



MENTAL HEALTH IN WORKPLACE

MTH-650, NORTHWOOD UNIVERSITY, MIDLAND, MI | MAR 2023



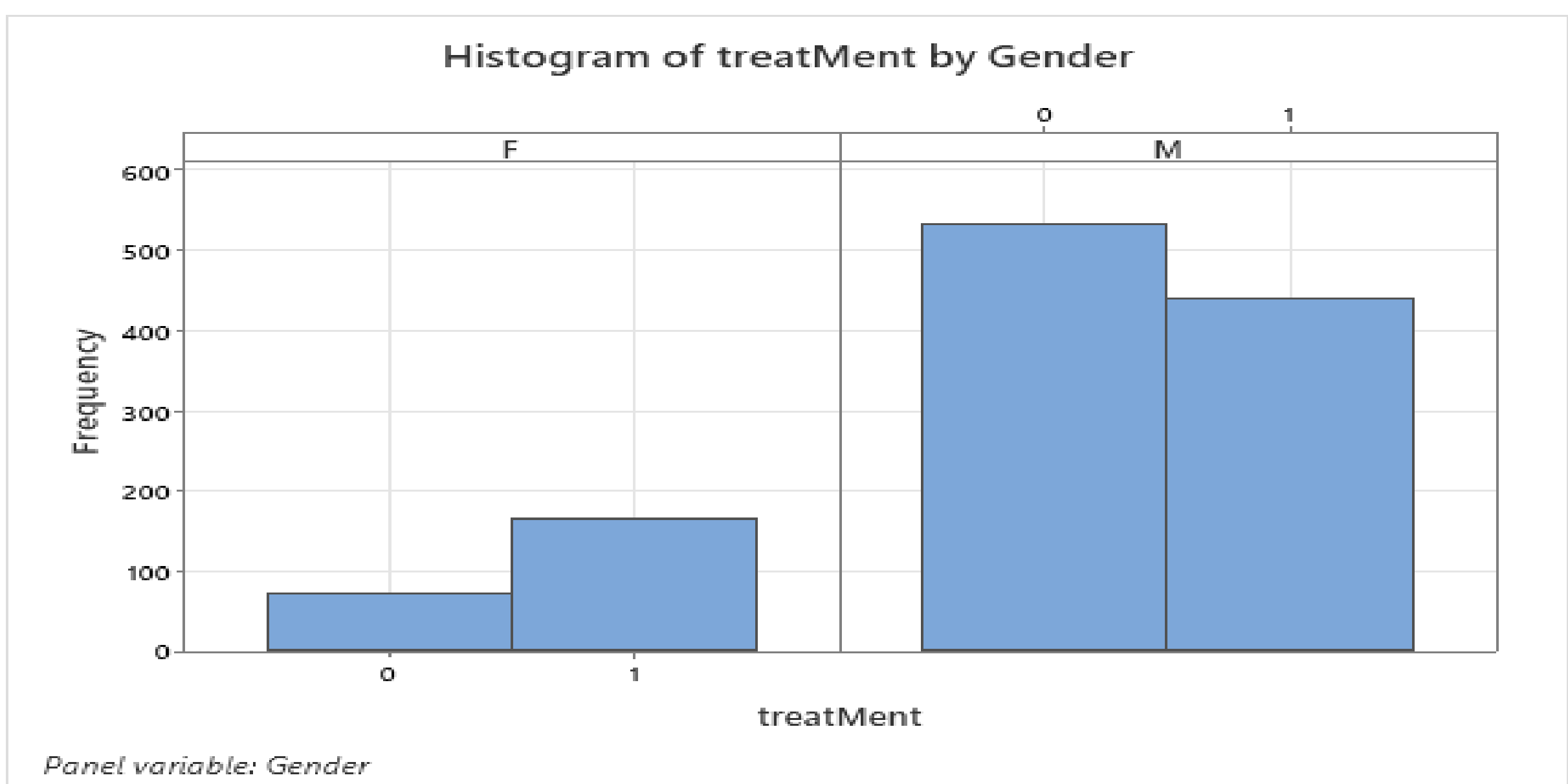
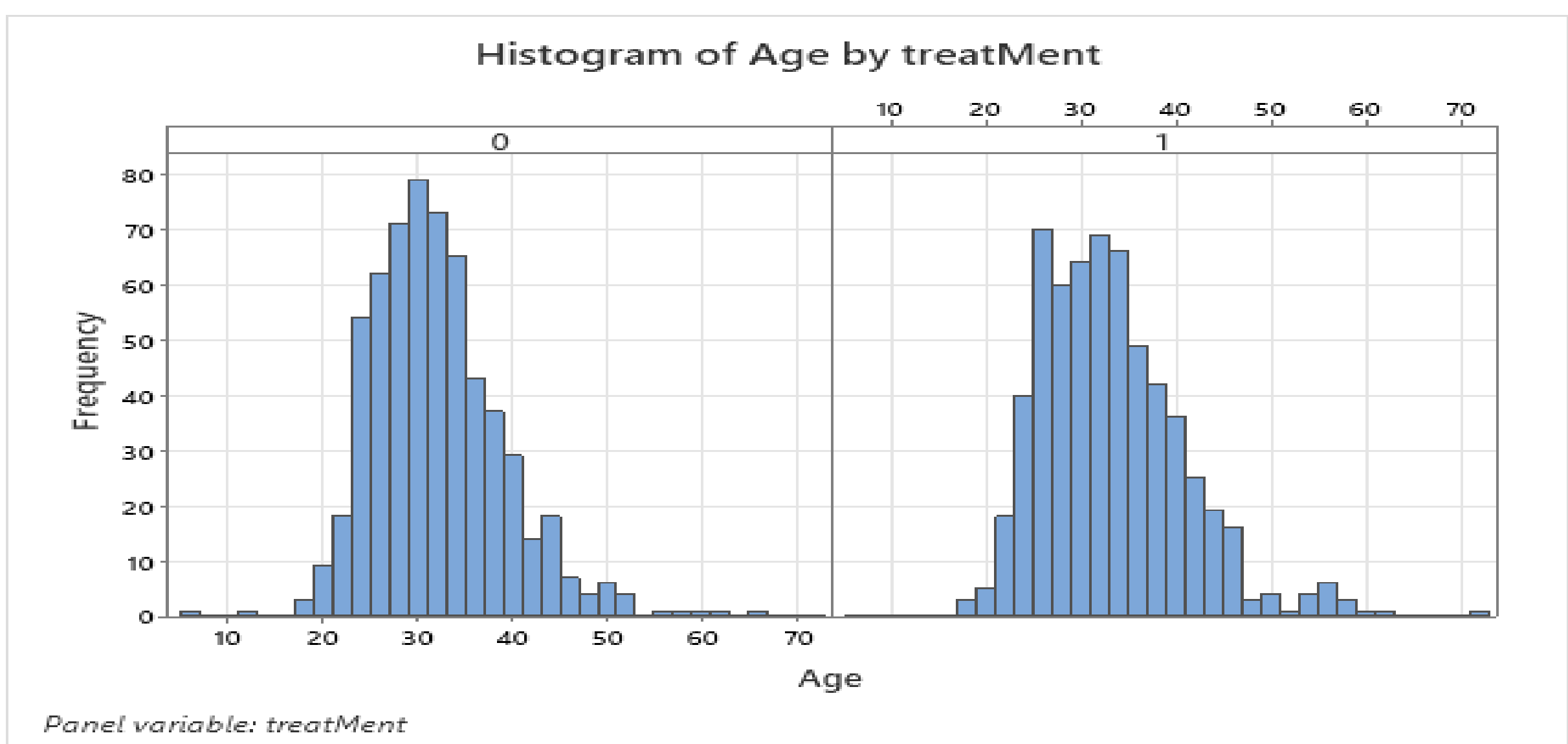
Introduction

