



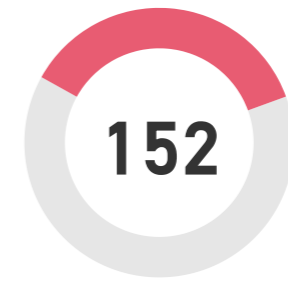
TITANIC

Passengers' Survival Analysis

The Titanic sample dataset records **418 (64% male and 36% female)** passengers. The purpose of this analysis is to **identify which class was most likely to survive** the Titanic disaster.



Total Passengers



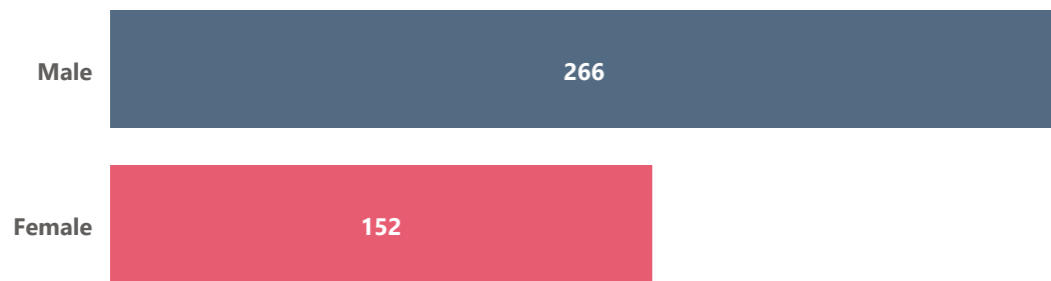
Total Survived



Total Lost

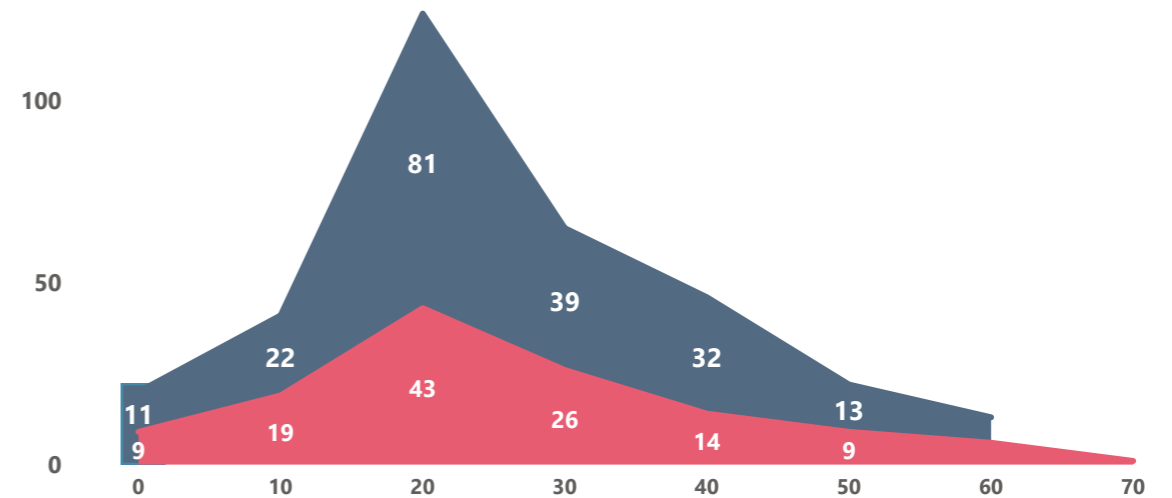
This analysis approaches the problem based on the characteristics available in the dataset, in order to know **how well each characteristic correlates with survival**.

Passenger's Gender



Out of **418** total passengers only **152 (36%)** passengers survived and **266 (64%)** died. This includes **100% females** who were rescued, compared to **100% males** who died. Most **females (72)** travelled in **3rd Class**. This reflects that gender influences the number of survivors because women from **all classes** were rescued with priority over men.

