Mental Disorders Analysis

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Problem Statement

Mental Disorders Data Analysis

Proposed Solution

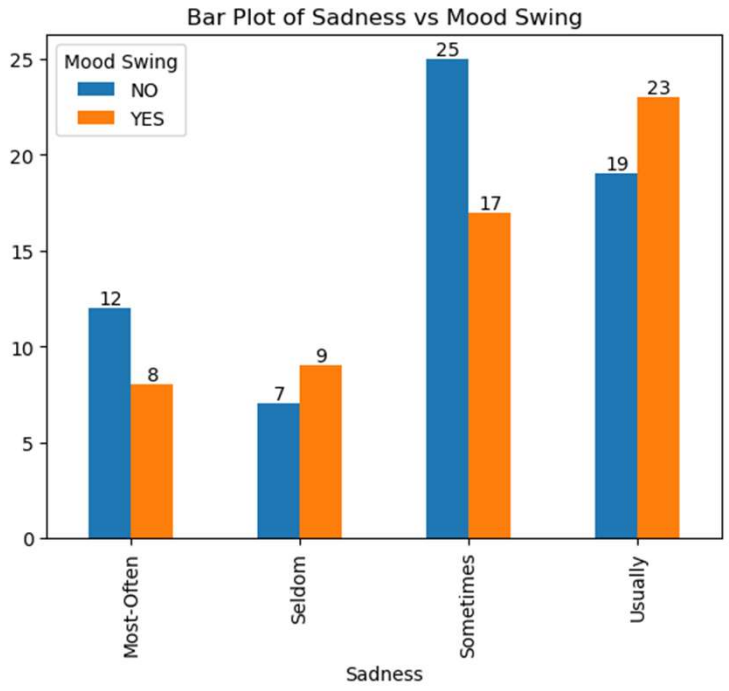
The approach involves systematically preparing and analyzing the data, developing and refining predictive models for mental health diagnoses and iteratively optimizing these models based on insights from intial exploratory analysis and testing.

Descriptive Analysis

Observation :-

- The plot visually represents the distribution or frequency of different levels of 'Sadness' with respect to the occurrence of 'Mood Swing' (Yes or No).

- By comparing the heights of the bars within each level of 'Sadness', you can infer whether there is a significant association between 'Sadness' and 'Mood Swing'. For instance, if bars for 'Mood Swing' = Yes are consistently higher across different levels of 'Sadness', it suggests a potential relationship between higher levels of sadness and mood swings.

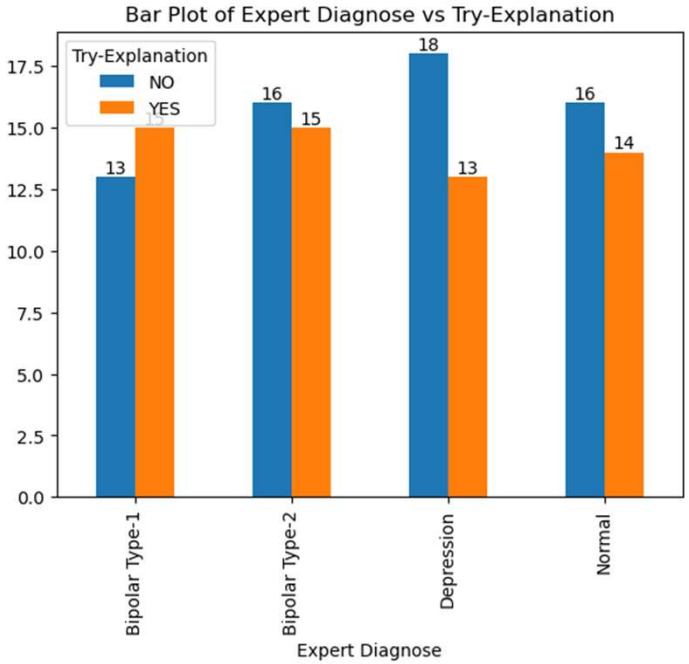


Descriptive Analysis

Observation :-

- Each bar in the plot corresponds to a category in 'Expert Diagnose’
. Within each bar, different colors represent the counts of
‘ Try-Explanation' categories ('X' and 'Y’).