Mental health issues currently affect 10.7% (2017) and has been increasing at a rate of 13%.

In the context of workplace mental health has been some what neglected. This poster aims to understand the impact of mental health issues specifically on employees working in tech companies and how to improve this situation.

Age and Gender wise Distribution

The general distribution of mental health issues across age group and genders helps us identify specific areas of focus.



Statistics

Variable	treatMent	Mean
Age	0	31.454
	1	32.686

0 – No Treatment

1 – Treatment Taken

Statistics

Variable	Gender	Mean
treatMent	F	0.6975
	M	0.4531

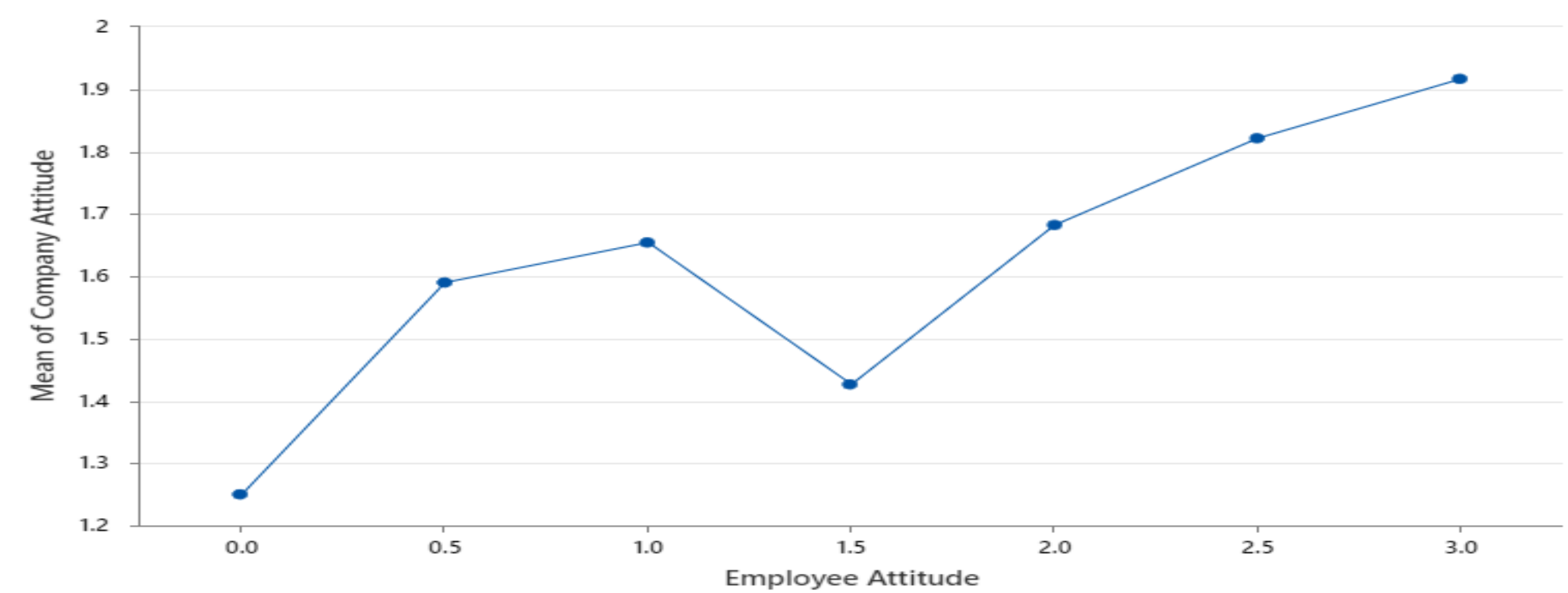
Mental issues are more evenly distributed across ages 20 to 40 and they are more likely to occur at higher ages.

Females have significantly higher chance of mental health issues when compared to male.

Special attention should be placed on these cohorts of people.

Workplace Attitude Towards Mental Health

Employees in companies with a positive and open attitude towards mental health are also open minded and less affected by mental health issues.

