



# MindScope

# Unveiling Patterns in Mental Health through Data driven Insights

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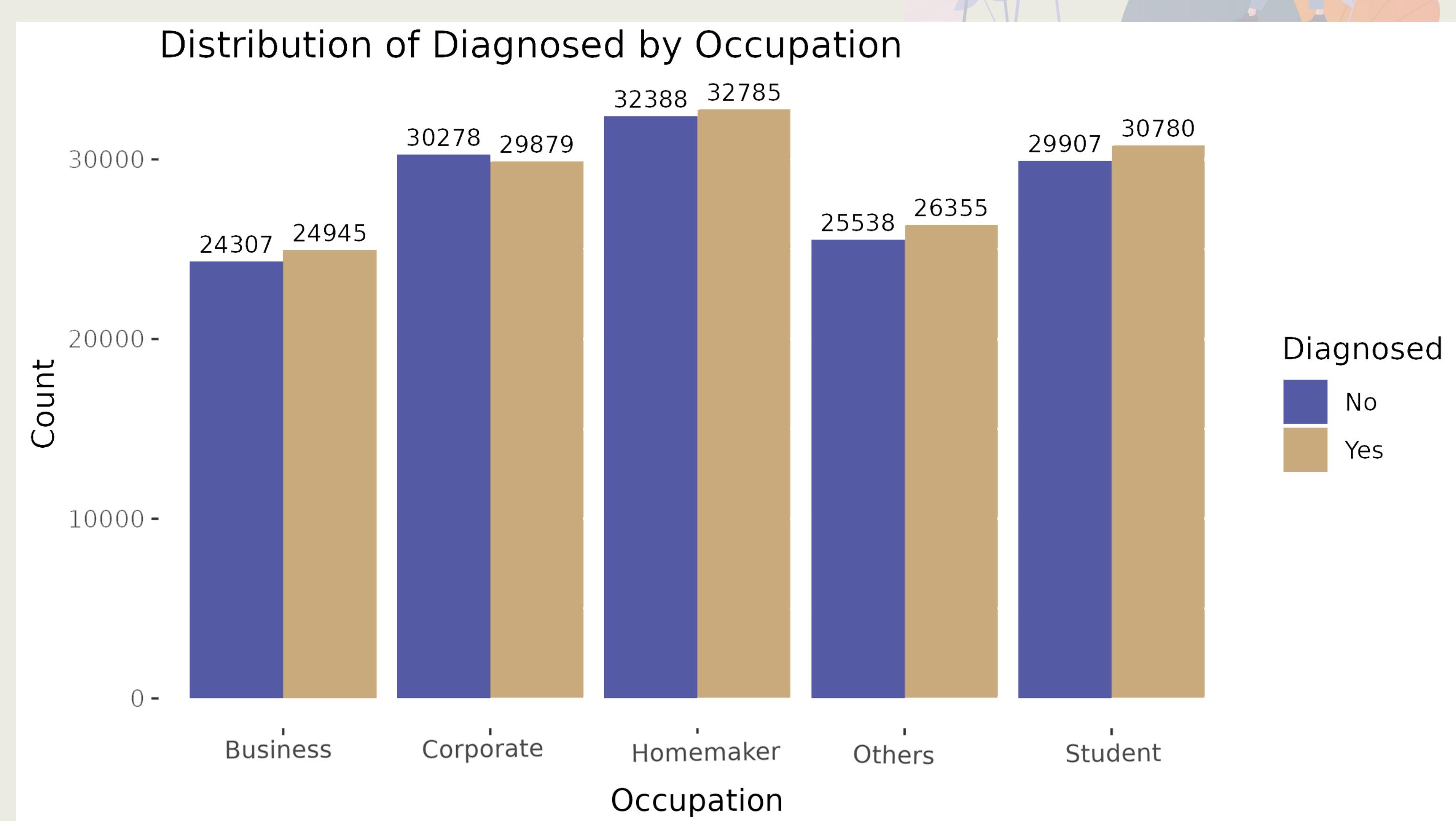


# THE UNIVERSITY OF ARIZONA

# Exploring the Determinants of Mental Well-Being: A Global Perspective

This project examines a dataset focused on factors influencing mental health, emphasizing how personal, environmental, and occupational conditions differ across contexts. By analyzing correlations and patterns, the study aims to uncover actionable insights that can guide policies and support systems to foster mental well-being worldwide.