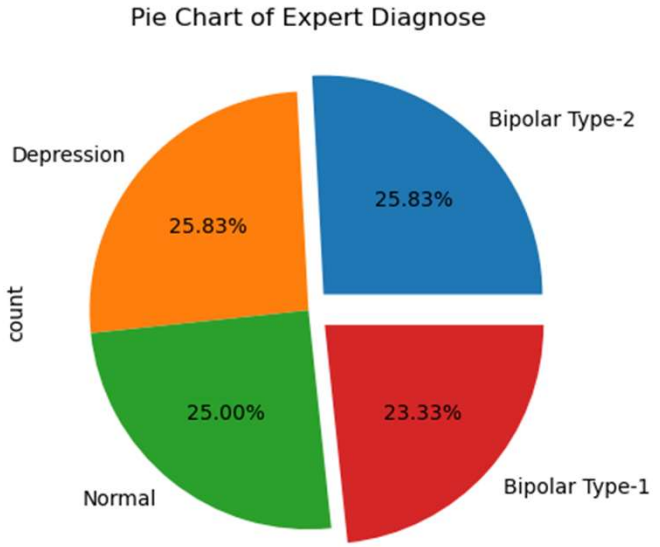
- By comparing the heights of the bars within each category of 'Expert Diagnose', you can observe which 'Try-Explanation’ category is more frequent or predominant for each 'Expert Diagnose'.
- The bar plot provides a visual summary of the distribution of 'Try-Explanation' categories across different 'Expert Diagnose’ categories, helping you understand any patterns or associations



Descriptive Analysis

Observation :-

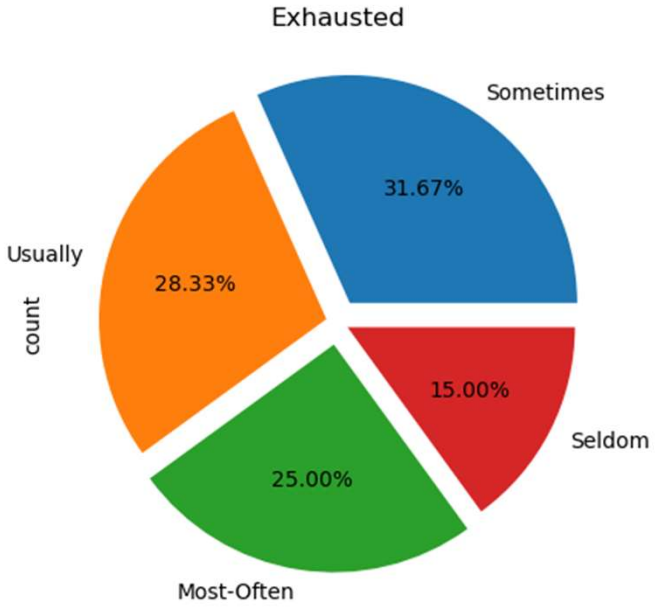
- The pie chart visually represents the distribution of different diagnoses ('Expert Diagnose') in your dataset.
- Each slice of the pie corresponds to a unique diagnosis category.
- The size of each slice indicates the proportion of that diagnosis category relative to the total number of diagnoses.



Descriptive Analysis

Observation :-

- The pie chart visually represents the distribution of different diagnoses (‘Exhausted') in your dataset.
- Each slice of the pie corresponds to a unique diagnosis category.
- The size of each slice indicates the proportion of that diagnosis category relative to the total number of diagnoses.