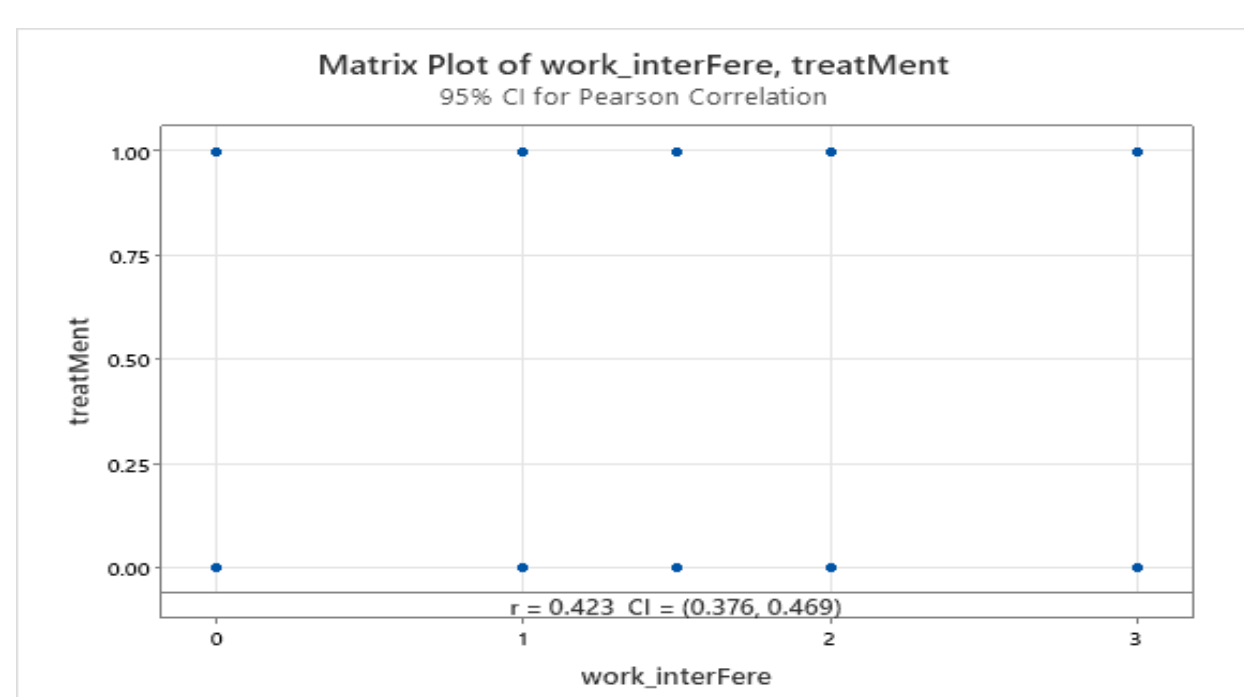


Employee Attitude is an indication of how open an employee is on discussing mental health issues.

Company Attitude is an indication of how helpful a company is to solve mental health issues of its employees.