# Studying correlations exist between depression and occupation ?

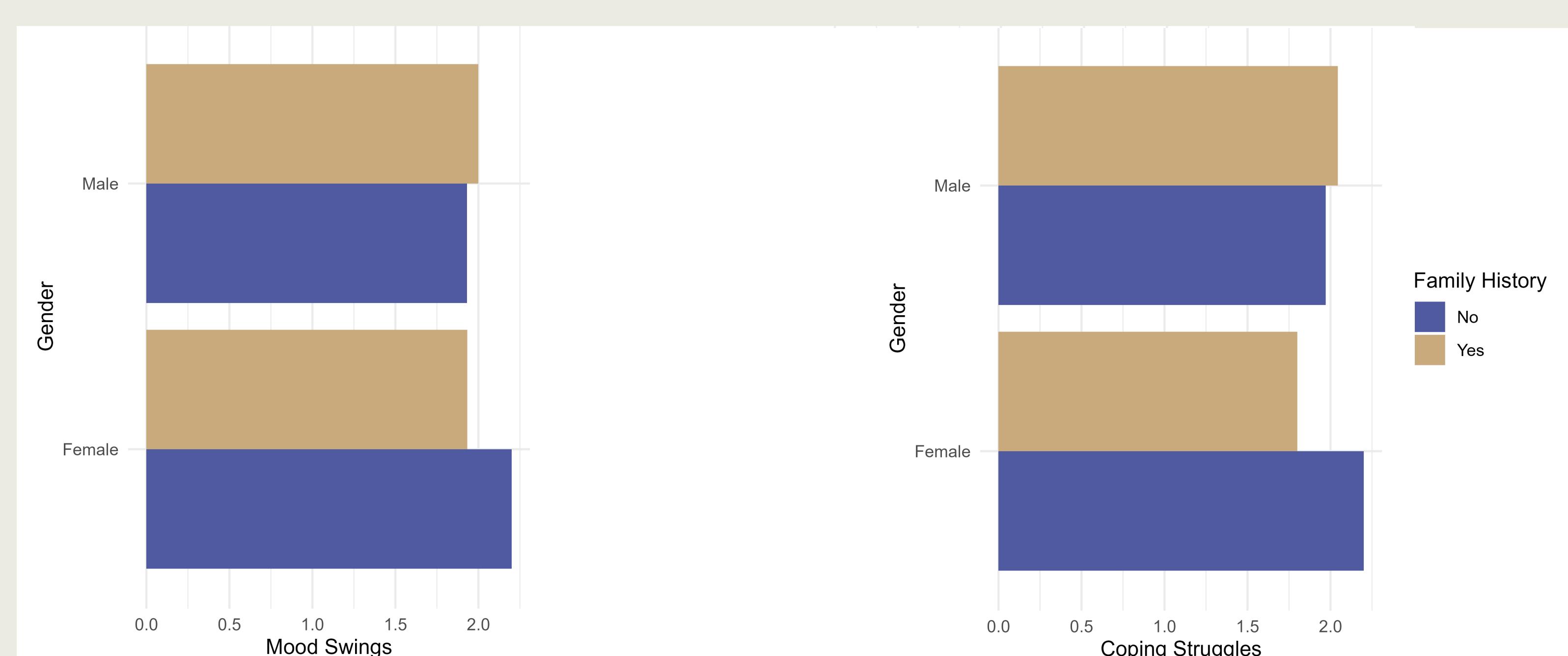


Occupation may play a role in diagnosis outcomes. For example, homemakers may report higher diagnosis rates due to increased stress, isolation, or lack of workplace mental health resources. The even distribution across "Corporate" and "Student" categories suggests that workplace or academic environments could affect diagnosis rates similarly.

