Team 7 Presents:

Mental Health Trends In the Tech Industry

Patrick Bacza, Hays Kronke, Jay Laxami, and Stephen Mims

Mental Health in the Tech Industry

Survey on Mental Health in the Tech Workplace in 2014, 2016, 2017, 2018, 2019

Mental health is something that affects everyone all over the world and we are interested in examining the impact of mental health disorders in the tech industry.

Our data set comes from a survey from Kaggle.com with thousands of responses spanning multiple years.

While this subject could be studied indefinitely, we decided the following questions to be the best topics for the project:

- Are employers doing enough to address their employees' mental health disorders?
- Are employers properly handling employee mental health/mental health data?
- Do work conditions such as company size, remote work, and job type reflect on the number of those with mental health disorders?
- If you have a mental health condition, how much does it interfere with your work?

*Disclaimer - this is all from one survey and is not necessarily comprehensive!

Are employers doing enough to address their employee's mental health?

1) Do you know the options for mental health care available under your employer-provided health coverage?

2) Does your employer offer resources to learn more about mental health disorders and options for seeking help?

3) Has your employer ever formally discussed mental health (for example, as part of a wellness campaign or other official communication)?
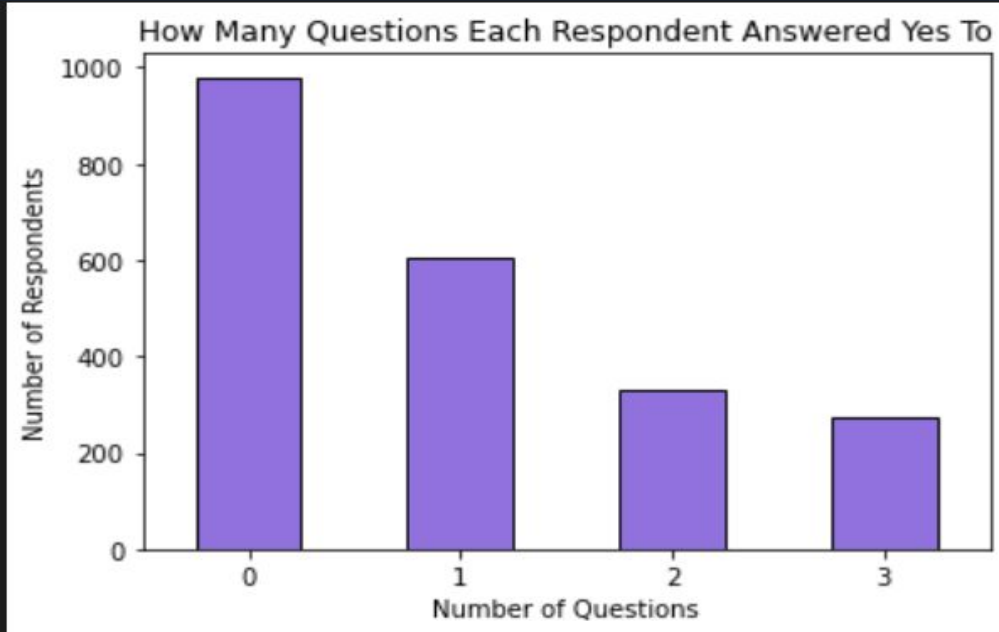
Are employers doing enough to address their employee's mental health?

To answer this question we grouped the respondents by the number of questions they answered yes to.

0 - Worst   1 - Bad   2 - Good   3 - Great

Respondent did not answer yes
to any of the three questions

Respondent answered yes to all
three questions

Are employers doing enough to address their employee's mental health?

How Many Questions Each Respondent Answered Yes To

45% of respondents did not answer yes to any of the 3 questions.

27.5% of respondents answered yes to 1 out of 3 questions

15% of respondents answered yes to 2 out of 3 questions

12.5% of respondents answered yes to all 3 questions

** Surveys where these questions were not answered were not included

Are employers doing enough to address their employee's mental health?

