

# **Student's Mental Health Status Based On A Survey**

**- Devi Somalinga Bhuvanesh**

## **Introduction**

A survey was conducted among university students to assess their mental health status. The survey was carried out using Google Forms, and the responses were made available on Kaggle. The purpose of this survey was to gain insights into the mental health of students across different years, courses, and academic performance levels. The dataset obtained from this survey provides valuable information about the mental well-being of the participating students and their educational circumstances.

## **Need of the Study**

Understanding the impact of mental health on students' academic performance is crucial for both individuals and educational institutions. Analyzing this dataset can help us gain insights into the potential effects of mental health issues and identify strategies to support students' overall well-being and academic success.

## **Aim**

The aim of the study was to investigate the prevalence of mental health issues among university students and identify potential factors associated with these issues.

## **Dataset Overview**

The raw dataset contains 11 variables collected from 101 university students, focusing on mental health indicators and academic performance. The indicators primarily capture whether students experienced depression, anxiety, or panic attacks during their study period. To facilitate further analysis, two additional columns were added: "Any form of mental health issue" and "Having Depression, Anxiety, Panic Attack." These indicators help us understand the number of students who faced any mental health issues and those who experienced all three types.

Therefore, the final dataset consists of 13 variables, providing information from 101 university students. Each indicator's definition is as follows:

Indicators	Definition
Timestamp	The date and time when the survey was completed
Choose your gender	The selection of the gender of the respondent
Age	The respondent's age in years
What is your course?	The academic program or course in which the respondent is enrolled
Your current year of Study	The current academic year or level of study of the respondent
What is your CGPA?	The cumulative grade point average of the respondent's academic performance
Marital status	The respondent's current marital status
Do you have Depression?	Whether the respondent is experiencing symptoms of depression or not
Do you have Anxiety?	Whether the respondent is experiencing symptoms of anxiety or not
Do you have a Panic attack?	Whether the respondent is experiencing symptoms of a panic attack or not
Any form of mental health issue	Whether the respondent is facing any one of the mental health issues among depression, anxiety, or panic attacks
Having Depression, Anxiety, Panic Attack	Whether the respondent is facing all three forms of mental health issues such as depression, anxiety, or panic attacks
Did you seek any specialist for treatment?	Whether the respondent seeks help or treatment from a mental health specialist for mental health issues.

