

Mental Health Analysis

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Overview

Mental health is a growing concern worldwide.
Understanding patterns helps in proactive interventions.

Goal of the Project:

To extract meaningful insights from a large dataset on mental health
using KPIs and data visualization

Objective

Identifying the factors influencing the demand for psychological treatment.

Analyzing the gaps between genders and professional categories.

Extracting actionable performance indicators.

Supporting decision-making through reliable insights

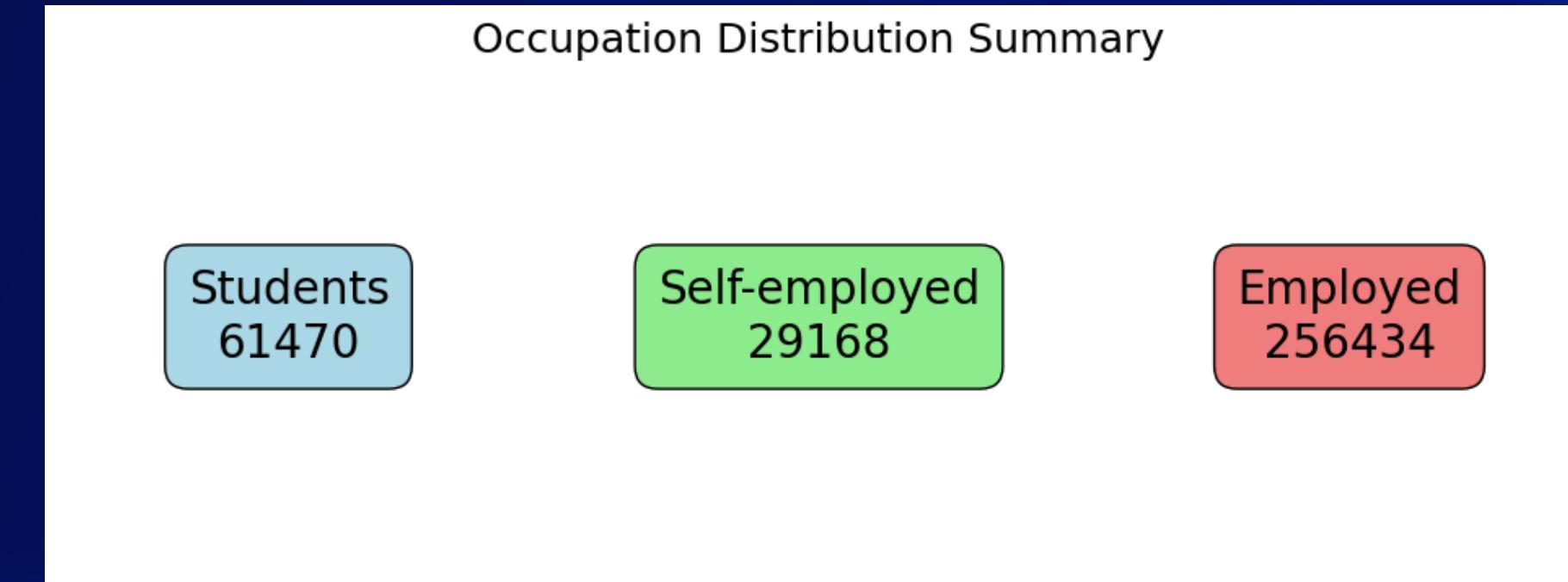
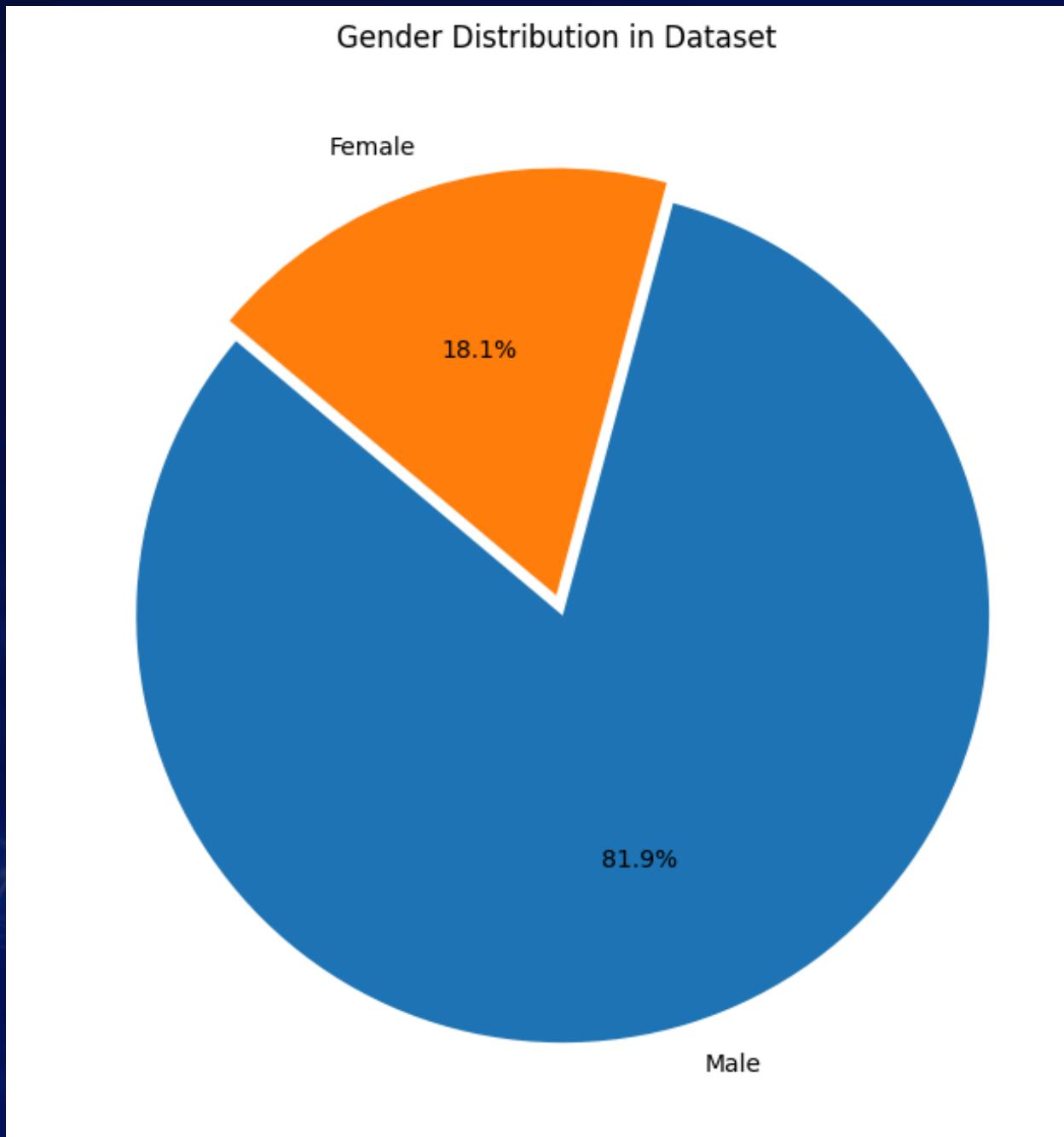