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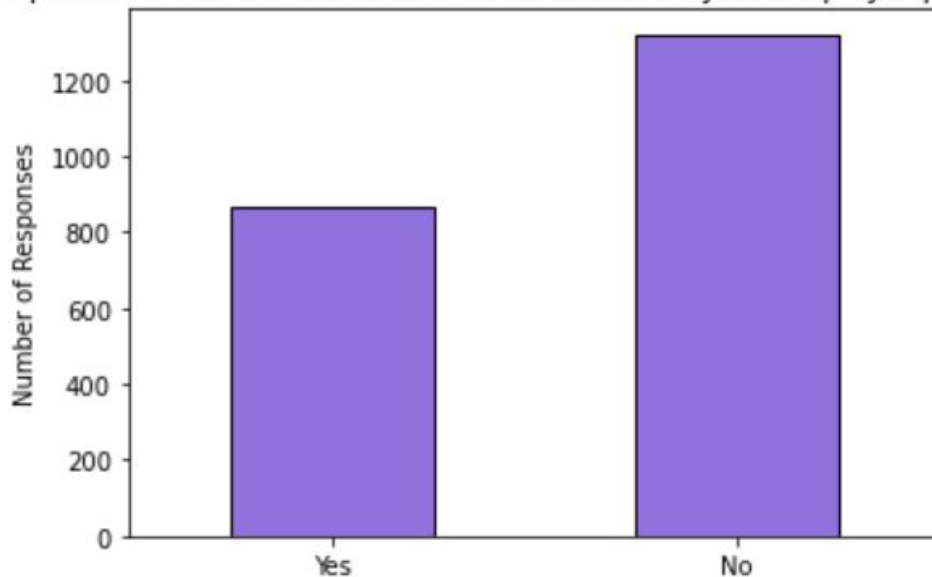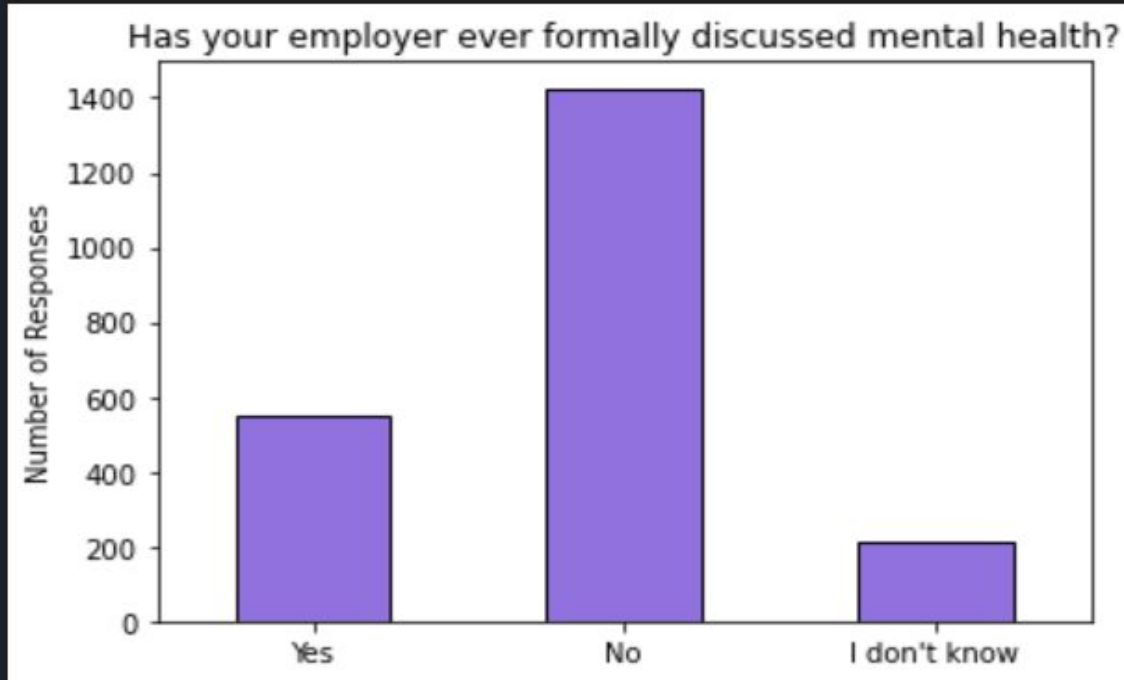
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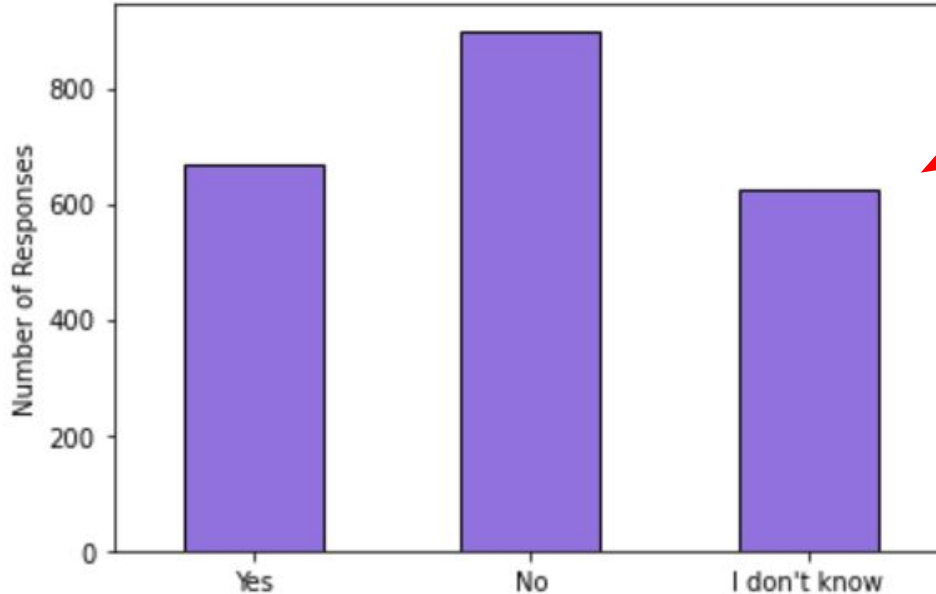
Has your employer ever formally discussed mental health?