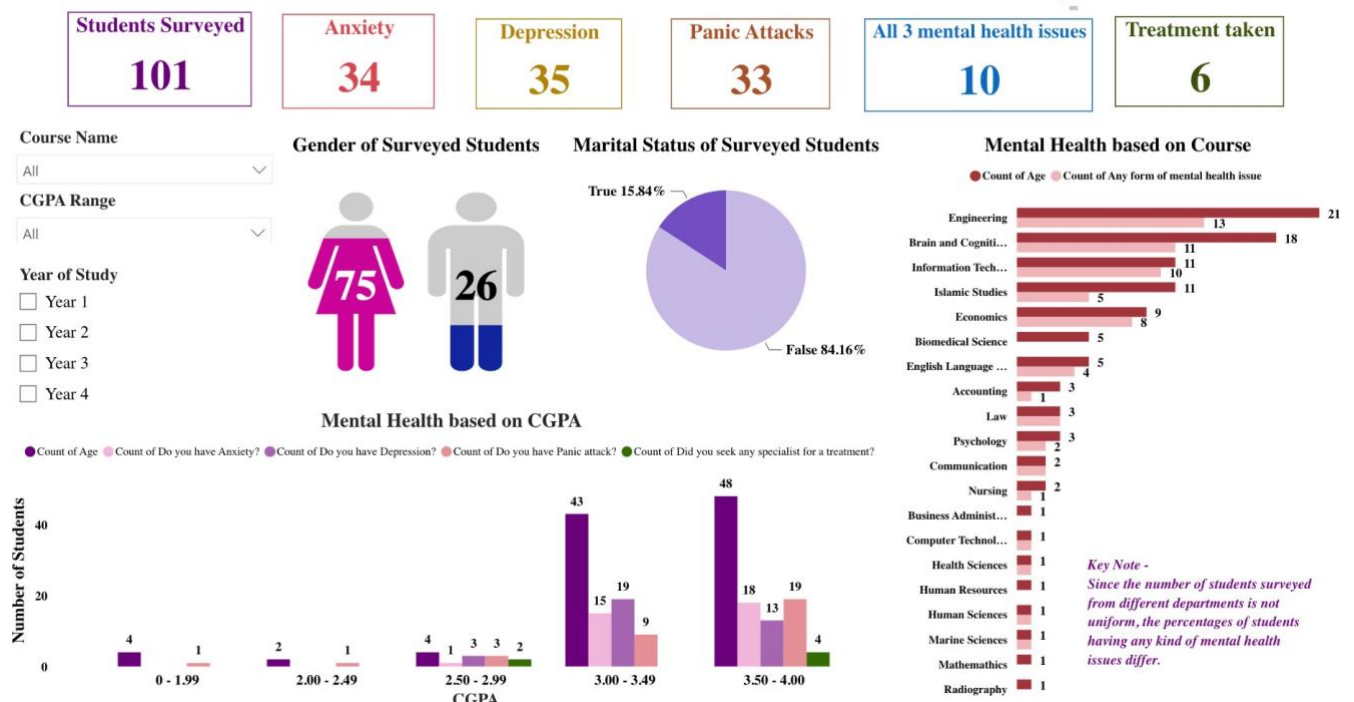
## Analysis and Interpretation

### Comprehensive Dashboard

By using PowerBI, a comprehensive dashboard was created to view the Student's Mental Health Status based on survey responses as shown below. It can be further filtered to view Course specific, based on CGPA range, and year-wise results as well.

The survey conducted among 101 university students revealed several key findings regarding their mental health and demographic characteristics. The majority of respondents (74%) were female, while 26% were male. Around 16% of the students were married. In terms of mental health, 34 students reported anxiety, 35 reported depression, and 33 reported panic attacks. Notably, 10 students experienced all three types of mental health issues and 6 have taken specialized treatment.

