

Assignment4:

Team member: Lv Kaiyang, Ma Ying, Tuo Weiyi

Summary:

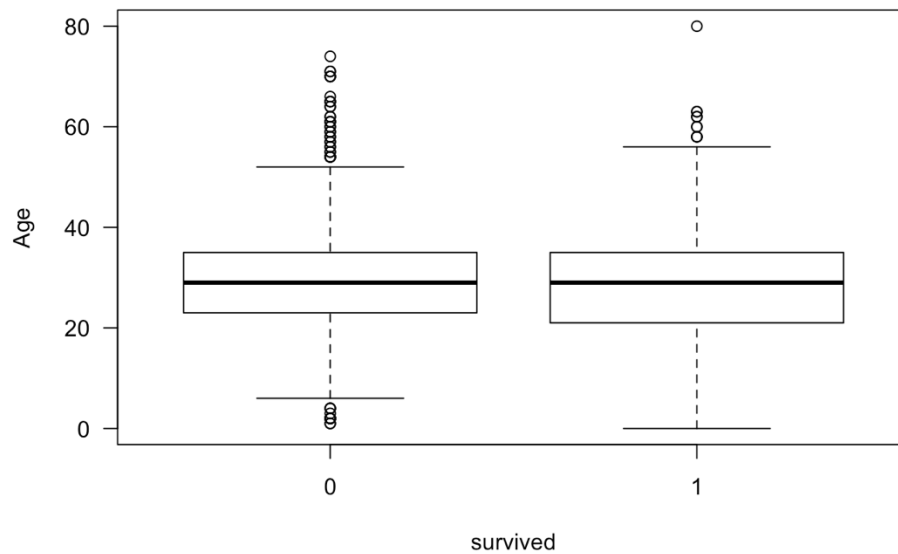
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
##	0.42	20.12	28.00	29.70	38.00	80.00	177

according to the above the graph, we learned that the majority passengers of Titanic are young people. The gap between 3rd Qu and 1st Qu is 17.88 which means half passengers of Titanic aged between 20 to 38.

Survival situation :

According to the downloaded data, Titanic has total 891 passengers. Finally, there are 342 passengers survived, and 549 passengers didn't make it. The survival rate was 38.3%

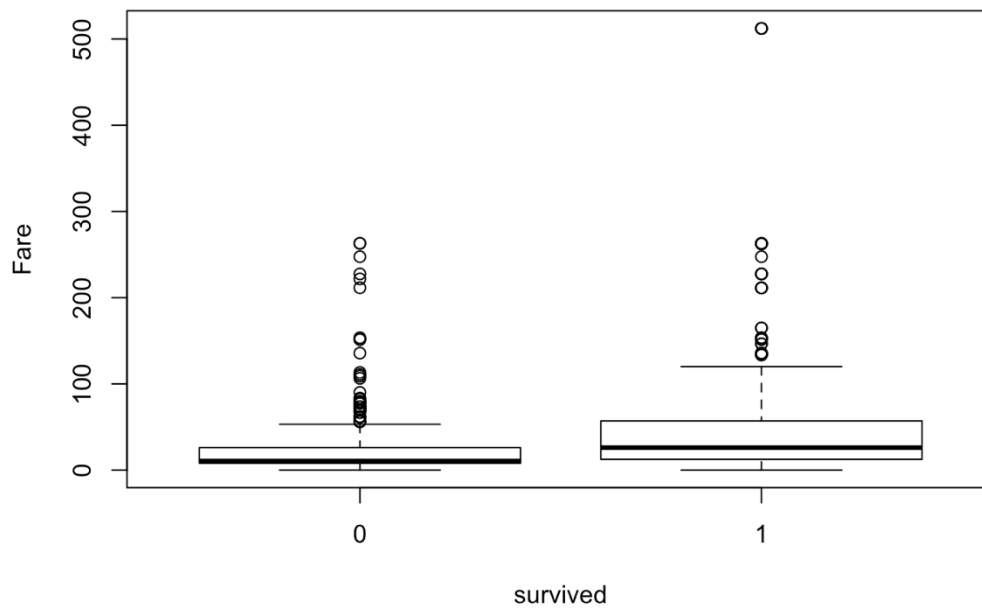
From the perspective of age:



According to the above graph, we can make the following conclusion:

1. Old passengers maintain lower possibility to survive
2. Survived passengers are mostly in the 20 to 40 years-old, in the meantime only few aged passengers could survive from this accident