Are employers doing enough to address their employee's mental health?

Key findings:

- The answer based on this survey is no, employers in the tech industry are not doing enough to address their employees' mental health.
- There is a communication issue between employer and employee.

Further Exploration:

- How does this trend change when looking at it based on company size (small, medium, large)?
- How does it look when people with diagnosed mental health issues are separated from people with no diagnosis.
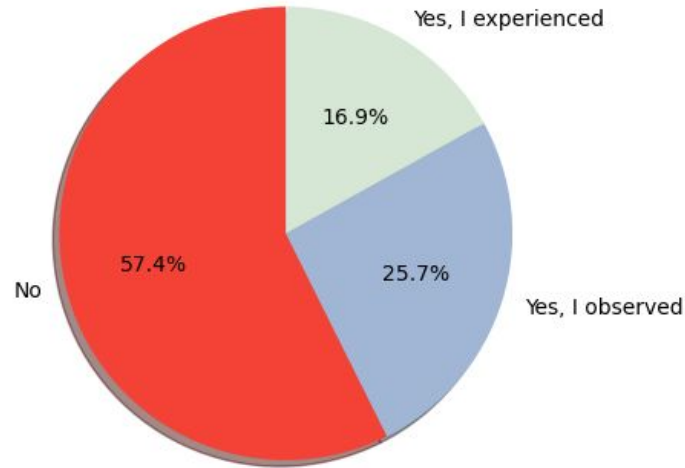
Are employers properly handling employee mental health/mental health data?

1) Have you observed or experienced an unsupportive or badly handled response to a mental health issue in your current or previous workplace?

2) Have your observations of how another individual who discussed a mental health disorder made you less likely to reveal a mental health issue yourself in your current workplace?

3) Is your anonymity protected if you choose to take advantage of mental health or substance abuse treatment resources provided by your employer?
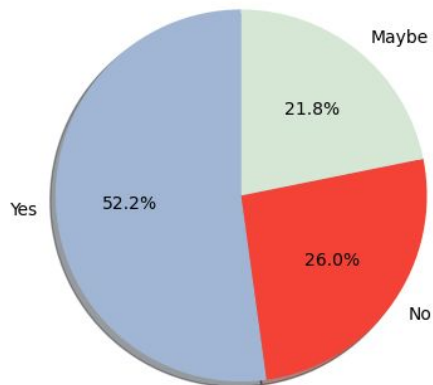
Are employers properly handling employee mental health/mental health data?

Have you observed or experienced an unsupportive or badly handled response to a mental health issue in your current or previous workplace?

