**Mental Health Analysis README**

**Overview**

This project aims to analyze the relationship between family history of mental health issues, employment status, and the likelihood of seeking mental health treatment. The analysis employs various statistical tests and visualizations to identify patterns and significant factors.

**Analysis Summary**

**Objectives**

1. **Primary Hypothesis 1**: Self-employed individuals are less likely to seek mental health treatment compared to employed individuals.
2. **Primary Hypothesis 2**: Individuals with a family history of mental health issues are more likely to seek mental health treatment compared to those without such a history.

**Findings**

1. **Employment Status**:
   * The analysis shows no substantial difference in mental health treatment-seeking behavior between self-employed and employed individuals.
   * **Bar Graph**: The number of self-employed individuals seeking treatment is slightly higher than those not seeking treatment. For employed individuals, the numbers are almost equal.
2. **Family History**:
   * Individuals with a family history of mental health issues are significantly more likely to seek treatment compared to those without such a history.
   * **Bar Graph**: Individuals with a family history seeking treatment significantly outnumber those not seeking treatment, and the opposite is true for individuals without a family history.
   * **Heat Map**: Supports the finding that family history influences treatment-seeking behavior.
   * **Violin Plot**: Shows a higher density of treatment-seeking behavior among individuals with a family history.

**Statistical Analysis**

* **T-test**:
  + T-statistic: 14.755
  + P-value: 3.919e-45

**Conclusion**

* Family history significantly influences the likelihood of seeking mental health treatment, whereas employment status does not appear to be a strong determinant.
* These insights can guide further research and targeted interventions in mental health services, emphasizing the importance of family history in shaping treatment-seeking behavior.

This project provides a comprehensive analysis of the factors influencing mental health treatment-seeking behavior, with a focus on family history and employment status.