

# Mental Health

Arpan Godiyal Ashish Choudhary Puneet Garg Rishabh Rawat Mr. Dhyanendra Jain

Department of Computer Science and Engineering  
GGSIU, New Delhi, India

**Abstract – Background:** Mental disorder is one of the most important diseases of which is predicted to increase from 10.5% to 15% until 2020. This study aims to determine various factors influencing the mental health of employees of an organisation.

**Methods:** We have studied a dataset from 2014 survey which measures attitudes towards mental health and frequency of mental health disorders in the tech workplace. We have applied regression models to analyse that data and draw conclusions.

**Results:** How mental health of an employee depends on factors like age, gender, family history, leaves etc. **Conclusion:** In order to improve people's mental health, it is recommended that healthcare officials may more attention to this matter through implementation of programs such as life skills' training, stress resistance skills training, and helping individuals to be able to adapt themselves to their life environment.

**Keywords-** Mental health, Employees.

## I. INTRODUCTION

In the modern-day era, each human being has the right to Employee wellness and fitness may be on corporate India's radar today, but even the most progressive organizations seem to struggle with mental health issues. Only 29 percent of Indian companies had a mental well-being action plan in 2018, even as mental health continues to deteriorate nationwide. If your employee wellness program doesn't cover this critical aspect, act now – before the cracks deepen and hit you where it really hurts!

**Why mental health of an employee is a problem to an organization.**

When an employee is overly anxious, withdrawn, or otherwise unsettled, it's easy to overlook it or put it down to poor coping skills. But deep-seated problems like stress, anxiety, depression, and schizophrenia are rampant among the Indian workforce and often go undiagnosed or untreated. Without help, such employees struggle to cope, take poor judgment calls on your dime, underperform, call in sick more often, and may even quit work altogether. And this hits your bottom line too.

The WHO estimates that India will suffer economic losses amounting to a whopping 1.03 trillion dollars from mental health conditions in 2012–2030! Even organizations that recognize the need for a mental health strategy often feel overwhelmed about the actual implementation. If that's the case, a simple blueprint can help you proactively and sensitively tackle the issue. Mental health issues aren't always obvious to the untrained eye, so how do you spot them? Start with preventive diagnostics like self-administered emotional wellness tests that check for triggers and vulnerability. Then, give employees the option to take follow-up tests.

Knowing your people's flashpoints can help you launch targeted initiatives. In the health corporate surveys, the number of respondents who experienced stress, anxiety, or depression varied by gender, age, and sector – for instance, women were more prone than men, especially in retail and IT/ITES sectors. Organization-specific insights such as these can help finetune your policies.

## II. METHODS

We have trained our machine learning model on a dataset selected from numerous available datasets on kaggle on mental health. The dataset has data of over 1k+ employees which contains their mental health, age, gender, family history, treatment, country etc. Below is its outline.

1. Age
2. Gender
3. Country
4. State: If you live in the United States, which state or territory do you live in?
5. self\_employed: Are you self-employed?
6. family\_history: Do you have a family history of mental illness?
7. Treatment: Have you sought treatment for a mental health condition?
8. work\_interfere: If you have a mental health condition, do you feel that it interferes with your work?
9. no\_employees: How many employees does your company or organization have?
10. remote\_work: Do you work remotely (outside of an office) at least 50% of the time?
11. tech\_company: Is your employer primarily a tech company/organization?
12. Benefits: Does your employer provide mental health benefits?

- 13.care\_options: Do you know the options for mental health care your employer provides?
- 14.wellness\_program: Has your employer ever discussed mental health as part of an employee wellness program?
- 15.seek\_help: Does your employer provide resources to learn more about mental health issues and how to seek help?
- 16.Anonymity: Is your anonymity protected if you choose to take advantage of mental health or substance abuse treatment resources?
- 17.Leave: How easy is it for you to take medical leave for a mental health condition?
- 18.mental\_health\_consequence: Do you think that discussing a mental health issue with your employer would have negative consequences?
- 19.phys\_health\_consequence: Do you think that discussing a physical health issue with your employer would have negative consequences?
- 20.Coworkers: Would you be willing to discuss a mental health issue with your coworkers?
- 21.mental\_health\_interview: Would you bring up a mental health issue with a potential employer in an interview?
- 22.obs\_consequence: Have you heard of or observed negative consequences for coworkers with mental health conditions in your workplace?

The machine learning model predicts mental condition of an employee with an accuracy of 70%

### III. RESULTS

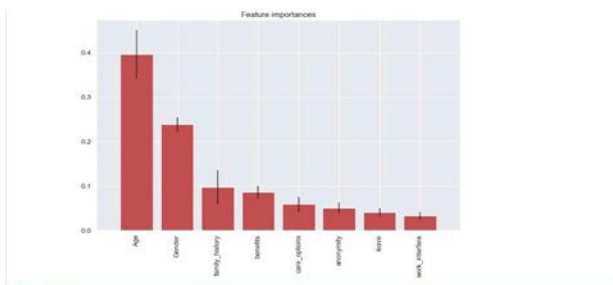


Fig.1. Feature importance graph.

The above bar graph shows how much mental health of an employee depends on features like age, gender, leaves etc.

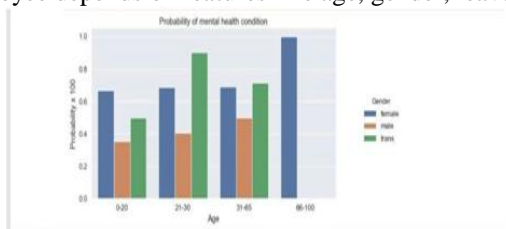


Fig. 2 - Age mental health graph.

The above bar graph shows the mental health of employees of varying ages distributed across three genders.

### III. CONCLUSION

When it comes to employee wellness, most companies typically focus most of their efforts and budget on those that are ill or long-term disabled. This is certainly money well spent, and it is easy enough to see the reason why, as this group is relatively easy to identify and quantify. So what can you do? Getting employee wellness right doesn't need to be particularly costly or difficult. Here are ten steps to get you started:

1. Use gamification, rewards and personalisation in your communication strategy – it's all about engagement. Make sure your employees not only know about your programmes and benefits, but actually want to get involved. Make it easy to understand, make it fun.
2. Support your communications with digital offerings. Nowadays, many things we interact with are tailored to our needs and accessible online whenever we want. You should apply the same thinking when it comes to your employee communications and create a wellbeing brand and a central intranet landing point.
3. Offer education and advice – make sure your employees have all the information they need on health, nutrition and their financial wellness. Keep it simple, but informative, practical and geared towards the actual needs and circumstances of your employees. Offer flexible working options that consider your employees' needs – this can dramatically reduce stress levels and make your employees feel a lot more comfortable between their work and private life, particularly in view of the demands on the so-called sandwich generation which has to care for both their children and their parents.
4. Provide access to free or subsidised activity trackers and apps – these little gadgets can really help to get your employees engaged in activity programmes.

### REFERENCES

- [1]. <https://www.kaggle.com/osmi/mental-health-in-tech-survey>
- [2]. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4764285/>
- [3]. <https://www.businessinsider.in/always-on-work-culture-is-affecting-mental-health-of-indians/articleshow/69522649.cms>  
<http://www.businessworld.in/article/Tackle-Workplace-Mental-Health>
- [4]. [With-These-6-Smart-Steps/02-03-2019-167672/](http://www.businessworld.in/article/Tackle-Workplace-Mental-Health)

<https://www.uk.mercer.com/our-thinking/10-ways-to-improve-your-employees-wellness.html>.