Dataset Overview

- Source: [Kaggle]
- Size: 292,364 rows × 17 columns
- Key Features :
- Demographics (Age, Gender, Country)
- Mental health history
- Workplace support
- Treatment seeking behavior
- Mood Swings
- Growing Stress
- Social Weakness



Who Are We Analyzing ?



Our dataset includes a total of 292,364 participants who took part in the mental health survey. The respondents represent a diverse range of professional backgrounds and gender identities:

- **Students : 61,470**
- **Employed : 256,434**
- **Self-employed : 29,168**

In terms of gender distribution :

- **Male: 238,290 ($\approx 81.5\%$)**
- **Female: 52,514 ($\approx 18\%$)**

Family History & High Mood Swings

The relationship between a family history of mental health problems and severe mood swings was clearly evident in both students and employees.

Approximately 16.77% of students with a family history experienced severe mood swings, a serious indicator for a group just beginning their careers.

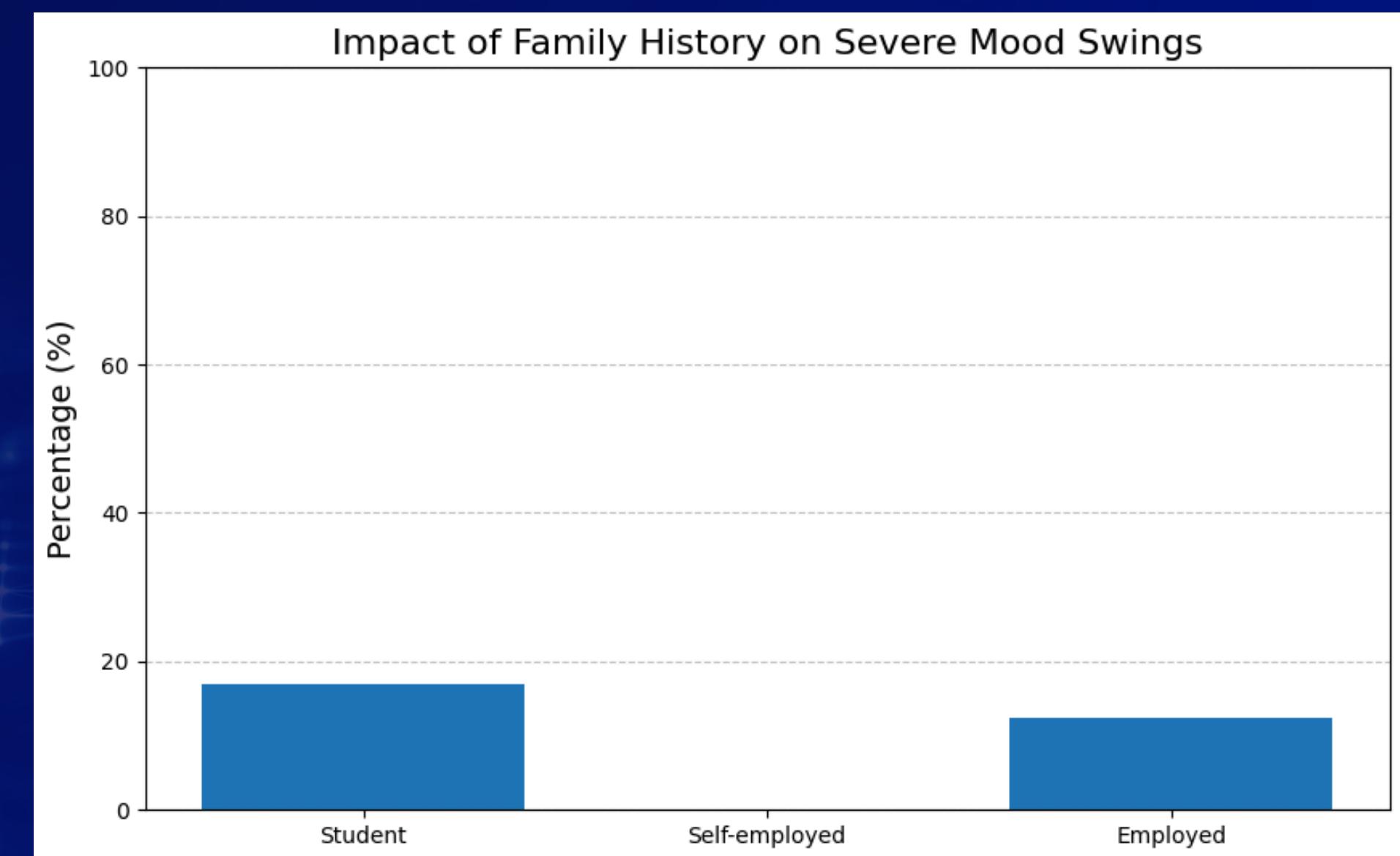
For corporate employees, the percentage is lower (12.41%) but still significant.

Insight :

Students with a family history of mental illness show a high rate of severe mood swings (16.77%), which may affect their early development and future potential.

Employees also show a notable rate (12.41%), indicating that mental health risks persist in the workplace.

These findings suggest the importance of early support for individuals with family mental health history—whether in schools or companies.





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KPI's

Mental Health Care Options by Occupation

Self-employed individuals reported the highest access to mental health care (40.72%), likely because they actively seek support through private means.

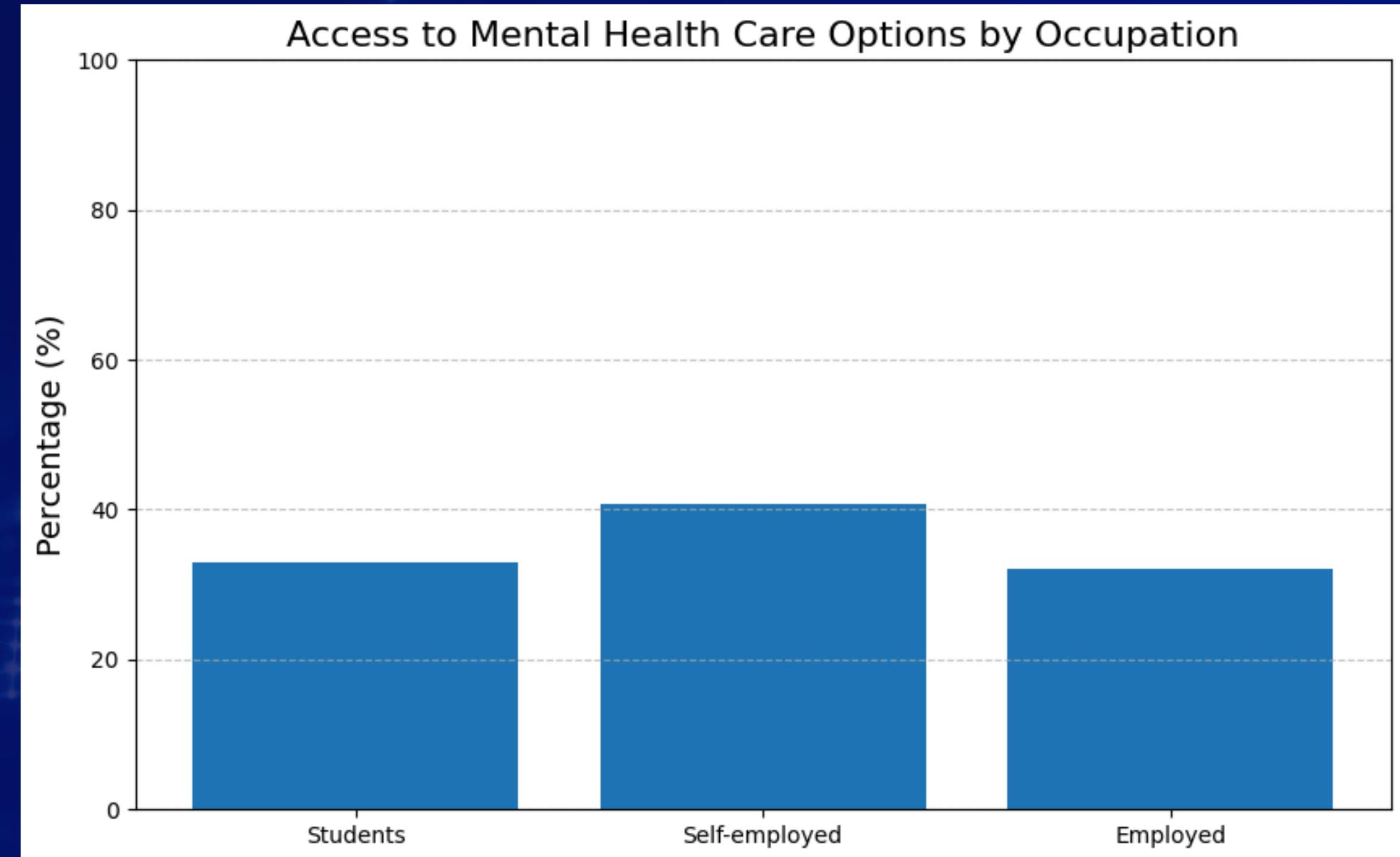
In contrast, access among students (32.86%) and employees (32.02%) was lower — possibly due to limited institutional programs or lack of awareness.