Effect of Mental Health Issues on Work

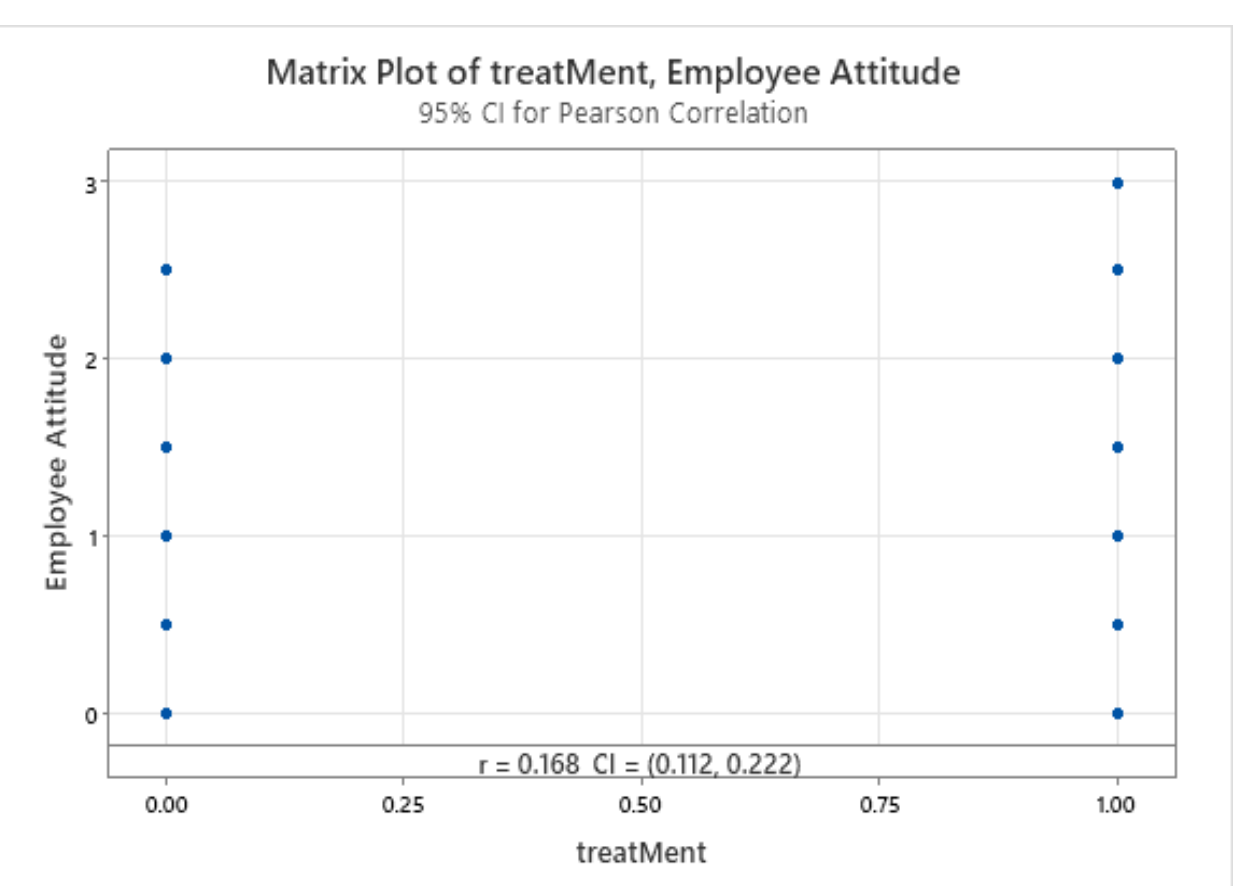
In an effort to understand the impact of mental health issues and employee attitude on work productivity, we correlated the employees who were undergoing treatment, their attitude and productivity and we found an important detail.



Correlations

	work_interFere
treatment	0.423

Those who experienced mental health issues categorically say that these issues significantly affect their productivity.



Correlations

	treatment
Employee Attitude	0.168

There is a positive correlation between employee Attitude and treatment. This indicates that a more open an employee about their mental health the greater are the chances that they take treatment and solve their issues, there by increasing productivity.

Effect of Remote Work Policy

Now a days with remote working policies being widely used, we tested the hypothesis that remote working has an impact on mental health issues.

Hypothesis Testing

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
remote work	1209	0.2953	0.4564	0.0131
treatment	1209	0.5012	0.5002	0.0144

Paired T-Test

Null hypothesis	H ₀ : μ difference = 0
Alternative hypothesis	H _a : μ difference \neq 0
T-Value	P-Value
-10.75	0.000

From this we can reject the hypothesis that Remote work and Mental health issues are statistically related.

Factors affecting Mental Health

As a final step we tried to find all the major factors and their effect on mental health

Regression Equation

$$\text{treatment} = 0.0676 + 0.340 \text{ Normalized Age} + 0.3617 \text{ Family history} + 0.1907 \text{ Company Attitude} + 0.2911 \text{ Employee Attitude}$$

Coefficients

Term	Coeff	SE Coeff
Constant	0.0676	0.0631
Normalized Age	0.340	0.181
Family history	0.3617	0.0274
Company Attitude	0.1907	0.0447
Employee Attitude	0.2911	0.0738

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.454770	17.62%	17.34%	16.94%

Occurrence of mental issues is a function of age and family history but solving these issues depends on the attitude of the employees and the companies at which they work.

Conclusion

Through all these analysis we found a few significant areas of improvement to solve mental health issues at workplace.

To do this, companies should take policies more aligned towards solving mental health issues specifically for female employees to improve working conditions and increase productivity.