



/MENTAL HEALTH

PROJECT WEEK 6





/INTRODUCTION



/01

/SURVEY OVERVIEW

- > Overview of questions/answers

/02

/HYPOTHESIS

- > Hypothesis and results



/03

/IMPROVMENTS

- > What did I learn and where can i make improvments

/04

/CONCLUSION

- > The project ends here

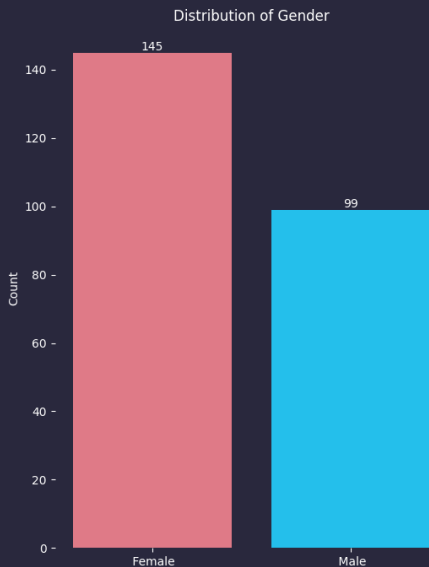




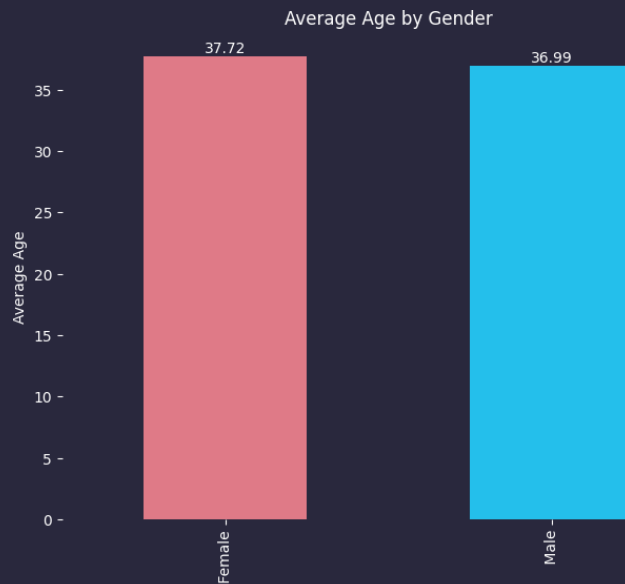
/SURVEY SAMPLE



Total:
244

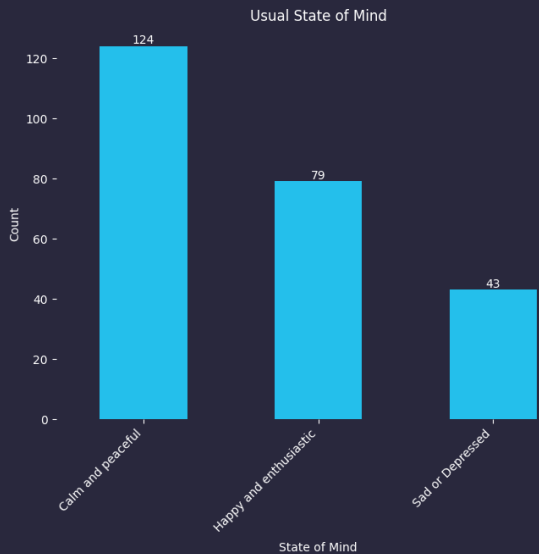


Average
age
37





/SURVEY SAMPLE

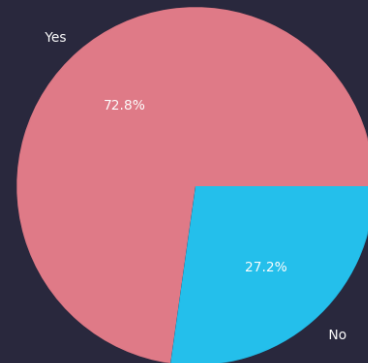


Average of days
feeling **depressed**

3

last week

Do you often feel depressed, stressed or anxious?