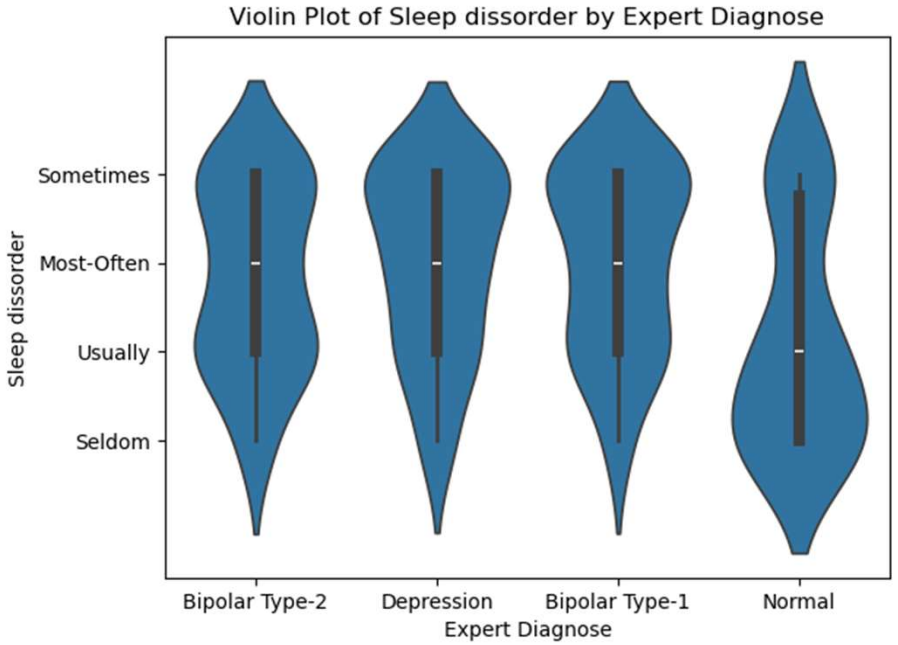
Descriptive Analysis

Observation :-

- The violin plot displays the distribution of 'Sleep dissorder' values across different categories of 'Expert Diagnose'.

- In this violin plot we can get the 'Expert Diagnose showing that how patient are 'Sleep Disorder'.

- The thick horizontal line inside each violin represents the interquartile range (IQR), and the thin vertical lines extending from it show the rest of the distribution, except for points that are determined to be "outliers".



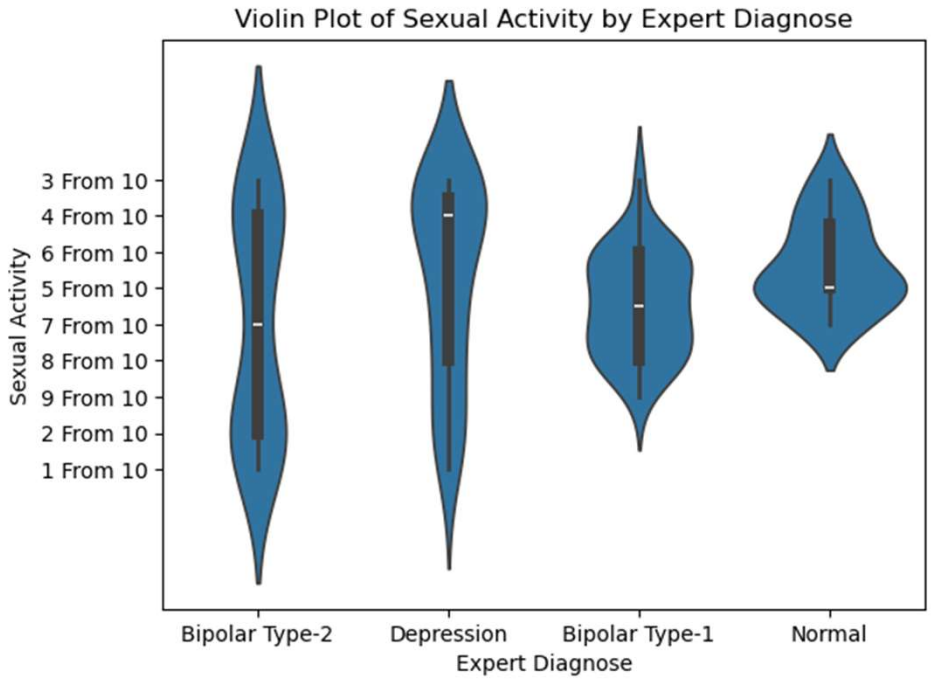
Descriptive Analysis

Observation :-

- You can compare the distributions of 'Sexual Activity' across different 'Expert Diagnose' categories. For instance, if one category has a wider and more spread-out violin plot compared to others, it indicates greater variability in 'Sexual Activity' within that category.

- Look for any noticeable patterns or trends in how 'Sexual Activity' varies across different diagnoses. Are there diagnoses where 'Sexual Activity' tends to be higher or lower?

- Violin plots also help in identifying outliers (data points that are significantly different from the majority) within each category of 'Expert Diagnose'.

