MENTAL HEALTH DATA SET

Key Insights

Mental Health Effects of Degree Major

The analysis of mental health effects by degree major reveals that Computer Science students experience the highest levels of anxiety, with a sum of 125. Data Science students report a slightly lower level of anxiety at 110. Information Technology and Software Engineering students report significantly lower levels of anxiety, with sums of 32 and 13, respectively. Overall, the data indicates a disparity in anxiety levels among different degree majors, with Computer Science and Data Science students experiencing higher levels of stress compared to Information Technology and Software Engineering students.

Mental Health Effects of Age

The analysis of mental health effects by age reveals that individuals aged 20 experience the highest levels of depression, with a sum of 98. As age decreases, the prevalence of depression generally declines. Individuals aged 23 report the lowest levels of depression, with a sum of 8. Overall, the data indicates a correlation between age and depression, with younger individuals experiencing higher levels of depressive symptoms compared to older individuals.

Mental Health Effects of Academic Year

The analysis of mental health effects by academic year reveals that first-year students experience the highest levels of depression, with a sum of 113. Third-year students report a lower level of depression at 95, followed by fourth-year students (38) and second-year students (34). Overall, the data indicates a decline in depression levels as students progress through their academic careers, suggesting that coping mechanisms and resilience may improve over time.

Mental Health Effects of Academic Workload

The analysis presents a clear correlation between the sum of academic workload and its impact on mental health. As the workload increases, so does the adverse effect on mental well-being. For instance, individuals with a total academic workload of 88 units reported a significantly higher level of mental health strain compared to those with 41 units. This trend is consistent across the data, suggesting a strong association between these two variables. In conclusion, the chart underscores the importance of addressing academic workload to mitigate its negative consequences on students' mental health.

Mental Health Effects of the University Attended

The analysis reveals that students from PU reported significantly higher levels of depression compared to other universities, with a score of 172. In contrast, UOL reported the lowest depression score of 1. While NUST and VU also had relatively low scores, UET, COMSATS, FAST, KUST,

and UMT demonstrated moderate levels of depression. Notably, the grand total of depression scores indicates that the majority of students from these universities experienced depression to varying degrees. In conclusion, the chart underscores the importance of considering the university's environment and resources when choosing a higher education institution, as it can significantly influence students' mental health.

Mental Health Effects of Social Relationships

The analysis reveals that individuals with a higher number of social relationships tend to have lower levels of mental health strain. For instance, the individual with a sum of social relationships of 61 reported a significantly lower level of mental health strain compared to those with lower scores. This trend is consistent across the data, suggesting a strong association between these two variables. In conclusion, the chart underscores the importance of fostering and maintaining strong social relationships to promote positive mental health.

Mental Health Effects of Stress Relief Activities

The chart illustrates the relationship between stress relief activities and their impact on depression levels. It reveals that while some activities, such as "Creative Outlets" and "Religious Activities," can significantly reduce depression scores (with values as low as 3), others, like "Online Entertainment" and "Outdoor Activities," show minimal or inconsistent effects. Notably, the combination of "Religious Activities" and "Sports

and Fitness" appears to be particularly effective in mitigating depression, with scores consistently below 5. However, the chart also highlights the variability in individual responses, suggesting that the effectiveness of stress relief activities may depend on personal factors. In conclusion, while the data suggests that certain activities can be beneficial in managing depression, a personalized approach is essential to identify the most effective strategies for individuals.

Recommendations for Addressing Mental Health Challenges

Based on the key insights from the mental health data set, the following recommendations are proposed to address the specific mental health challenges faced by computer science students:

1. **Tailored Support for Degree Majors:**
   - **Specialized counseling services:** Offer counseling sessions tailored to the unique stressors and challenges faced by students in different degree majors, such as Computer Science and Data Science.
   - **Peer support groups:** Facilitate peer support groups within each degree major to provide a safe space for students to share experiences and coping strategies.
   - **Mentorship programs:** Establish mentorship programs where experienced students can offer guidance and support to newer

students, helping them navigate the academic and personal challenges of their respective majors.

2. **Age-Specific Interventions:**

- **Proactive outreach:** Implement proactive outreach programs to identify and support younger students who may be at higher risk for depression.

- **Transitional support:** Provide transitional support for students entering the university, focusing on adjustment challenges and coping strategies.

- **Age-appropriate workshops:** Offer workshops on stress management, time management, and self-care techniques tailored to the specific needs of students at different ages.

3. **Academic Year-Based Support:**

- **First-year orientation:** Enhance first-year orientation programs to provide students with essential information about mental health resources and support services.

- **Academic advising:** Offer personalized academic advising to help students manage their workload effectively and balance their academic commitments with their mental health.

- **Career counseling:** Provide career counseling to help students explore their career options and reduce the stress associated with uncertainty about their future.

4. **Workload Management Strategies:**

- **Time management workshops:** Conduct workshops on time management techniques to help students prioritize tasks and avoid feeling overwhelmed.
- **Academic skills development:** Offer workshops on academic skills, such as note-taking, study strategies, and exam preparation, to reduce academic stress.
- **Flexible academic policies:** Consider implementing flexible academic policies, such as pass/fail options or deferred exams, to alleviate pressure on students during times of high stress.

5. **Promoting a Supportive Campus Environment:**

- **Mental health awareness campaigns:** Organize mental health awareness campaigns to reduce stigma and encourage students to seek help when needed.
- **Social events and activities:** Promote social events and activities to foster a sense of community and belonging among students.
- **Accessible mental health resources:** Ensure that mental health resources, such as counseling services and support groups, are easily accessible to all students.
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By implementing these recommendations, universities can create a more supportive and inclusive environment for computer science students,

helping to mitigate the negative impacts of mental health challenges on their academic success and overall well-being.