

Assignment_3_Part_2 – Conclusion

- **Determine if the survival rate is associated to the class of passenger.**

As Figure 1 shows, passengers in class 3 more like did not survive compared to class 1 and class 2. Also, the passengers in class 1 had more than 50 percent survival rate, while passengers in class 2 had less than 50% chance of survival. Additionally, the chi-square(102.89) is greater than the critical value(5.99). Therefore, there is a significant difference in rejecting the null hypothesis. In other words, the survival rate is associated to the class of passengers.

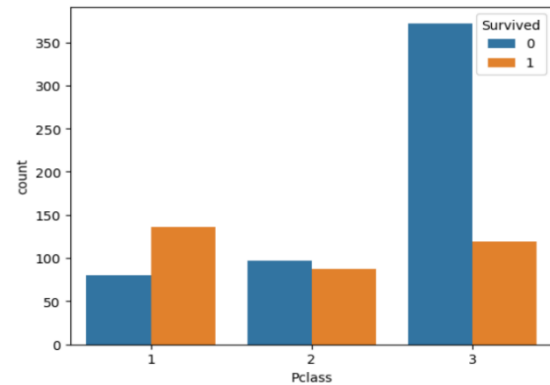


Figure 1: survival and class

- **Determine if the survival rate is associated to the gender.**

As Figure 2 shows, female passengers had more chance of survival than male passengers. Consequently, the survival rate is associated to gender. Additionally, the chi-square(260.72) is greater than the critical value(3.84). Therefore, there is a significant difference in rejecting the null hypothesis. The survival rate is related to gender.

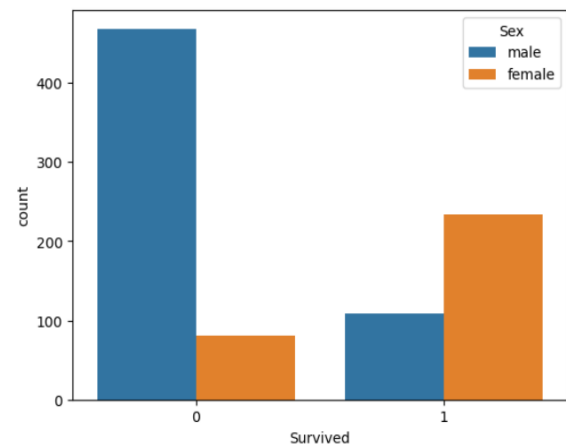


Figure 2: survival and gender

- **Determine the survival rate is associated to the age.**

As Figure 3 shows, younger passengers, particularly those below 8 years old, had more chance of survival than passengers whose ages were over 10 years old. Passengers whose ages were over 65 years old could barely survive. Thus, the survival rate is associated to age.

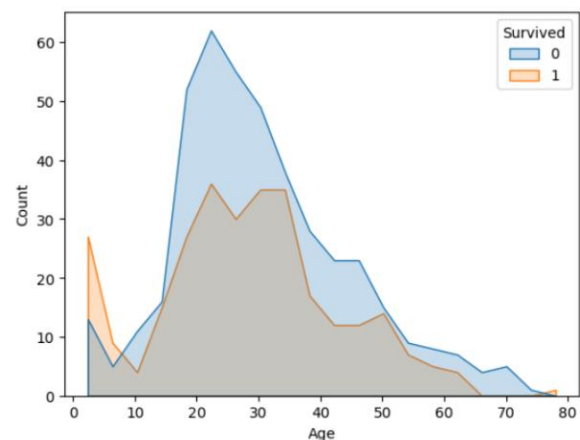


Figure3: survival and age