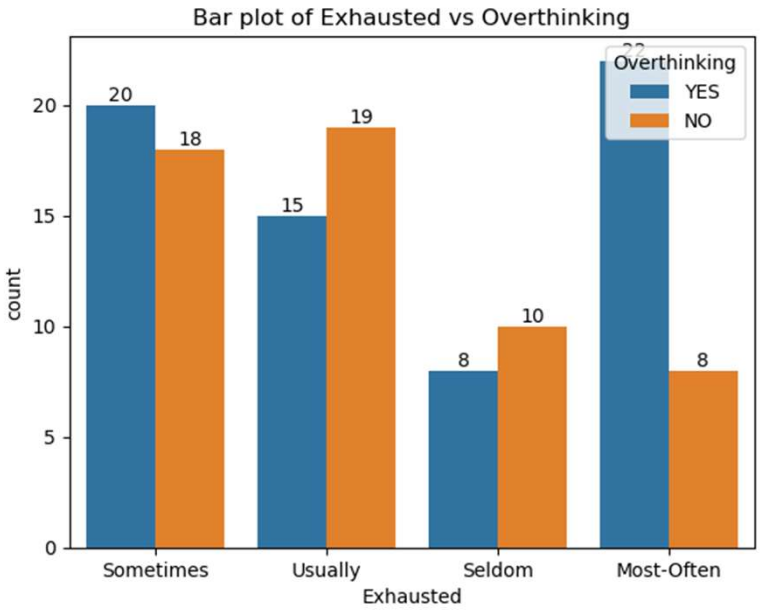


Descriptive Analysis

Observation :-

- The count plot allows you to compare the frequency of 'Exhausted' across different categories of 'Overthinking'.

- Annotations on each bar show the exact count of occurrences for each combination of 'Exhausted' and 'Overthinking'.



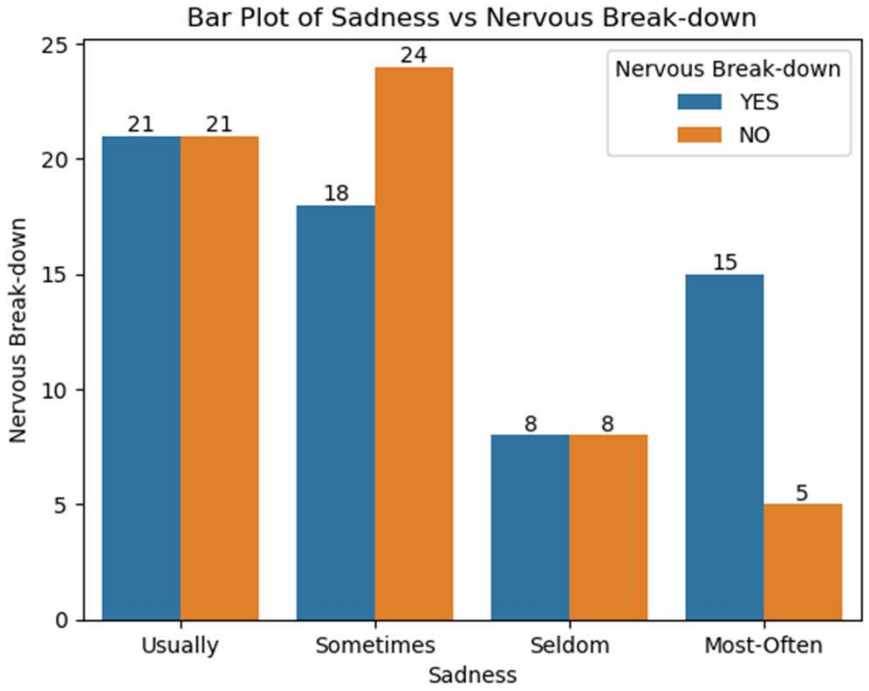
Descriptive Analysis

Observation :-

•The count plot compares the counts of 'Sadness' across different categories ('Low', 'Medium', 'High') and further categorizes each count by 'Nervous Break-down' ('Yes' or 'No').

• For instance, if the bar for 'Sadness' = 'High' is taller for 'Nervous Break-down' = 'Yes', it suggests a higher frequency of nervous breakdowns among individuals reporting high sadness levels.