## Student's Mental Health Status based on Survey



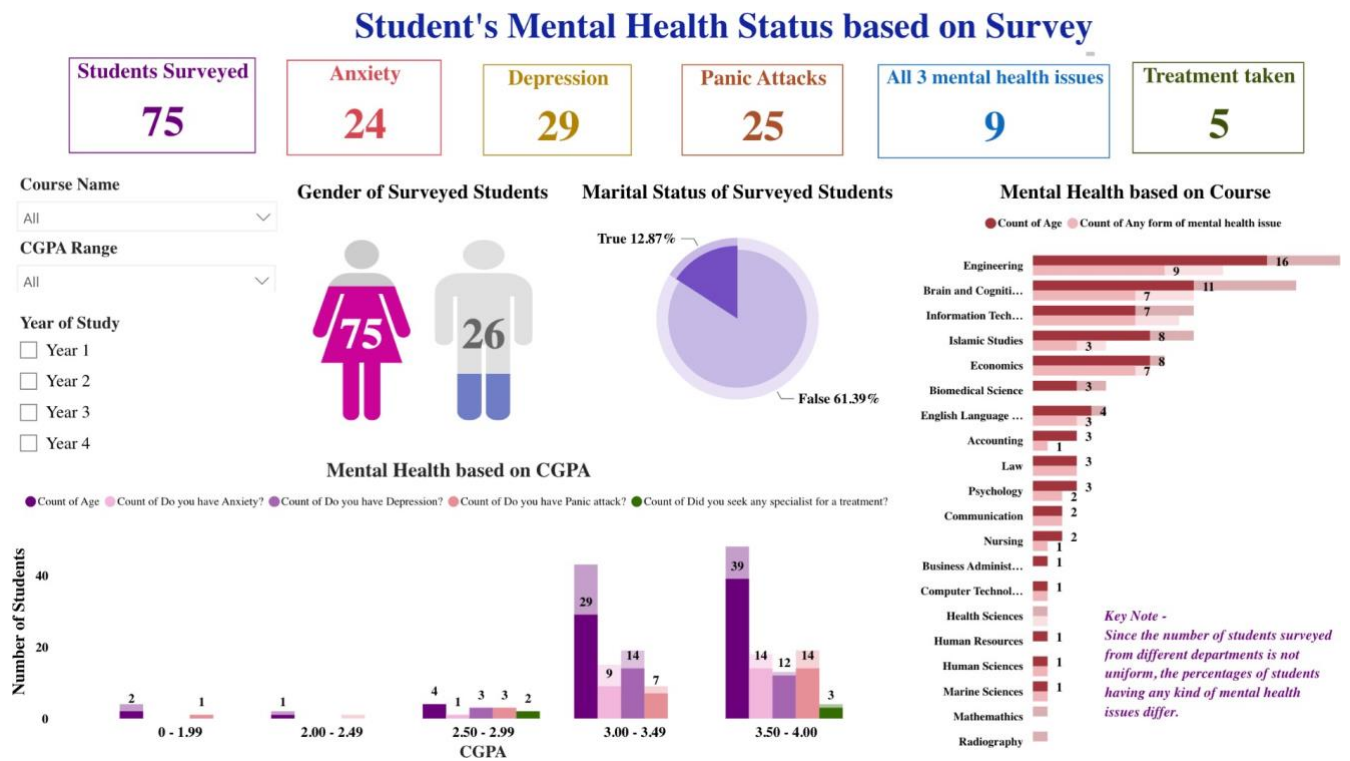
Examining the students' CGPA ranges, it was observed that the majority (91) had a CGPA above 3.00. Students with a CGPA in the range of 2.50-2.99 had a higher prevalence of anxiety (25%), depression (75%), and panic attacks (75%), indicating increased vulnerability to mental health challenges. However, as CGPA increased, the percentages of students reporting anxiety and depression generally decreased, suggesting a potential association between higher academic performance and reduced likelihood of experiencing these mental health issues. The overall proportion of students seeking specialist treatment for mental health issues was low across all CGPA ranges, but the CGPA range of 2.50-2.99 stood out with a relatively higher percentage seeking professional help.