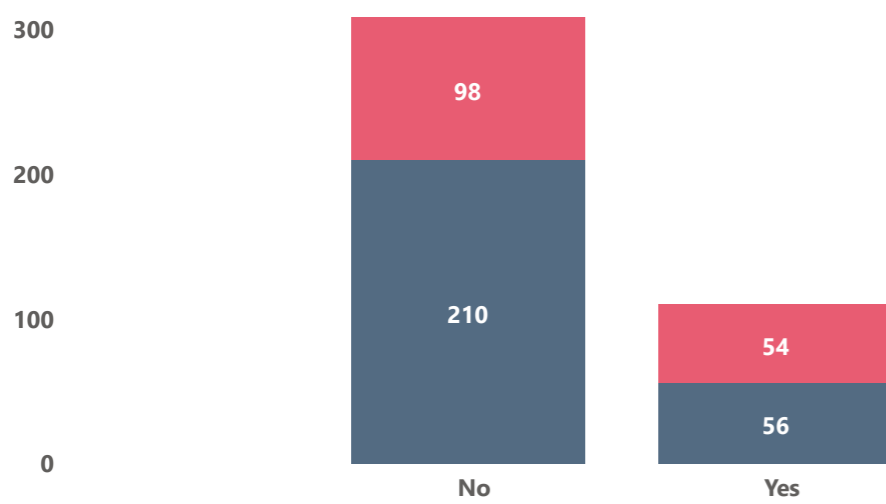
Passenger's Age



Children had highest survival rate of **46%** considering they were accompanied by their mothers. Young adults around the age of **20 to 30** had the lowest survival rate of **37%**. Most of them travelled in **3rd class**.

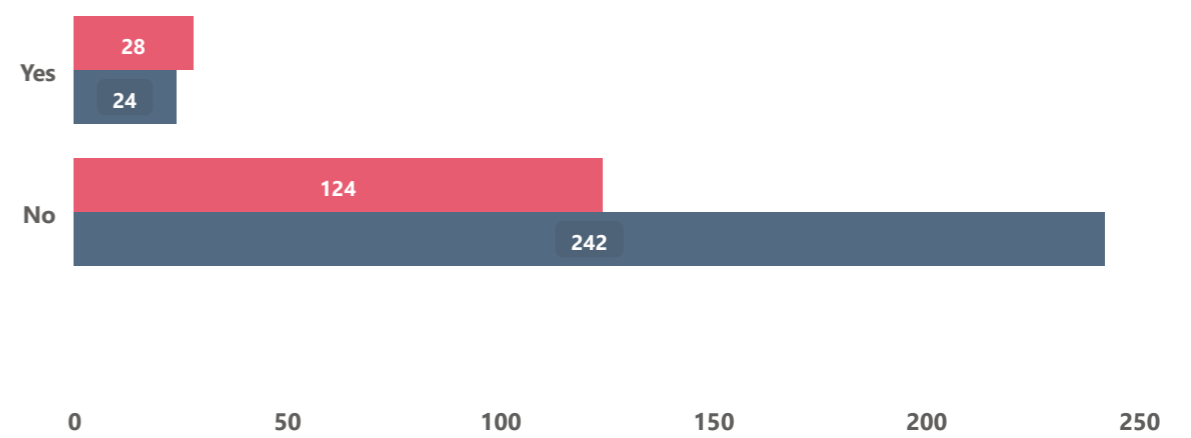
Note- Age data in this dataset is incomplete. Age feature contains **86** null values, which are not included in the above chart.

Travelling with Siblings or Spouse



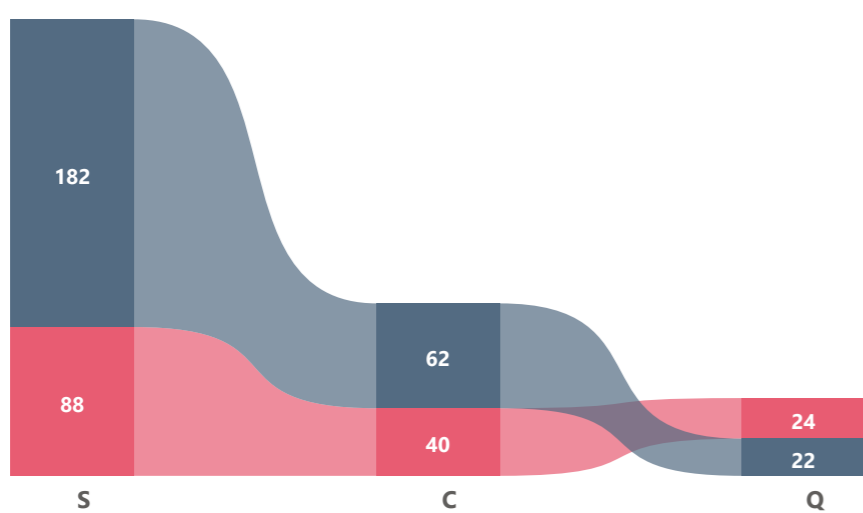
Passengers traveling with **siblings or spouse** had **higher** survival rates than those traveling **alone**.