This raises a critical question:

Are companies and universities doing enough to support mental well-being?

These numbers reveal a clear gap that needs attention — through better policies, awareness campaigns, and integrating mental health care into educational and professional environments.

Because mental health isn't just a personal issue — it's essential for productivity, growth, and long-term success.





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KPI's

Gender Gap in Mental Health Stress and Treatment

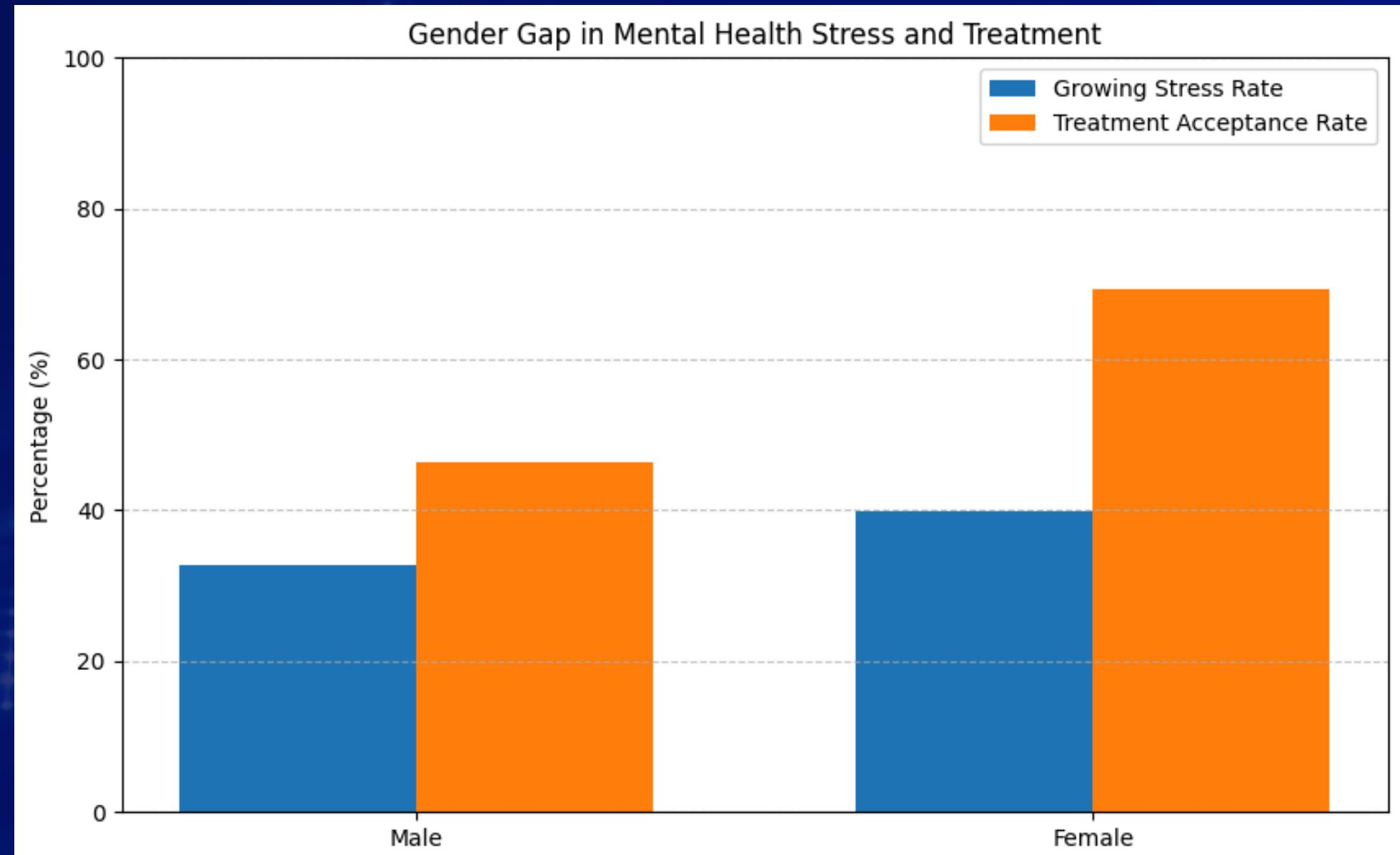
Women are 7% more likely to experience growing stress than men.

