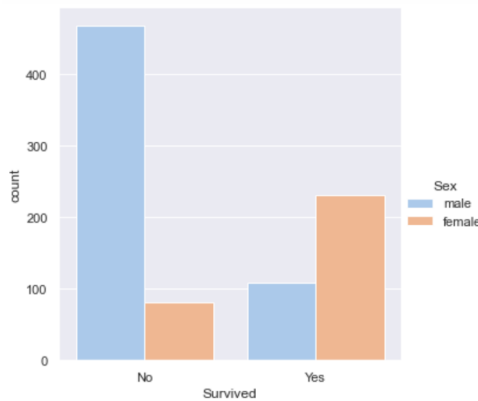Valeria Velez
CPSC-4800-W01
March 11, 2022

Summary Titanic Data Set

This document presents the results of an Exploratory Data Analysis (EDA) on the Titanic Dataset. For more detailed information, please refer to the Jupyter Notebook.
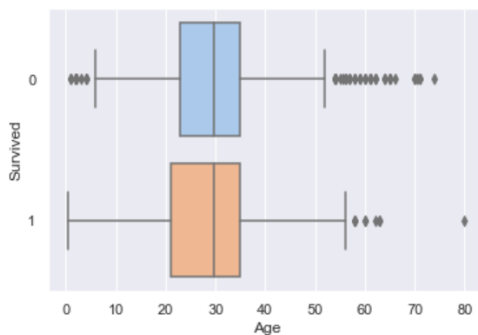
Survival and Gender

The bar graph shows a strong relationship between the gender and the survival rate. 74% of women survived to the Titanic whereas just 19% of male survived.

If the passenger was male, he was very likely not to survive on the Titanic and if the passenger was female, she was more likely to survive to the accident.

In addition, the P-Value of the Chi-Square test is $< .05$ meaning that the variables are not independent to each other.
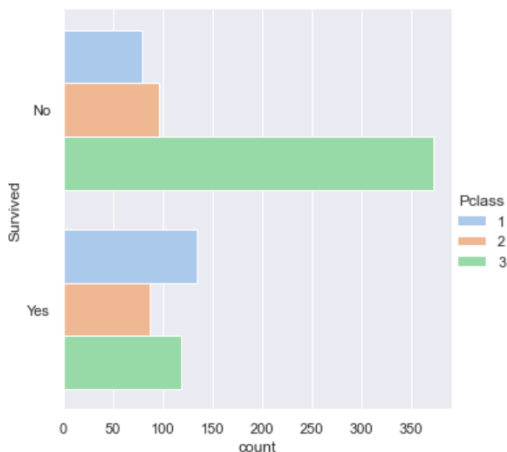
Age and Survival

Age	Survived	
	No	Yes
Adult	63.7%	36.3%
Child	41.6%	58.4%

There is a relationship between the age and the probability of survive. It was found that children were more likely to survive than male, that could be seen in the two-way table. 58% of children survived to the Titanic whereas just 36% of adults survived.

Passenger Class and Survival

Survived	No	Yes
Pclass		
1	0.373832	0.626168
2	0.527174	0.472826
3	0.757637	0.242363

There is a correlation between the variables Passenger Class and Survived.

It was obtaining a p-value (Chi-Square analysis) less than .05. It was more likely to survived to the Titanic if the passenger was in Class 1 than in Class 3 or 2, and it was more likely to survive in Class 2 than in Class 3.