Travelling with Parent or Child



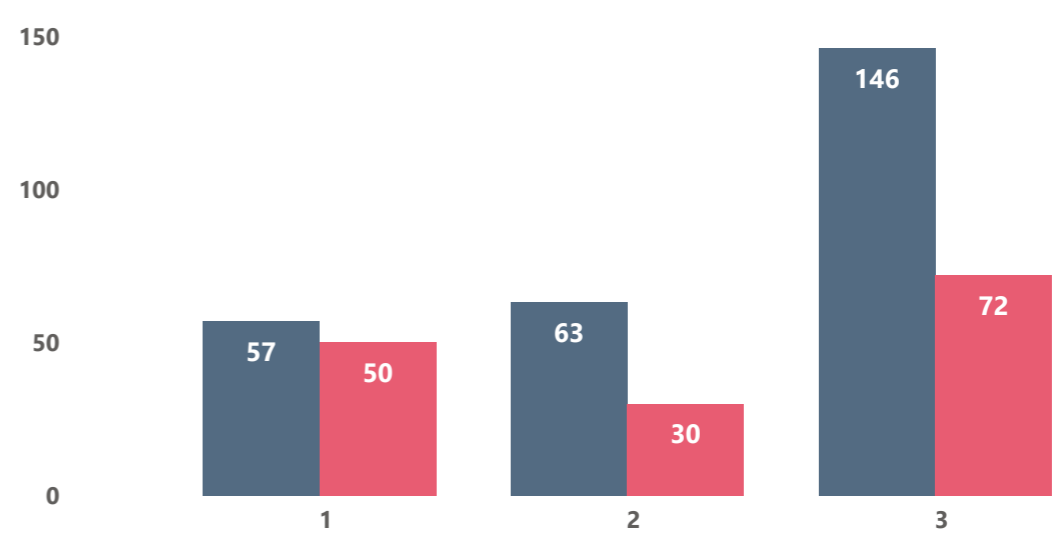
Passengers who **lost** the most, travelled **alone** in comparison passengers with parents or children. Most of those **families** travelled in the **1st class** while most **solo** passengers travelled in the **3rd class**.

Port of Embarkation



(65%) passengers embarked from **Southampton** port, **(24%)** from **Cherbourg** port and **(11%)** from **Queenstown** port. Passengers who boarded from **Queenstown**, had the **highest (52%)** survival rate compared to **Cherbourg (39%)** and **Southampton (33%)**.

Passenger Class



Survival rate was **highest** in **First class (47%)**, followed by **third class (33%)** and **second class (32%)**. This reflects, the fact that **highest fare paid passengers had highest survival rate**.

Summary:

Overall, several characteristics were observed that correlated with the rate of survival of the Titanic Disaster.

Gender: **Female** passengers from **all classes** were rescued with priority.

Family: Passengers who travelled **with family** members had the **highest** survival rate. Most of them travelled in the **1st class** and **unaccompanied** passengers who lost the most were in **3rd class**.

Age: **Young adults** around the age of **20 to 30** had the **lowest** survival rate, since most of them travelled in **3rd class**.

Class: **1st class** passengers were given priority as they paid the **highest fare** compared to other classes.

Embarkation: Highest number of passengers who embarked from **Southampton** and travelled in **3rd class** had **lowest** rate of survival.

Note: This is a themed dataset and may not be accurate against actual events of the Titanic disaster. The Cabin and Ticket features are dropped during this analysis because of fewer data points.