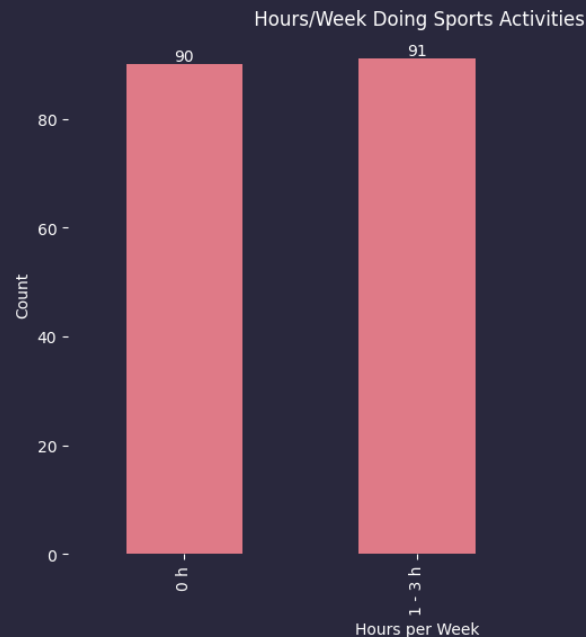


/SURVEY SAMPLE



Average
hours sleep

6,73

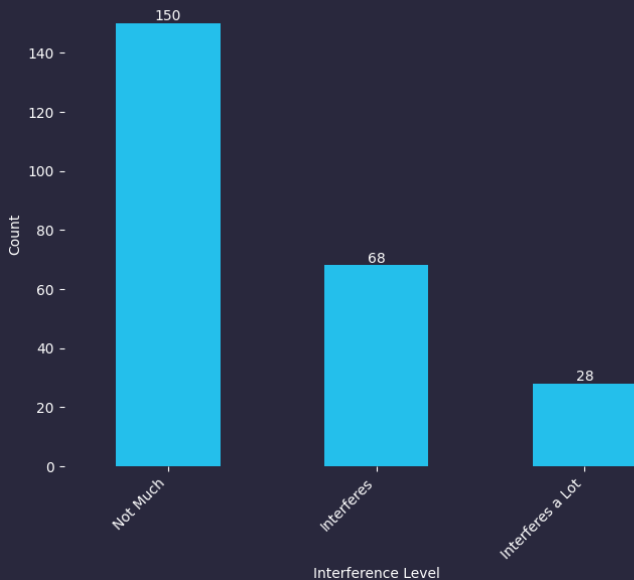




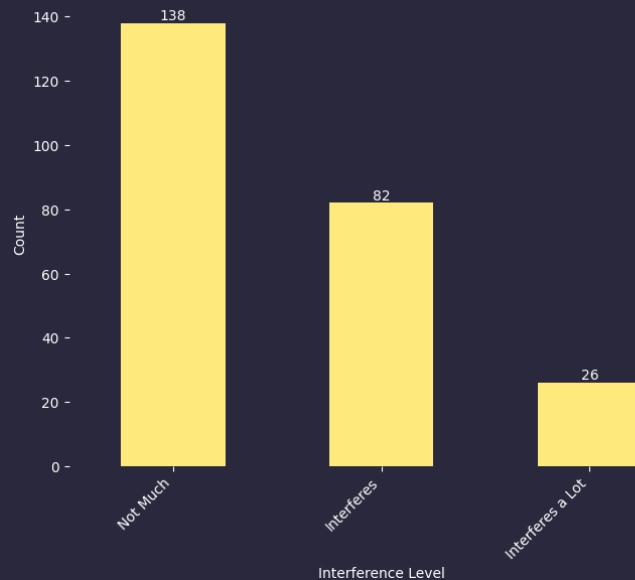
/SURVEY SAMPLE



Mental Health Interference with Job Performance



Mental Health Interference with Relationship



/HYPOTHESIS



/HYPOTHESIS

/GENDER & FEELING DEPRESSED

H0= There is no association

H1= There is an association

/HOURS SLEEP & NUMBER DAYS FEELING STRESSED

H0= There is no linear correlation

H1= There is a linear correlation

/GENDER & LIKELIHOOD OF SEEKING PROFESSIONAL HELP

H0= There is no association

H1= There is an association

/HOURS SLEEP & EMPLOYMENT STATUS

H0= Mean hours of sleep are the same

H1= Mean hours of sleep are the !=



/HYPOTHESIS 1



/ gender and the fact of feeling depressed, stress or anxious

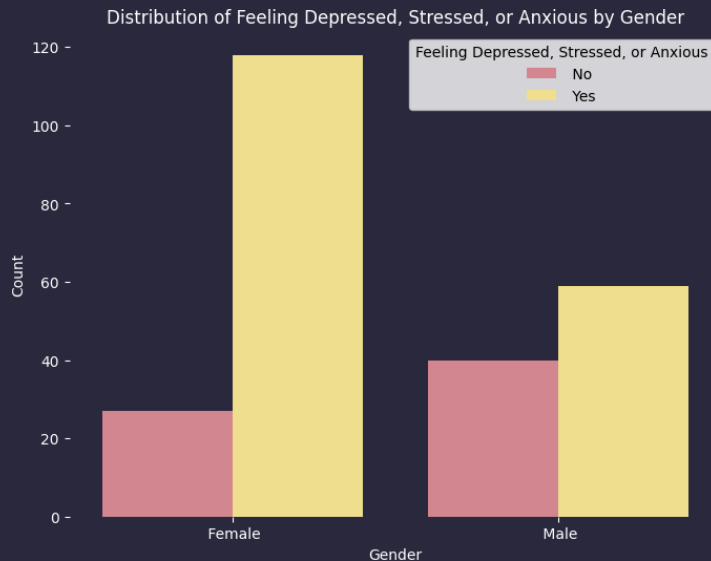
H0: There is **no** association

H1: There is **an** association

Chi-Square Value: 12.942778330393152