Women show a higher acceptance of psychological treatment (69%) than men (46%).

This may reflect that men are less willing to seek psychological support, whether due to social stigma or a lack of awareness of available help methods.

This finding is important because it suggests that any psychological support initiatives must be tailored to each gender.

"Understanding is the first step toward healing. Let's build a world where mental health support is not a stigma, but a strength."



Coping Struggles by Gender

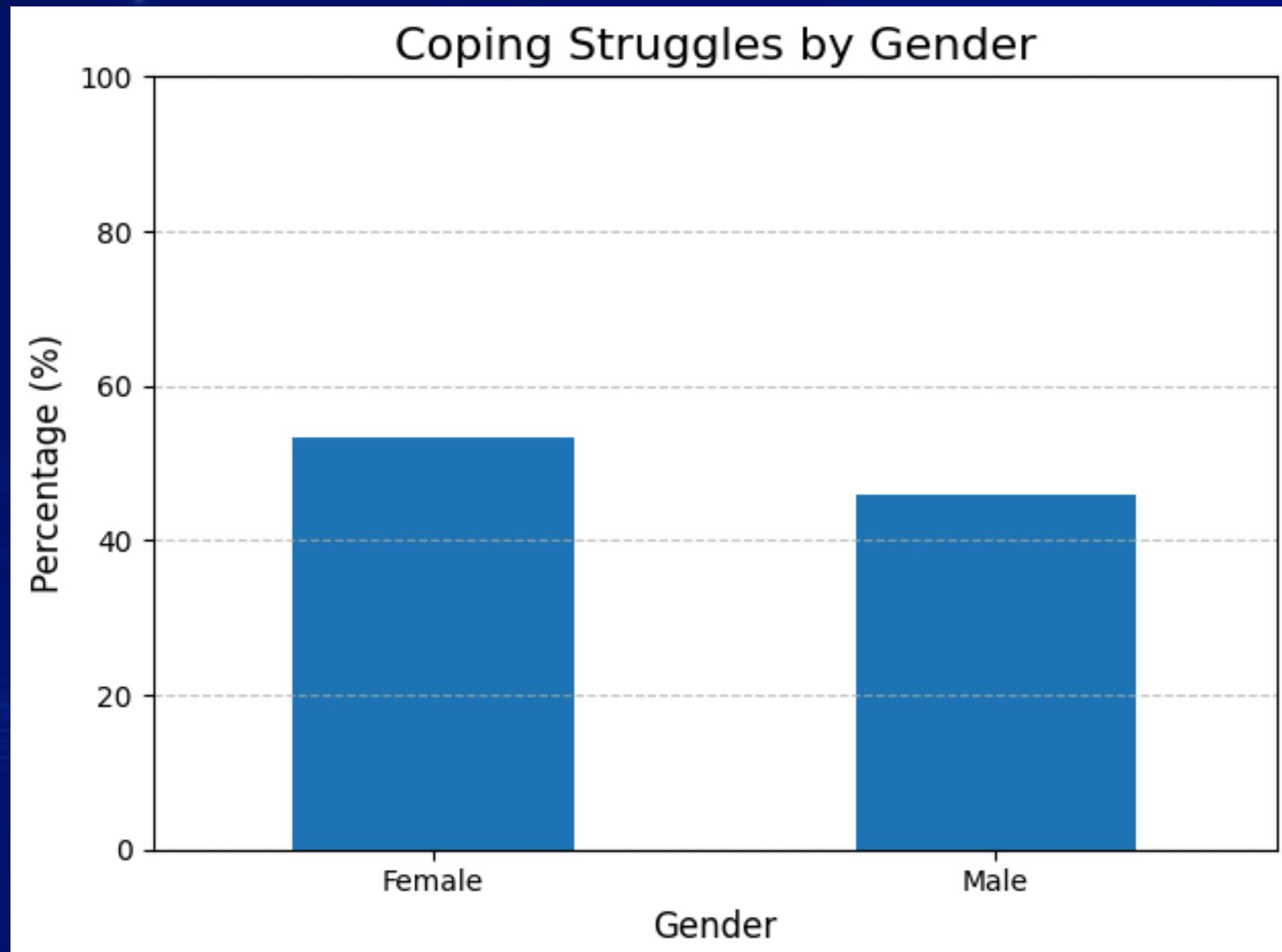
Our analysis revealed that 53.23% of females reported being able to cope with mental health struggles, compared to only 45.90% of males. This gender gap may be closely linked to the noticeable difference in attitudes toward psychological treatment: previous statistics showed that 69% of women were open to receiving treatment, compared to just 46% of men.