- Yes, I experienced — 16.9%
- Yes, I observed — 25.7%
- No — 57.4%

Are employers properly handling employee mental health/mental health data?

Have your observations of how another individual who discussed a mental health disorder made you less likely to reveal a mental health issue yourself in your current workplace?

Maybe 21.8%

Yes 52.2%

No 26.0%

Are employers properly handling employee mental health/mental health data?

Is your anonymity protected if you choose to take advantage of mental health or substance abuse treatment resources provided by your employer?
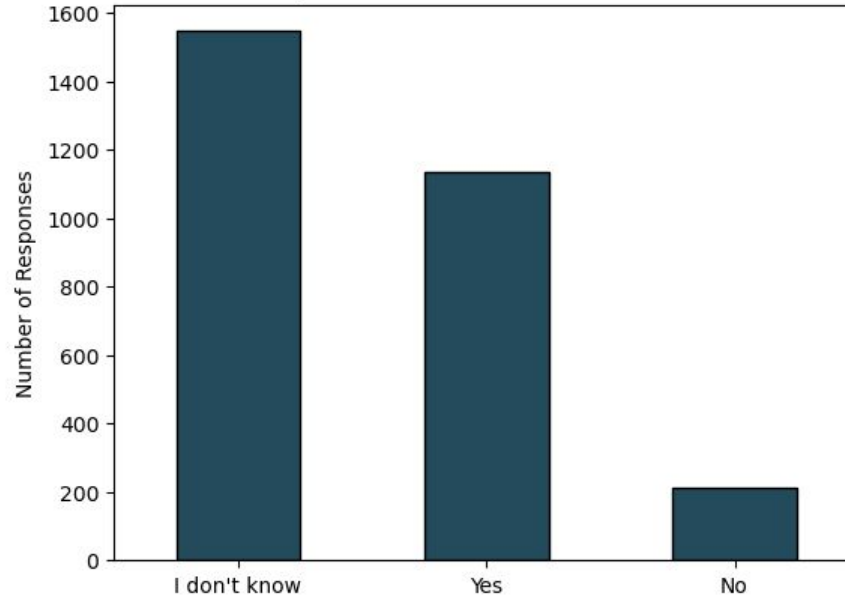
Are employers properly handling employee mental health/mental health data?

Key Findings:

- Based upon survey data, employers are not handling employee mental health properly.

- In regards to mental health data, findings are somewhat inconclusive considering how many of those who answered the survey do not know if their data is kept anonymous.

- This further supports the previous finding that employers are not communicating mental health treatment details well enough to employees.

- Employees don't necessarily need to have mental health issues to be impacted by them when observing their employers handling of other employees mental health issues.

- This is further supported by the increased hesitancy of employees to discuss mental health issues after seeing how it went for their colleagues.

Further Exploration:

- If employees were given more information, what would the split of employee information being kept anonymous look like?

Does the size of a company have an effect on Mental Health?

Before starting the analysis of Data, we need to determine null and alternate hypothesis and need to check if data in data set are significant for the study.

Null Hypothesis: Company Size has no statistical significance on Mental Health study.

Alternate Hypothesis: Company Size has statistical significance on Mental Health study.

After using Chi Square test, we found that -

Chi-square value of 385.35 at a confidence level of 95% exceeds the critical value of 5.99, we conclude that the differences seen in size of company has statistical significance. (Reject Null Hypothesis).

Does the size of a company have an effect on Mental Health?

After the analysis of data it was found that large (more than 1000 employees) companies have more mental health frequency followed by small (100-500 employees) and medium (500-1000 employees) sized company.