Analyzing mental health issues by course, it was found that courses like Information Technology (91%), Economics (89%), English Language and Literature (80%), and Brain and Cognitive Sciences (61%) had higher percentages of students experiencing anxiety, depression, or panic attacks. However, some courses, such as Biomedical Science, Radiography, Mathematics, Human Resources, Business Administration, and Health Sciences, had no reported cases of mental health issues among the surveyed students. It is important to note that the sample sizes for some courses were small, which may limit the generalizability of these findings. Nevertheless, the data highlights the need to address mental health concerns across various courses and emphasizes the importance of implementing appropriate support and resources to promote overall well-being within the university community.

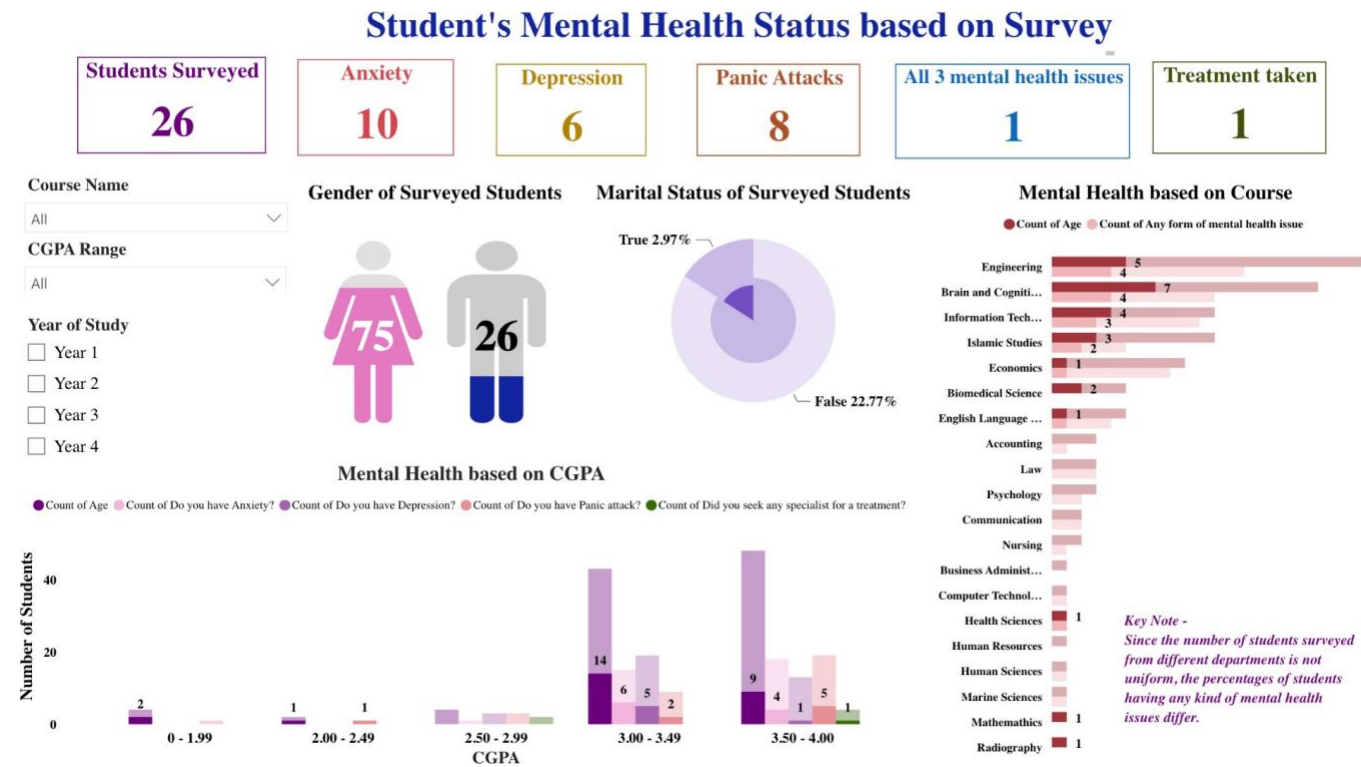
## Gender-Based Analysis

By choosing the respective gender icon, the data in the dashboard gets highlighted and changes as per the selection.