**Does a person's or their family's history of mental health problems link with higher levels of mood swings, and coping challenges?**

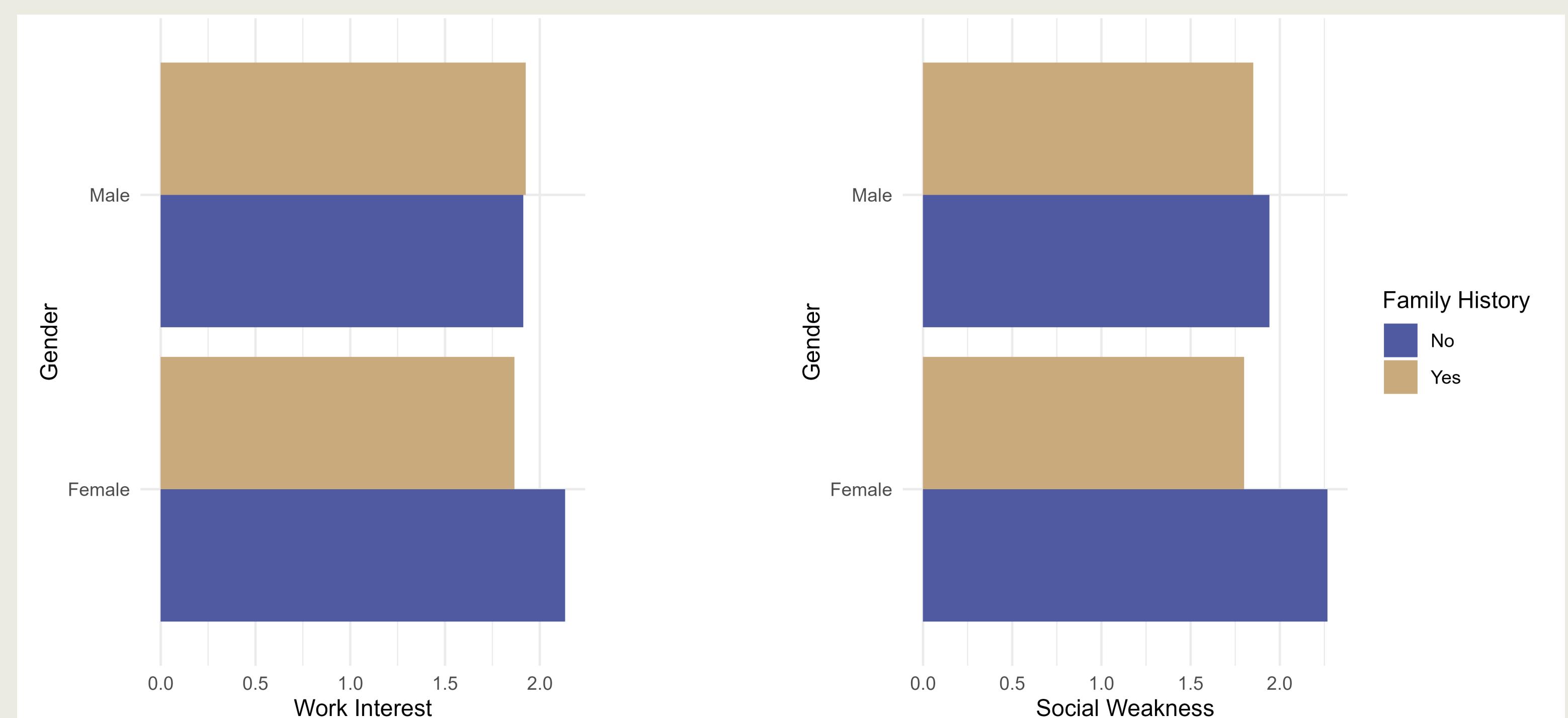
Family history of mental illness seems to make mood swings less intensive, at least in women. There is no significant effect for male population.

When it comes to coping abilities, the data indicates that women struggle more, but family history has virtually no effect on how well people can cope.



`work_interest` and `social_weakness` show a very slight negative correlation of -0.05, while `coping_struggles` and `social_weakness` have a minimal positive correlation of 0.01. The variable `self-employed` shows no correlation with any other factors. These observations indicate that these mental health factors are independent of each other.