The higher coping rate among females likely stems from their greater willingness to seek help, talk about their emotions, and engage with mental health support systems—whether formal or informal. This openness creates space for early intervention, emotional resilience, and healthier stress management.

On the other hand, men's lower coping rate could reflect cultural or social barriers that discourage them from expressing vulnerability or pursuing psychological support. This avoidance may result in the accumulation of stress, eventually impacting their mental well-being and overall quality of life.

This finding emphasizes the importance of gender-sensitive mental health strategies. Awareness campaigns should target reducing stigma among men and promoting the value of seeking help.

- ◆ No one should face psychological pressure alone. Seeking help is a sign of strength, not weakness.



Social Weakness Rate (Among High Days Indoors) by Occupation

"When we focused on people who spend long periods indoors, we found that feelings of social weakness were very prevalent across all groups.

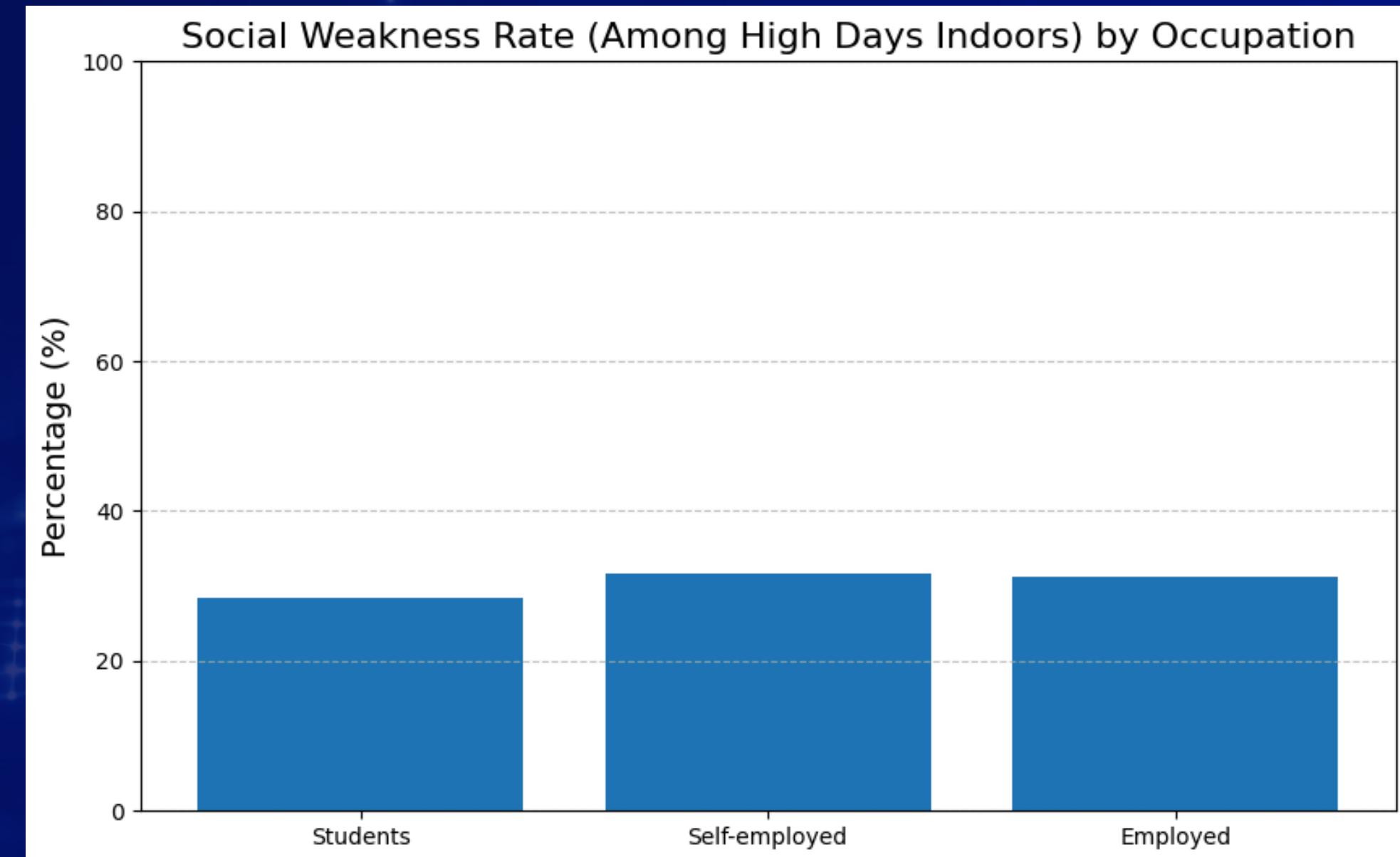
Self-employed individuals accounted for 31.67% of the total, followed by employees at 31.20%, and students at 28.44%.