### Female



### Male

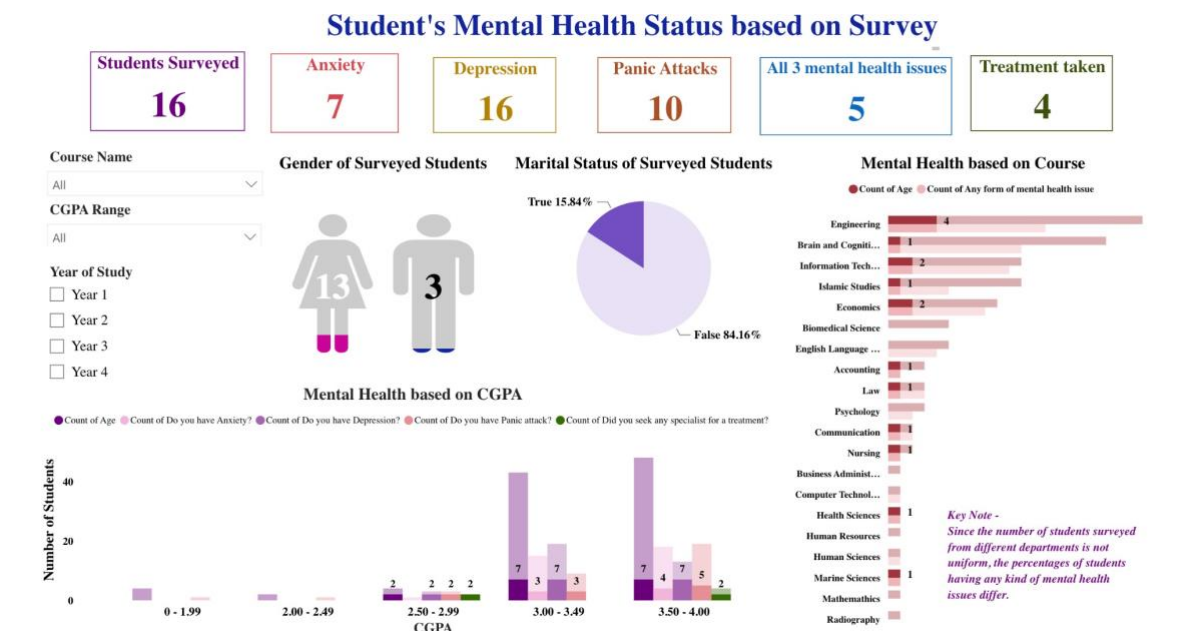


While comparing mental health status based on gender, it is evident that a higher percentage of male students (38%) experience anxiety than female students (32%). On the other hand, a higher proportion of female students (39%) experience depression compared to male students (23%). Similarly, the prevalence of panic attacks is slightly higher among females (33%) when compared to male students (31%). Overall, 12% of the female and 4% of the male students had all types of mental health issues including anxiety, depression, and panic attacks. However, it is important to note that only a small percentage of students from both genders (7% of females and 4% of males) reported having reached out to specialists for treatment. Additionally, female students perform better academically, with 52% scoring in the range of 3.50-4.00, while the majority of male students (54%) scored between 3.00-3.49. Notably, no males scored between 2.50-2.99. Course preferences vary, with males leaning towards technology-oriented subjects, while females choose a broader range of fields.

These findings highlight the need for addressing mental health concerns, promoting access to specialist support, and understanding gender differences in academic performance and course choices among university students.

## Marital Status

By choosing the students who are married, the data in the dashboard gets highlighted and changes as per the selection.



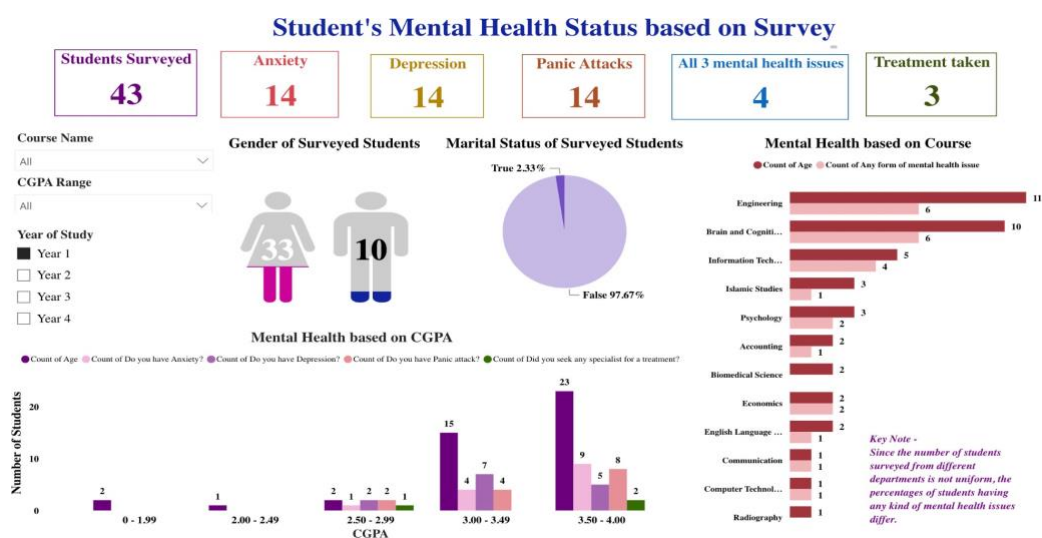
Among the 101 students surveyed, 75 were female and 26 were male. Interestingly, 13% of the female students and 3% of the male students were married. All married students reported experiencing

depression, while 44% experienced anxiety and 63% experienced panic attacks. Surprisingly, 31% of married students faced all three types of mental health issues. However, only 25% sought specialist treatment for their mental health concerns. It is noteworthy that despite being married, these students maintained relatively high academic performance, with the majority achieving a CGPA above 3.00. Their chosen courses primarily focused on Engineering, Information and Technology, Economics, Law, and other science subjects. These findings highlight the need for targeted support and awareness regarding mental health issues among married students, emphasizing the importance of seeking appropriate treatment while maintaining their academic pursuits.