Company Size vs Frequency of Mental Health
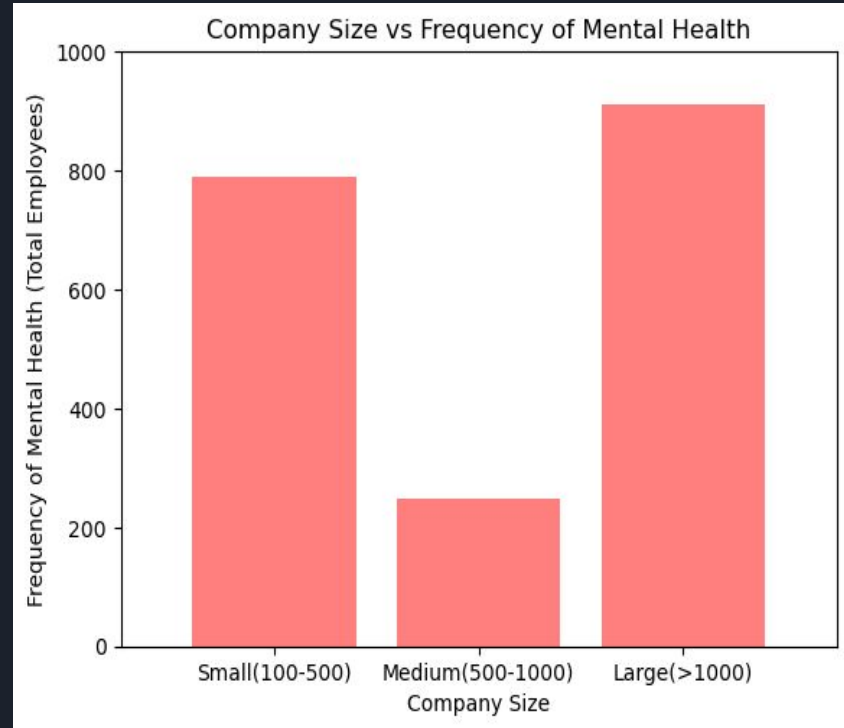
Is there any relation between Mental Health and Remote Workers?

This pie chart concludes that about 70.2% workers having mental health problems are working from the office (not remote) and 29.8% are remote workers.

Remote Work vs No Remote

No 70.2%

Yes 29.8%
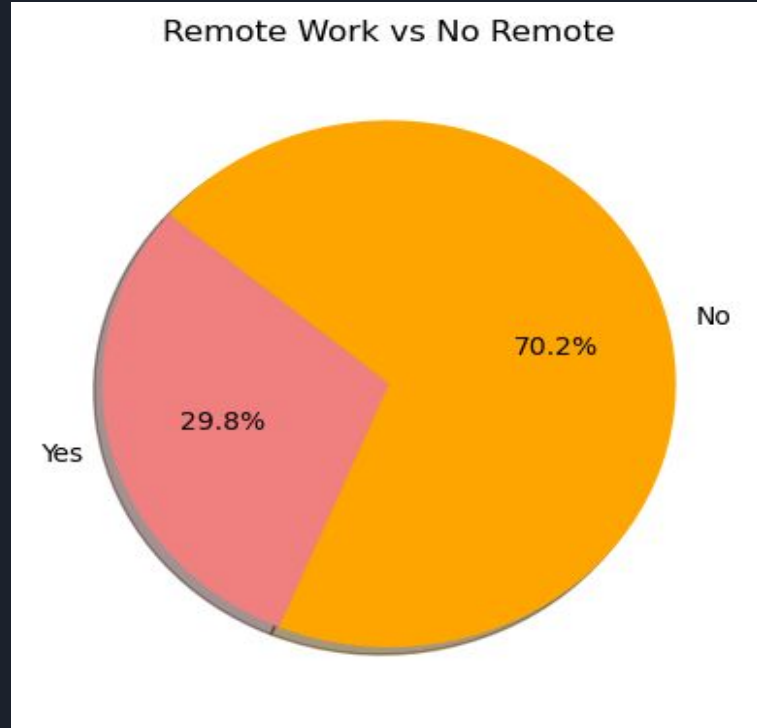
Have you ever had a mental health problem?

This graph is about total number of participants who have ever had a mental health problem.