These figures suggest that social isolation is not limited to a specific group... but rather a general problem that can affect anyone who spends long periods away from social interaction.

This confirms that psychological support programs and awareness of the importance of social interaction must be directed at all groups, not just students or employees."

Guidance:

**Spending too much time alone indoors can silently impact your mental well-being.
Make time for real social interaction – your mind needs connection just as much as your body needs rest.**



Mood Swings vs Social Weakness Over Time

"The time-series analysis here reveals two very important relationships in mental health:

High Mood Swings.

Social Weakness.

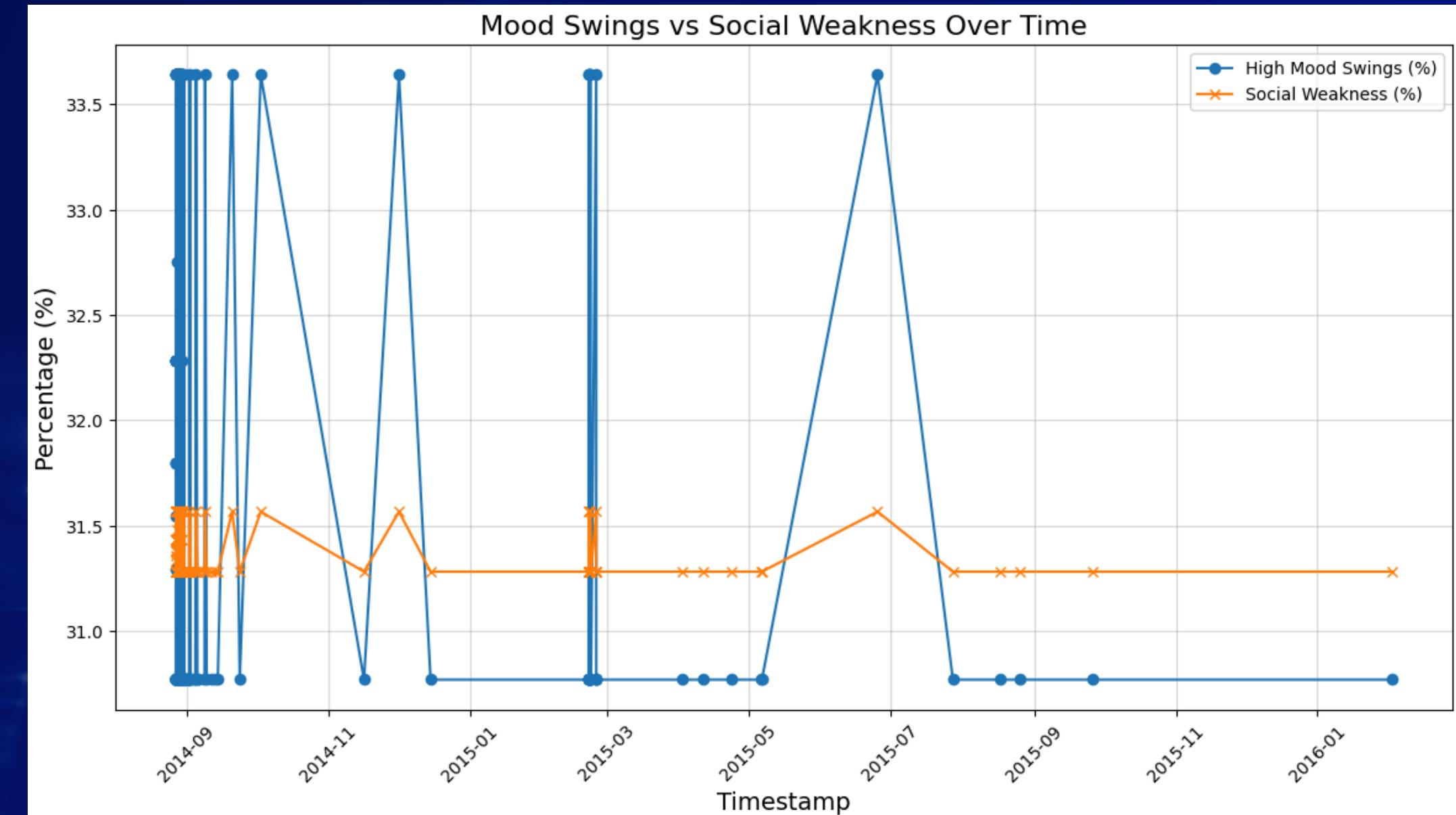
We observed that the rate of social weakness remained roughly constant at around 31-32% over time. This means that the problem of social isolation is stable and not linked to a specific period... but rather a recurring problem.