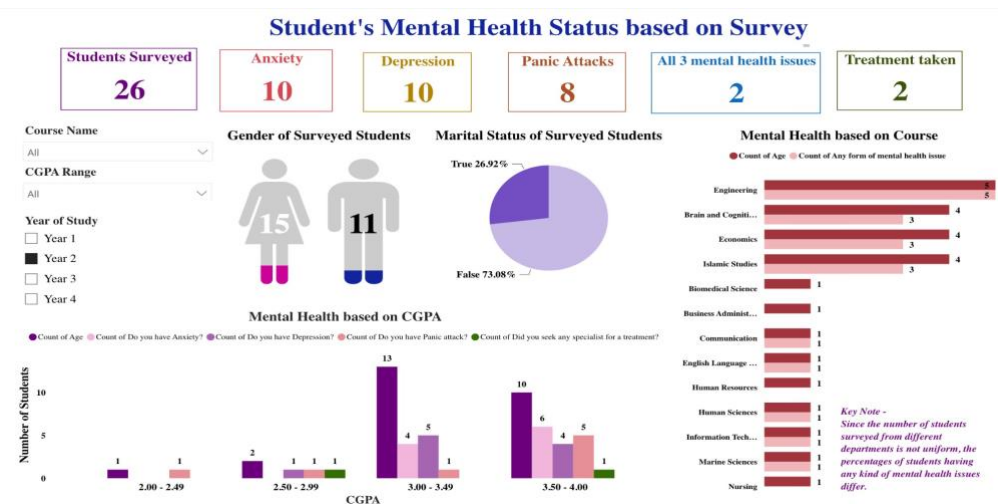
## Year of Study

By filtering the data year-wise, the below dashboard helps to see the academic performance and mental health of students from respective years.