It includes everyone from the Tech and Non-tech fields.
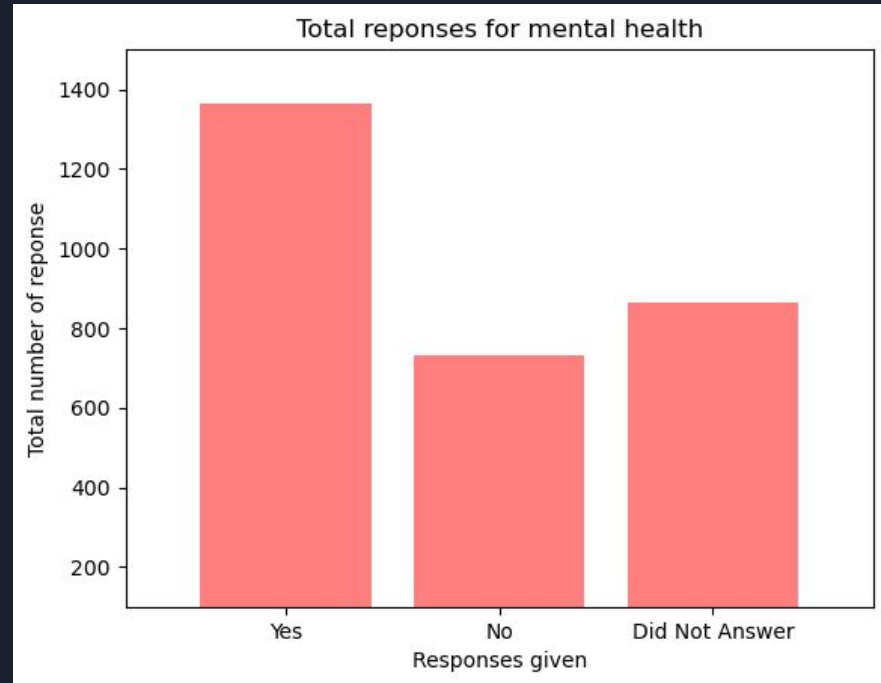
Relation of Job-type with Mental Health

Total Responses received with respect to Job-type:

This graph represents total number of employees which responded to the survey of mental health problem.

We can analyze this total response of job-type with total survey response received.

We did run a chi -squared but did not think the results were significant considering the majority of respondents in the survey have a tech job
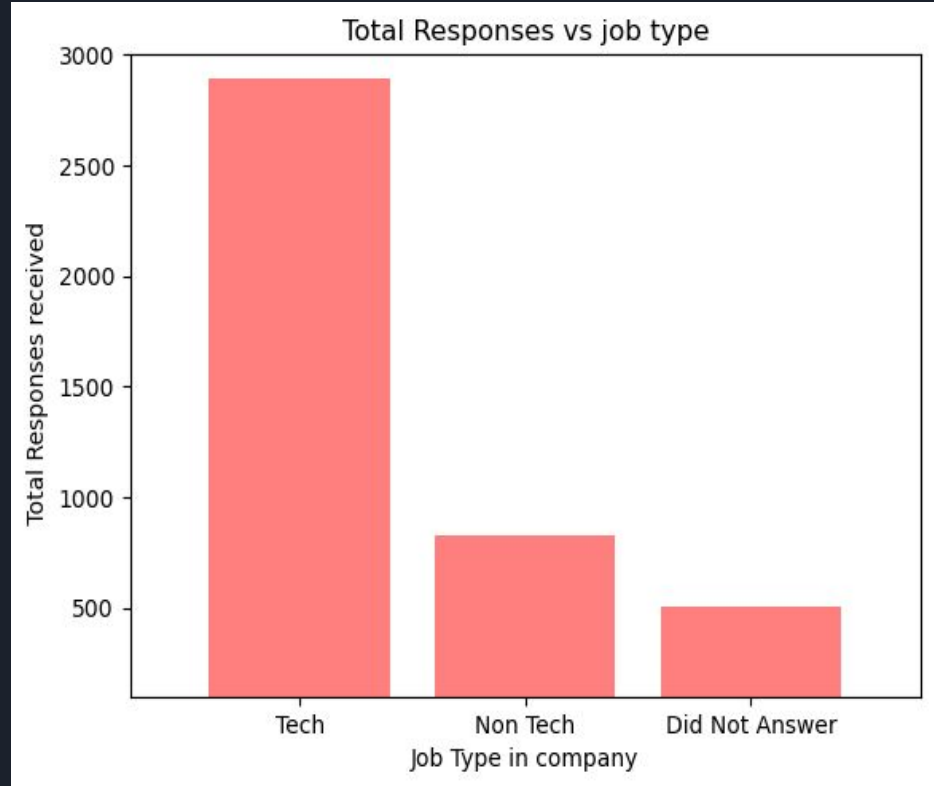
Relation of Job-type with Mental Health

After finding and studying the survey data and using groupby function (Job-type and total response received), we can conclude that people working in Tech/IT job roles have much more cases of Mental Health problems than people working in Non-tech.

