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DSC530

3/1/2025

**Titanic Dataset Analysis**

**Statistical/Hypothetical Question**

The point of this analysis was to determine how a person’s class, age, fare, or sex affected the statistical likelihood of survival on the Titanic. The analysis tested these factors to see if they had any significant impact.

**Outcome of EDA**

The EDA showed the following patterns in survival probability:

* Class had a large impact on an individual’s chance of survival. It showed that first class passengers had a much higher likelihood of survival.
* Sex also had a significant impact. Females were much more likely to survive.
* Age was less likely to have an impact, however it still showed that younger passengers were more likely to survive.
* Fare had a large skew and did not prove to be much of a factor on survival probability.
* Outliers were analyzed in fare and age.

**Missed during analysis**

There were likely other variables that influenced survival rates. Those factors could include Room location, size of family, and if the person was a part of the crew or not. There were also some missing values in the dataset that could have biased the study.

**Incorrect Assumptions**

It is possible that there was bias in the data collection. There is a chance that some values were incorrect or not included. A person’s fare may have other factors that may impact the study such as where their cabin was located.

**Challenges**

Decisions had to be made on how to handle missing values in the dataset. Also, understanding the statistical tests requires deeper understanding of the statistical analysis.

**Conclusion**

The analysis supported the alternative hypothesis that class and sex had a significant impact of a persons chance of survivability. These results are consistent with the historical record of the Titanic disaster. The analysis also showed that age and fare had some impact, but it was not significant. There are other factors that could be analyzed in the future to provide further insight, such as room location or if the person was part of the crew.