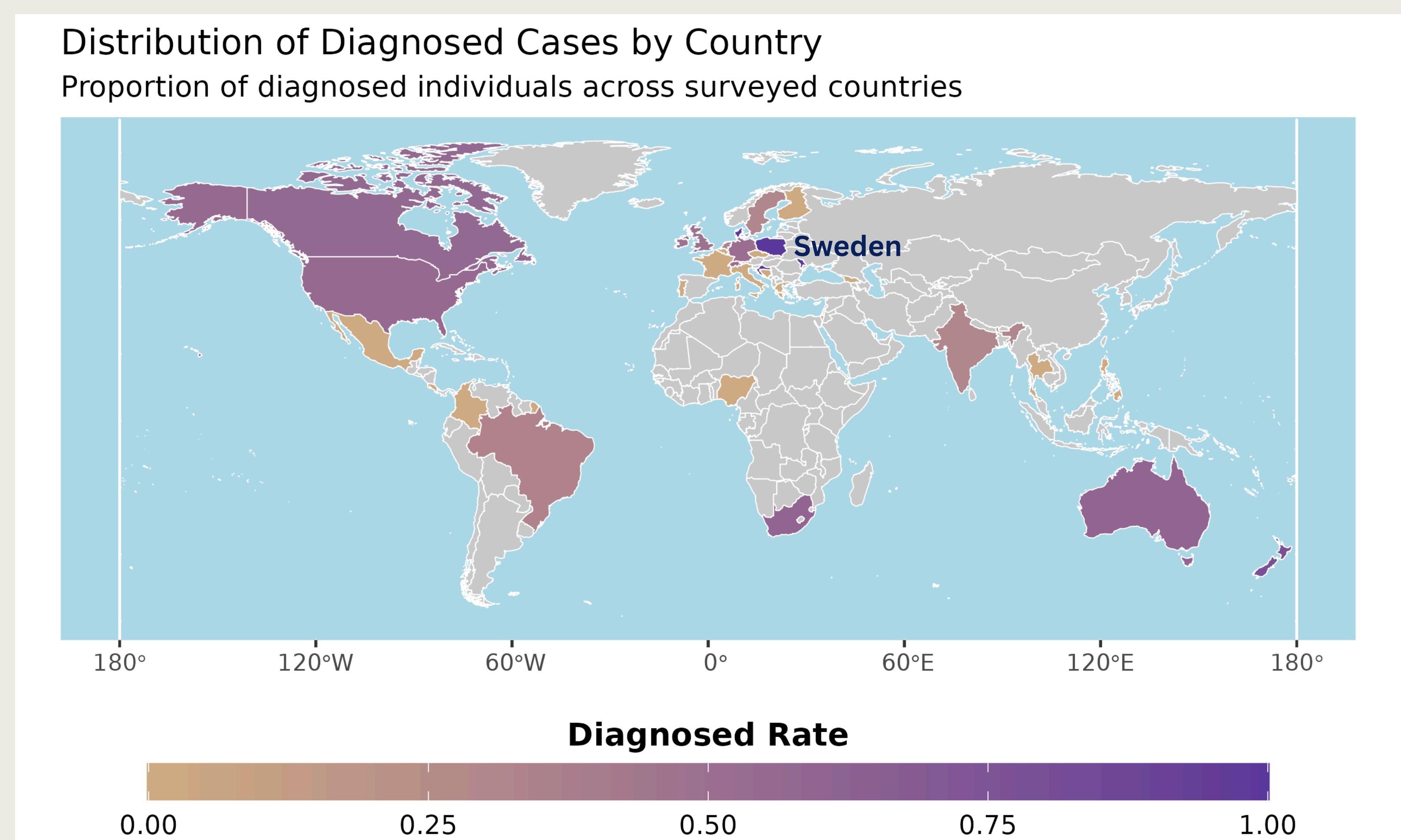
# How does a person's or their family's history of mental health problems link with Work Interest and Social Weakness?



When it comes to work, women again seem more sensitive to family history: in families with a history of mental illness women have more interest in work, whereas men not so much.

