondary Data)

# Model Comparisons

#### Discussion & Conclusion

Findings showed a moderate negative correlation between number of hours worked remotely and social connectedness.

Regression indicated that age and workload were significant predictors of mental health score.

Conclusion: Remote work presents both risks and benefits—flexibility vs. isolation.

Recommendations:
Employers should foster
community and
encourage regular
check-ins.



Interpretation of results

#### Discussion



Comparison with existing literature



• Implications

#### Conclusion

- • Summary of findings
- • Limitations
- Recommendations

#### Self-Reflection

Challenge: Planning and executing primary data collection required persistence and adaptability.

Data preprocessing for secondary data was time-intensive due to inconsistencies and noise.

Lessons learned: Importance of version control (used GitHub privately), and documenting all preprocessing steps clearly.

# Challenges



• PERSONAL CHALLENGES



• LEARNING OUTCOMES



PROJECT
 MANAGEMENT AND
 GITHUB TRACKING

#### Future Work





 Recommendations for future research  Improvements and extensions

## References



APA/Harvard style references



Tools used for citation

## Thank You





CONTACT
 INFORMATION

• OPEN TO QUESTIONS