In contrast, mood swings experienced ups and downs over time. They increased during certain periods, such as the beginning of the school year (possibly due to exam pressure or the start of a new job).

This gives us an important insight:

Social isolation has a long-term impact and is not easily changed.

Mood swings can be affected by events or circumstances a person is experiencing.



Work Interest Distribution Among People with Growing Stress

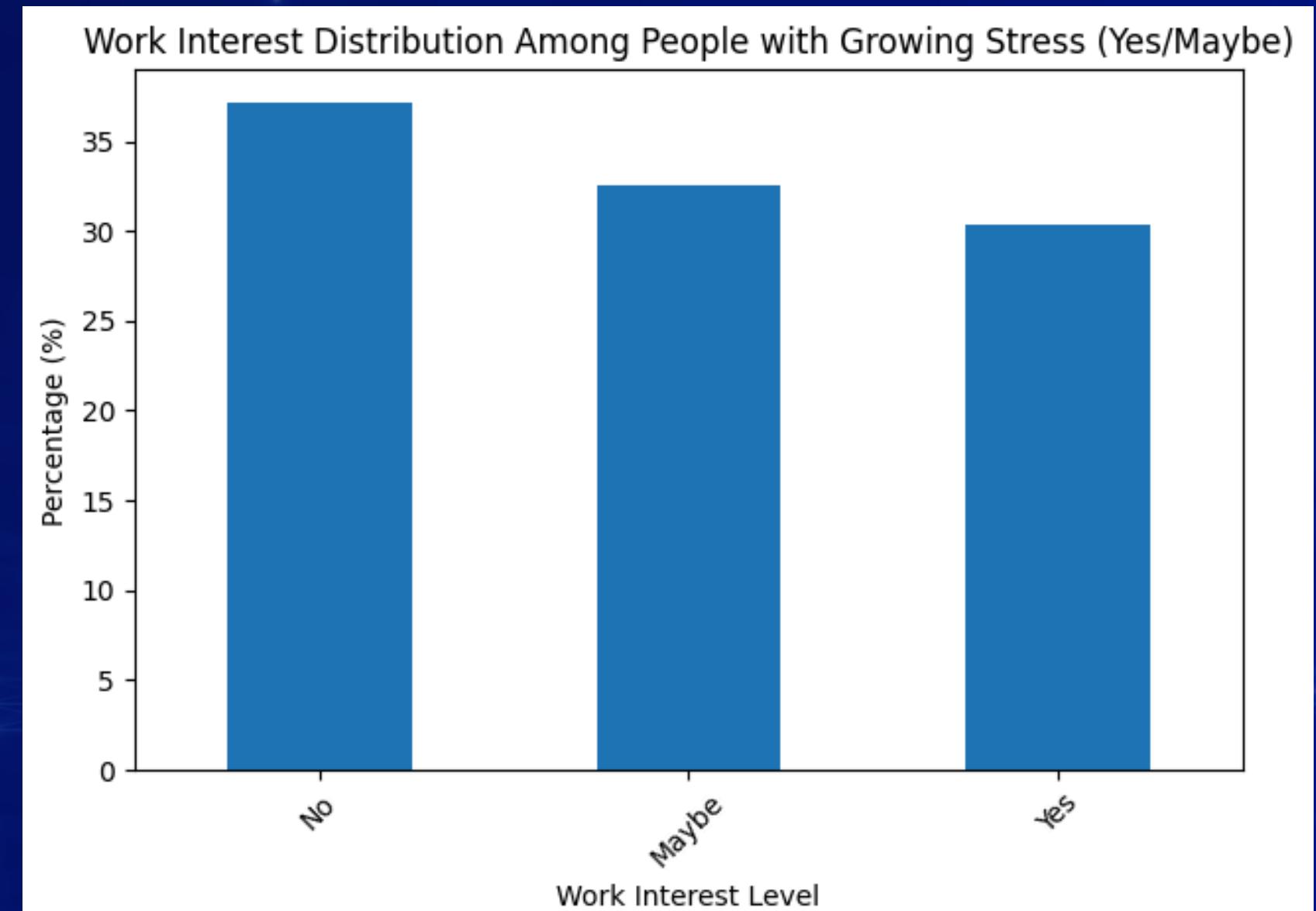
Among individuals experiencing growing stress (answered "Yes" or "Maybe"), there is a notable decline in work interest:

- 37.1% of them reported having no interest in work.
- Only 30.3% expressed a clear interest.

This indicates that psychological stress may significantly impact motivation and enthusiasm at work, as the largest segment of stressed individuals reported a complete loss of interest.

Interpretation:

- No interest was the most common response among those under stress.
- Those who are psychologically stressed are more likely to lose motivation than to remain engaged.



**"A calm mind brings inner strength and self-confidence
that's very important for good health."**

— Dalai Lama

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"Mental health is not a destination, but a process. It's about how you drive, not where you're going."
May this project be a reminder that behind every data point, there's a human story worth listening to.

Thanks For Listening