### Year 1 -

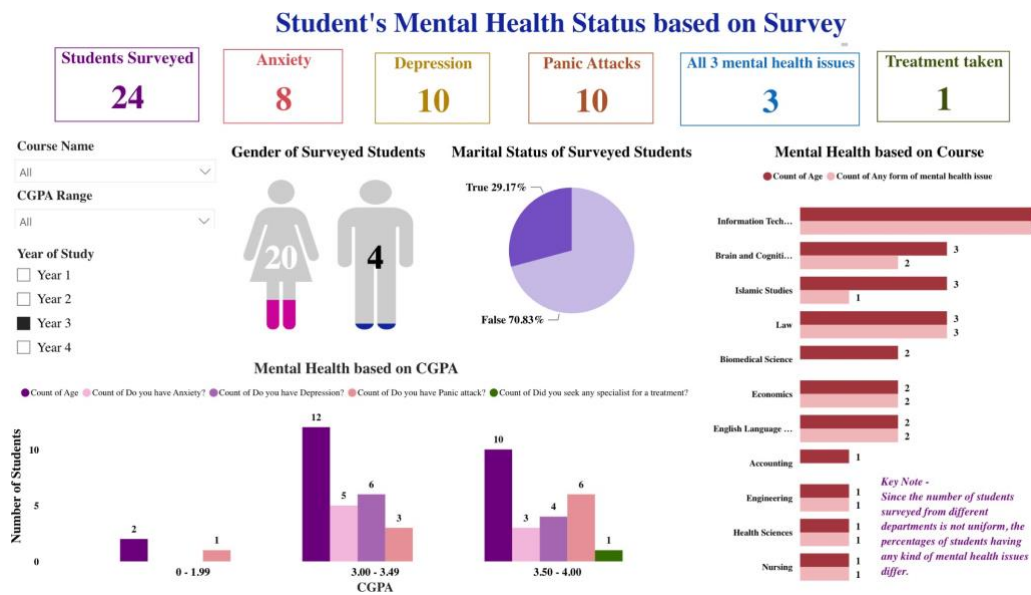


### Year 2 -

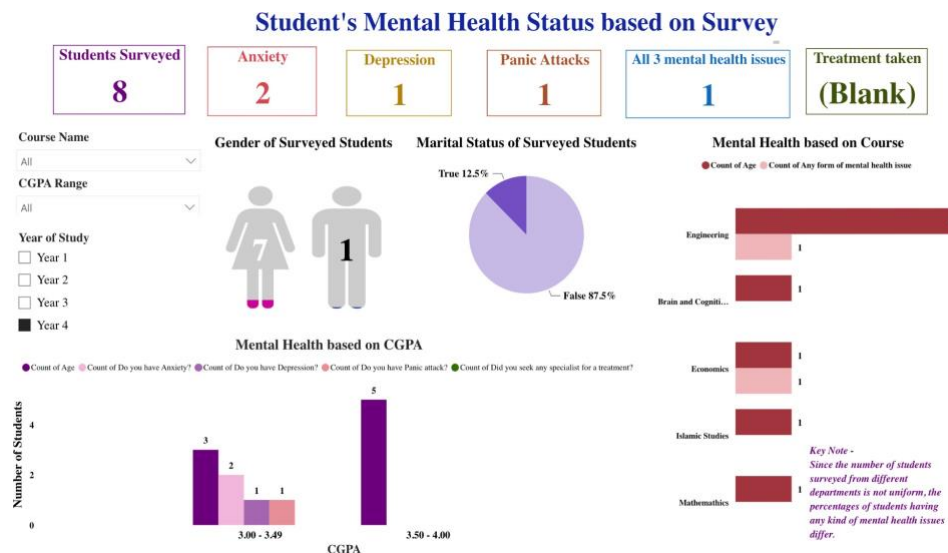




## Year 3 -



## Year 4 -



By analyzing the mental health status based on year-wise analysis, the following key insights can be derived:

- **Depression:** The highest prevalence of depression is reported among Year 3 students (42%), followed by Year 2 students (38%) and Year 1 students (33%). Year 4 students have the lowest prevalence of depression at 13%.
- **Anxiety:** Year 2 students have the highest percentage of anxiety (38%), followed closely by Year 1 students (33%) and Year 3 students (33%). Year 4 students have a relatively lower prevalence of anxiety at 25%.

- **Panic Attacks:** Year 3 students have the highest percentage of panic attacks (42%), followed by Year 1 students (33%) and Year 2 students (31%). Year 4 students have the lowest prevalence of panic attacks at 13%.
- **Having all three mental health issues (depression, anxiety, and panic attacks):** Year 3 students have the highest percentage (13%) of experiencing all three mental health issues, followed by Year 2 students (8%) and Year 1 students (9%). No Year 4 students reported experiencing all three mental health issues.
- **Seeking Specialist Treatment:** Year 1 students have the highest percentage (7%) of seeking specialist treatment for their mental health issues, followed by Year 2 students (8%) and Year 3 students (4%). No Year 4 students sought specialist treatment.

Overall, mental health issues vary among students across different academic years. Year 3 students appear to have higher rates of depression, anxiety, and panic attacks compared to other years. Seeking specialist treatment remains relatively low among all-year groups. These findings emphasize the need for targeted mental health support and interventions throughout a student's university journey, particularly for those in Year 3, and highlight the importance of raising awareness and promoting access to specialist treatment for all students.

## Conclusion

In conclusion, the survey findings highlight the prevalence of mental health issues among university students, with significant proportions experiencing depression, anxiety, and panic attacks. Gender differences were observed, with females reporting higher rates of depression (39%) and panic attacks (33%), while males reported higher rates of anxiety (38%). Out of 16% of the students who married, all of them have reported in experiencing depression. The percentage of students seeking specialist treatment was relatively low (6%) across all categories yet females and married students seem to seek support more when compared to others.

Courses such as Information Technology (91%), Economics (89%), English Language and Literature (80%), and Brain and Cognitive Sciences (61%) had higher percentages of students experiencing anxiety, depression, or panic attacks. Academic performance, as indicated by CGPA, showed a potential association with mental health, with higher scores correlating with lower rates of anxiety and depression. Year 3 students had the highest prevalence of depression (42%), anxiety (33%), and panic attacks (42%) and appeared to be particularly vulnerable to mental health issues. The findings indicate the need for universities to prioritize mental health initiatives, increase awareness, and provide accessible support



services to promote the well-being of their students. By addressing these issues, universities can promote the overall well-being of their students and ensure they receive the necessary help and resources for their mental health concerns.

## Reference

*Student Mental health.* (2023, February 17). Kaggle.  
<https://www.kaggle.com/datasets/shariful07/student-mental-health>

Bayes, S. (2021, September 14). Power BI Infographics and Icons - Data Bayes. *Data Bayes*.  
<https://databayes.co.uk/power-bi-infographics-and-icons/>

*Gender Visual.* (2023, April 28).  
<https://community.fabric.microsoft.com/t5/Desktop/Gender-Visual/td-p/1902190>

Von Courter, G. (2022, December 16). Edit a dashboard - Power BI Essential Training [Video]. LinkedIn.  
<https://www.linkedin.com/learning/power-bi-essential-training-17362720/edit-a-dashboard?autoplay=true&u=74653650>

Davidiseminger. (2023, May 15). Edit data models in the Power BI service (preview) - Power BI. Microsoft Learn. <https://learn.microsoft.com/en-us/power-bi/transform-model/service-edit-data-models>