P-value: 0.0003211580128304274

strong evidence to suggest that there is a statistically significant association between the variables Gender and depressed mood



/HYPOTHESIS 2



/ hours of sleep vs number of days feeling anxious

H0: There is **no** association

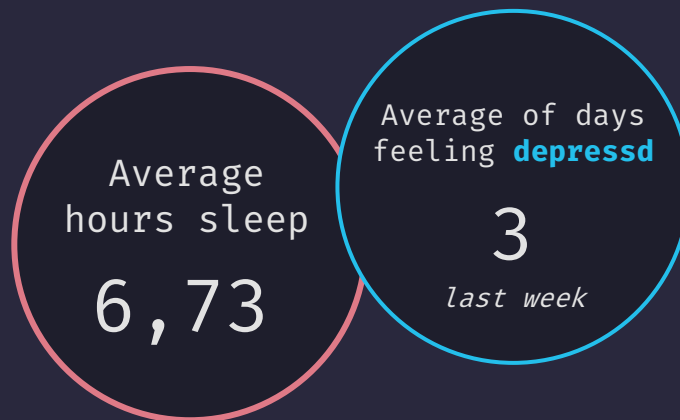
H1: There is **an** association ←

Chi-Square Value: 14.841304972310123

P-value: 0.0005987583365046322



The negative correlation coefficient suggests that, on average, **individuals who report more hours of sleep tend to report fewer days feeling anxious, and vice versa.**



/HYPOTHESIS 3



/ gender and the likelihood of seeking professional help

H0: There is **no** association

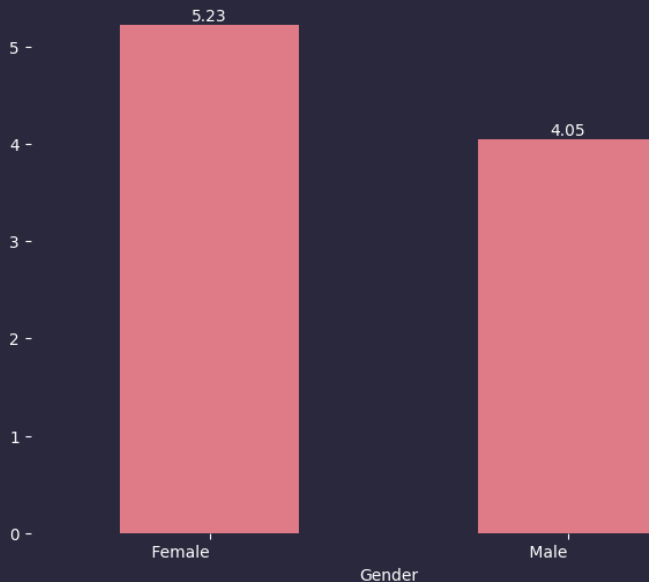
H1: There is **an** association

Chi-Square Value: 19.41273137359943

P-value: 0.3668324701721441

Based on the data, there is **no statistically significant** association between gender and the likelihood of seeking professional help for mental health issues.

