Final Step 3

Abstract

Introduction

Hypothesis 1: Will

Our first hypothesis we want to test is that students with moderate to healthy dietary habits will have lower rates of depression compared to students with unhealthy dietary habits. We will fit a basic logistic regression model to predict the binary outcome variable, "depression", using our categorical variable "dietary_habits" as a predictor. The results of the model are summarized in the following table:

	Estimate	Std. Error	z value	Pr(>|z|)
dietary_habitsHealthy	-0.1848625	0.0229657	-8.049494	0.0000000
dietary_habitsModerate	0.2420784	0.0202267	11.968239	0.0000000
dietary_habitsUnhealthy	0.8825377	0.0216397	40.783224	0.0000000
dietary_habitsOther	0.6931472	0.6123723	1.131905	0.2576745

We see statistically significant results from our basic logistic regression model with just dietary habits as a predictor. Every level of dietary habit besides "Other" has statistically significant effects on the presence of depression. Our model predicts that Healthy dietary habits decrease the probability of depression by about 18.5%, while Moderate and Unhealthy dietary habits increase the probability of depression by about 24 and 88 percent respectively. This is a very strong result to start with, but we should

Hypothesis 2: Matthew

Students who average more sleep per night will have lower rates of depression compared to students who average less.

Hypothesis 3: Hayden

Students with the highest collective reported stressors (Academic Pressure + Work Pressure + Financial Stress) will have higher rates of depression compared to students with lower collective reported stressors.

Conclusion

Recommendations