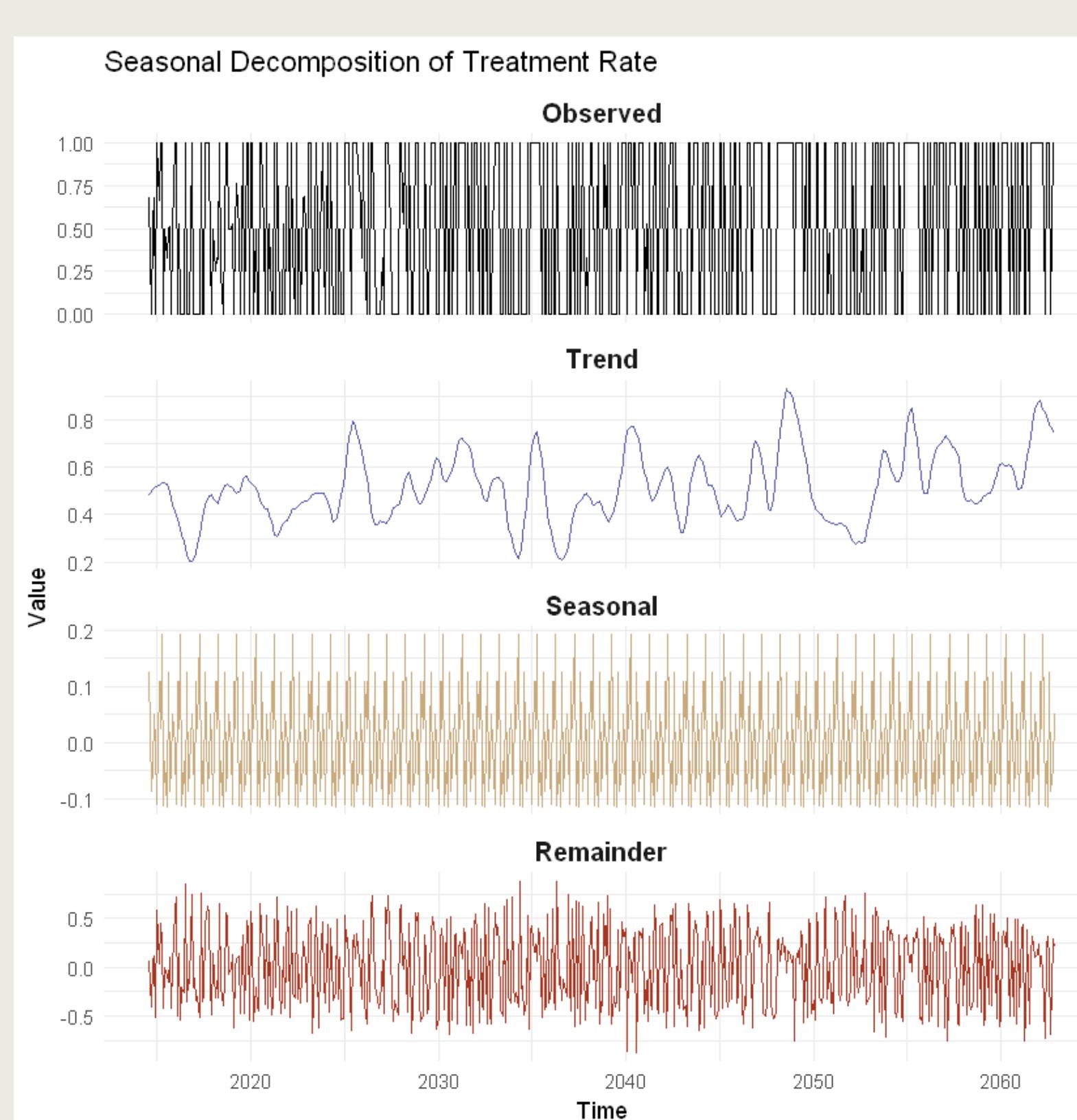
Finally, social skills seem to be very little affected by the history of mental illness, and there is also only a negligible difference between men and women.

# Distribution of mental health treatment-seeking across different demographics



Higher diagnosed rates in certain countries could be attributed to:  
Better access to mental health services and awareness campaigns.  
Cultural differences in reporting or seeking help for mental health issues. Lower  
diagnosed rates in some regions might be due to stigma, lack of resources, or  
underreporting.

# Time series Decomposition for Treatment



# Logistic Reg for Diagnosed Prediction

(diagnosed ~ Gender + Country + Occupation + family\_history)