Likelihood of seeking professional help for mental by Gender



/HYPOTHESIS 4



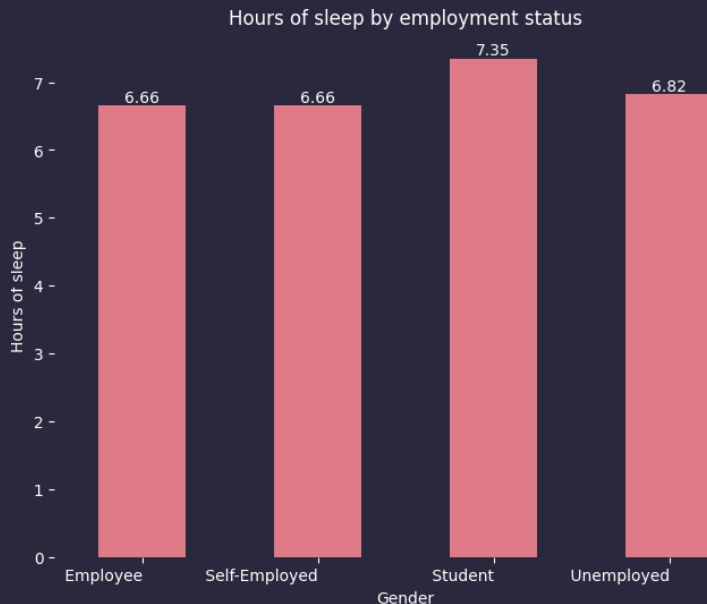
/ hours of sleep are the same across all employment status groups

H0: hours of sleep **are the same**
across all employment status groups

H1: hours of sleep **are different**
across at least one pair of employment
status groups

→

To see if there is
statistically significant
difference in the average hours
of sleep between employment
status group we can do...



/HYPOTHESIS 4



/ hours of sleep are the same across all employment status groups

H0: hours of sleep **are the same** across all employment status groups ←

H1: hours of sleep **are different** across at least one pair of employment status groups

Tukey's HSD

Multiple Comparison of Means - Tukey HSD, FWER=0.05						
group1	group2	meandiff	p-adj	lower	upper	reject
Employee	Self-Employed	0.0011	1.0	-0.5623	0.5645	False
Employee	Student	0.6927	0.0316	0.0428	1.3425	True
Employee	Unemployed	0.1684	0.9365	-0.5759	0.9126	False
Self-Employed	Student	0.6916	0.1169	-0.1091	1.4923	False
Self-Employed	Unemployed	0.1673	0.9608	-0.7118	1.0463	False
Student	Unemployed	-0.5243	0.4709	-1.4611	0.4125	False



/ANOTHER EXAMPLE



/ hours of sleep and usual state of mind

#H0: There is no significant difference ←

#H1: There is a significant difference

Tukey's HSD

Multiple Comparison of Means - Tukey HSD, FWER=0.05							
group1	group2	meandiff	p-adj	lower	upper	reject	
Calm and peaceful	Happy and enthusiastic	0.2535	0.2603	-0.1271	0.634	False	←
Calm and peaceful	Sad or Depressed	-0.4781	0.0439	-0.9459	-0.0102	True	
Happy and enthusiastic	Sad or Depressed	-0.7315	0.002	-1.2325	-0.2305	True	

/ANOTHER EXAMPLE



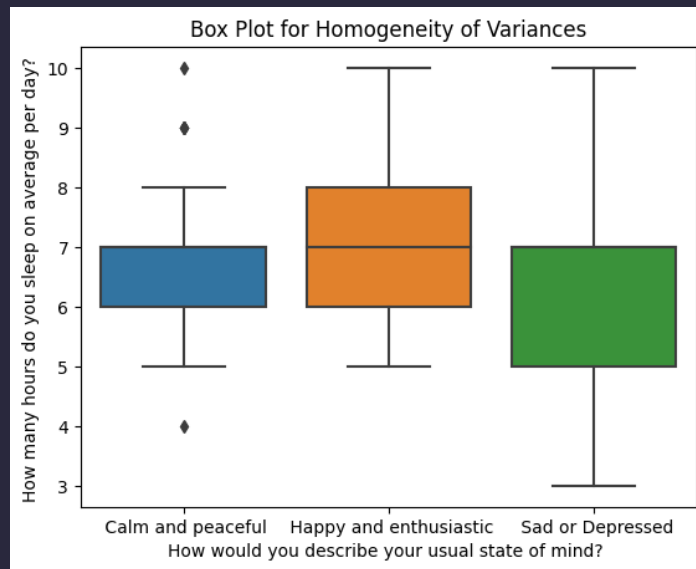
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/IMPROVEMENTS



SURVEY

open-ended
questions

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/POSITIVE POINTS

DATA CLEANING

I was able, due the fact of open-ed questions, to practice the *“art”* of data cleaning

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TEST

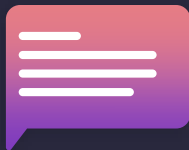
I could test and compare several hypotheses of different types

.....

LEARN

Tukey's HSD test

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<Thank you>



Questions?