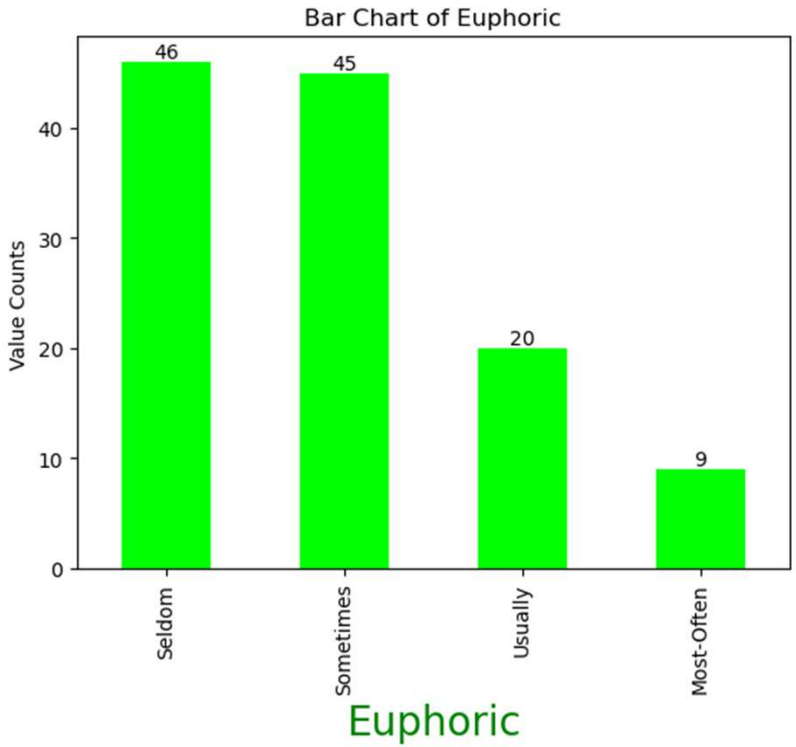
• This plot helps in quickly understanding how the occurrence of 'Nervous Break-down' varies across different levels of 'Sadness', providing insights into potential relationships or correlations between these variables.



Descriptive Analysis

Observation :-

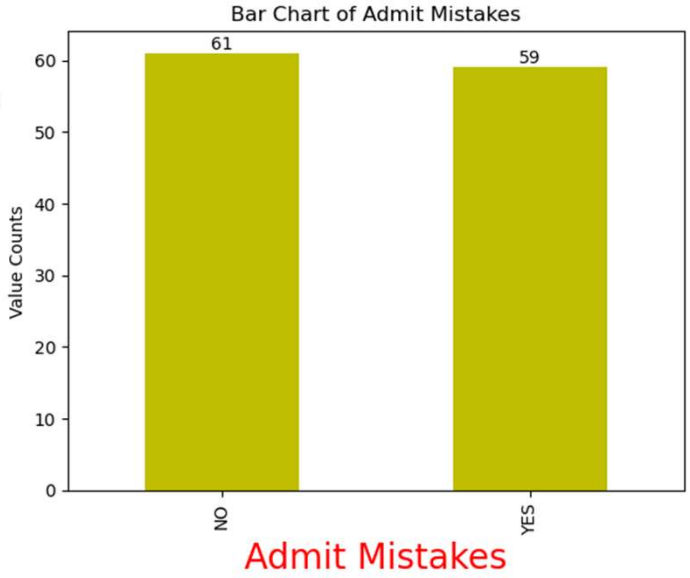
- Each bar in the plot represents the count of in the 'Euphoric' column.
- Annotations on top of each bar provide exact counts for each category ('Yes' or 'No').
- The lime green color helps distinguish between different categories visually.



Descriptive Analysis

Observation :-

- Each bar in the plot represents the count of 'Yes' and 'No' in the 'Admit Mistakes' column.
- Annotations on top of each bar provide exact counts for each category ('Yes' or 'No').
- The yellow color helps distinguish between different categories visually.



Conclusion

- The dataset provides a comprehensive view of Mental health disorders like Overthinking, Sucidial thoughts, Sadness, Aggressive response.

- These insights can guide further research, clinical instrument and mental health to improve improve mental disorder.

- Mind power is our best motivation how to improve any kind of mental disorder

Future Scope

- Advancements in understanding mental disorders require interdisciplinary collaboration, innovative research methodologies, and a commitment to addressing societal challenges.

- As technology and knowledge continue to evolve, the future holds promise for improved diagnostics, personalized treatments, and enhanced support systems for individuals affected by mental health conditions globally.

Thank You