Mental Health cases found

%Did not answer

%NonTech

17.2%

21.3%

61.4%

%Tech
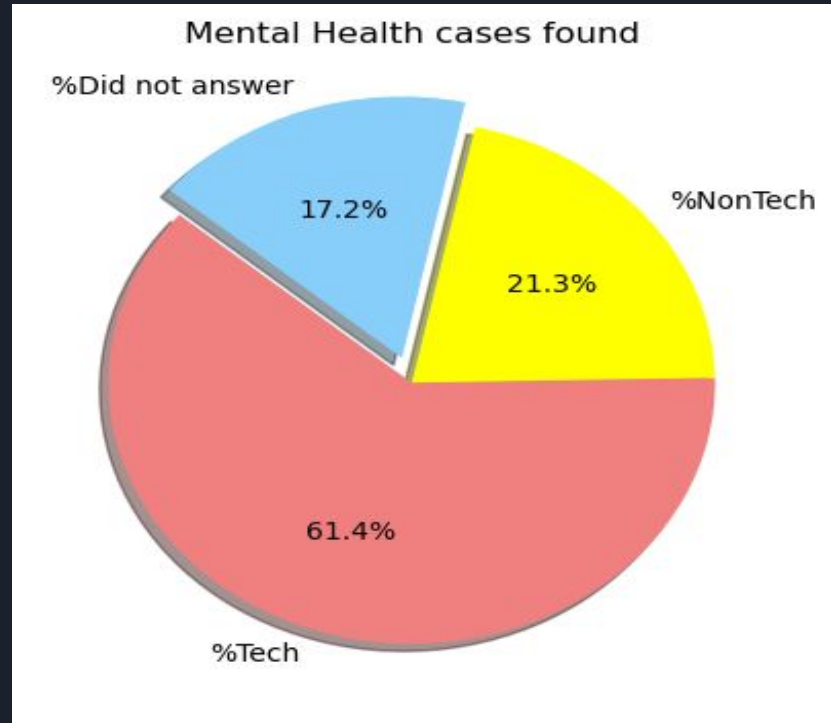
If someone has a mental health disorder, does it interfere with their work?
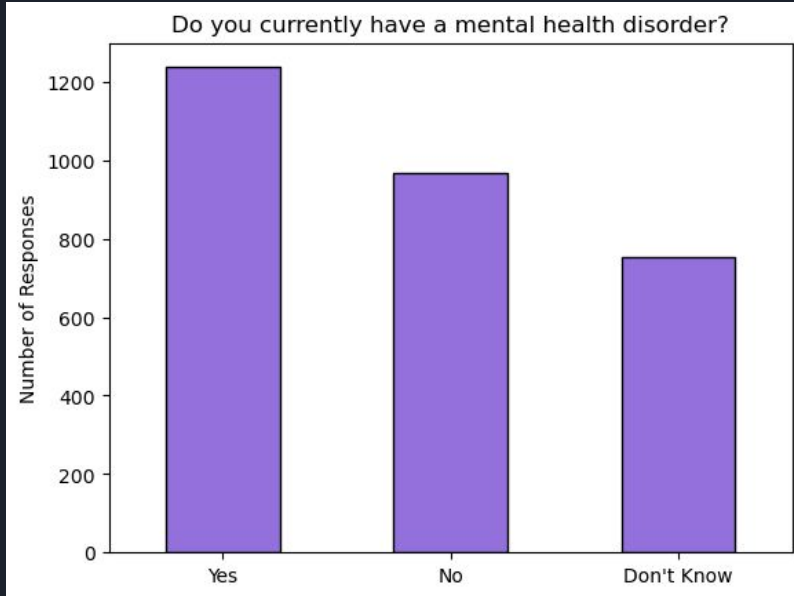

Naturally we would assume so, but in what capacity?

How common are these issues?

First, we need to narrow down how many people have mental health disorders compared to those that don't. Looking at the data in the bar chart, "Yes" was the most common overall response with a little over 40% of participants!

If someone has a mental health disorder, does it interfere with their work?

Does your mental health disorder affect your productivity?
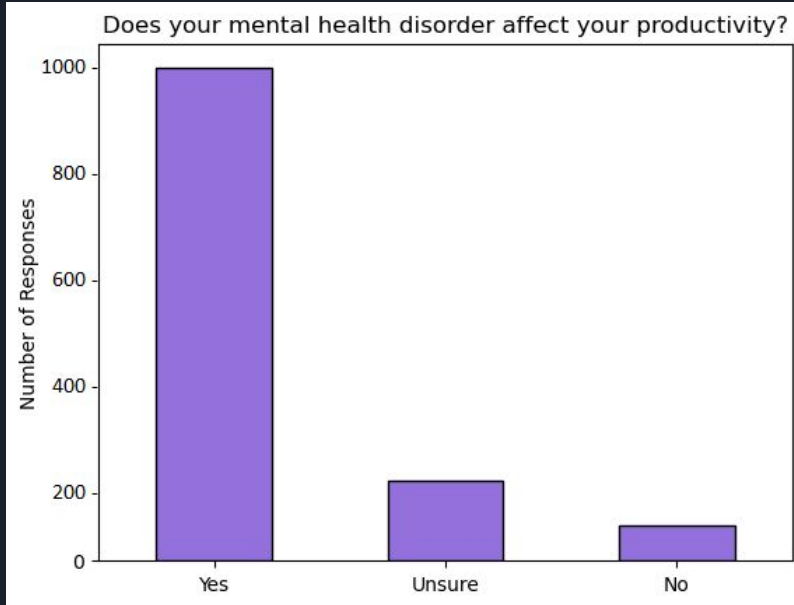
As we can see here, the vast majority (roughly 80%) of those claiming to have mental health disorders also assert that their productivity is impacted.

The answer to our initial question appears to be solved, but we can actually look into this even further!

If someone has a mental health disorder, does it interfere with their work?

How frequently does your disorder affect your productivity?
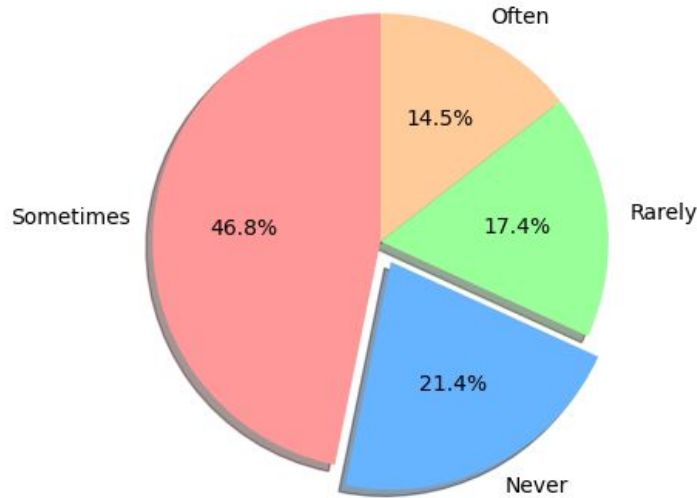
The responses for "Often", "Sometimes", and "Rarely" all indicate that yes, a mental health disorder does influence the employees' workflow.

It means we can confidently say yes, mental health disorders do affect work productivity!

If someone has a mental health disorder, does it interfere with their work?

Key Findings:

- Over 40% of all those surveyed claim to have some form of mental health disorder.

- If we apply the 78.7% percentage of people whose work is influenced by their condition, we find that 32.93% of all productivity is impacted. That's about one third of the total group!

- The number could even be higher if we had definitive tests for those who didn't know if they were afflicted. This is a hugely impactful metric and with more thorough testing, and wider access to the healthcare needed, we can take steps to improve these conditions!

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Survey on Mental Health in the Tech Workplace in 2014, 2016, 2017, 2018, 2019

What did we learn about mental health in the tech industry?

- Employers in the tech industry are not doing enough to address their employees' mental health. Most are not even making formal acknowledgments or offering proper services. This could be trend outside of the tech industry as well.

- Employers are not properly handling mental health issues of their employees. Employees witnessing colleagues coming forward are less likely to discuss their mental health struggles than before.

- People working in the tech industry have more cases of mental health disorders than those working in non-tech. And over 70% of those afflicted are working remotely.

- Mental health disorders greatly affect workplace performance. Roughly 80% of those with a condition claim their work is impacted. Any company should see mental health as a priority for their employees and their company's wellbeing.

*Disclaimer - this is all from one survey and is not necessarily comprehensive!