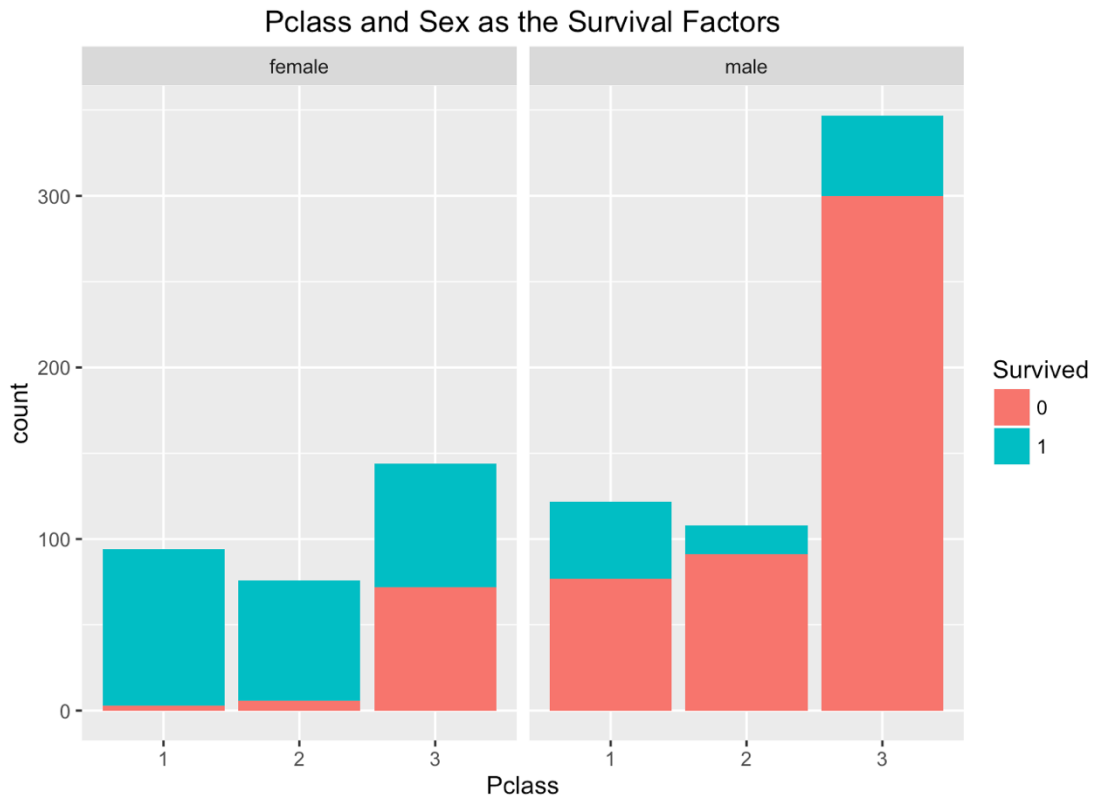
From the perspective of fare:



from the above picture, we can see that the survivors' fare is higher than the victims.

In the following we combine different two row as survival factors:

1) Pclass and sex as the survival factors:



For female passengers:

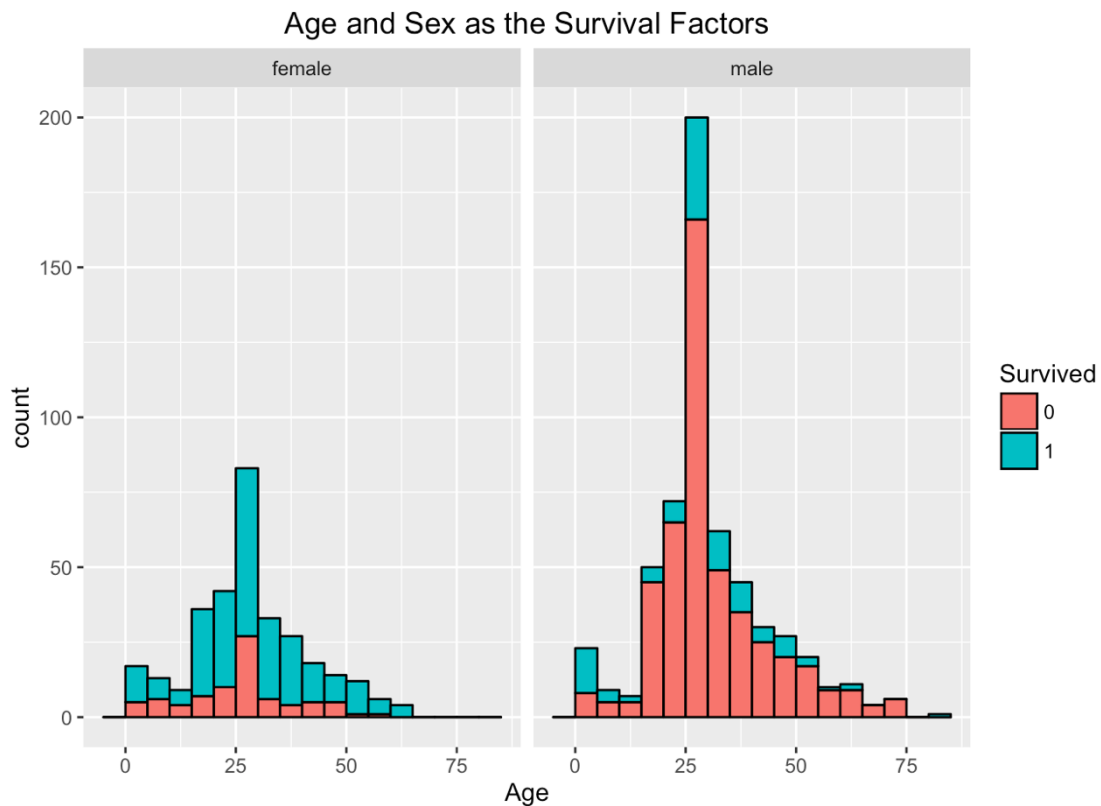
1. When Pclass equals to 1 or 2, they have the highest possibility to survival
2. When Pclass equals to 3, female passengers have approximate 50% rate to survival

For male passengers:

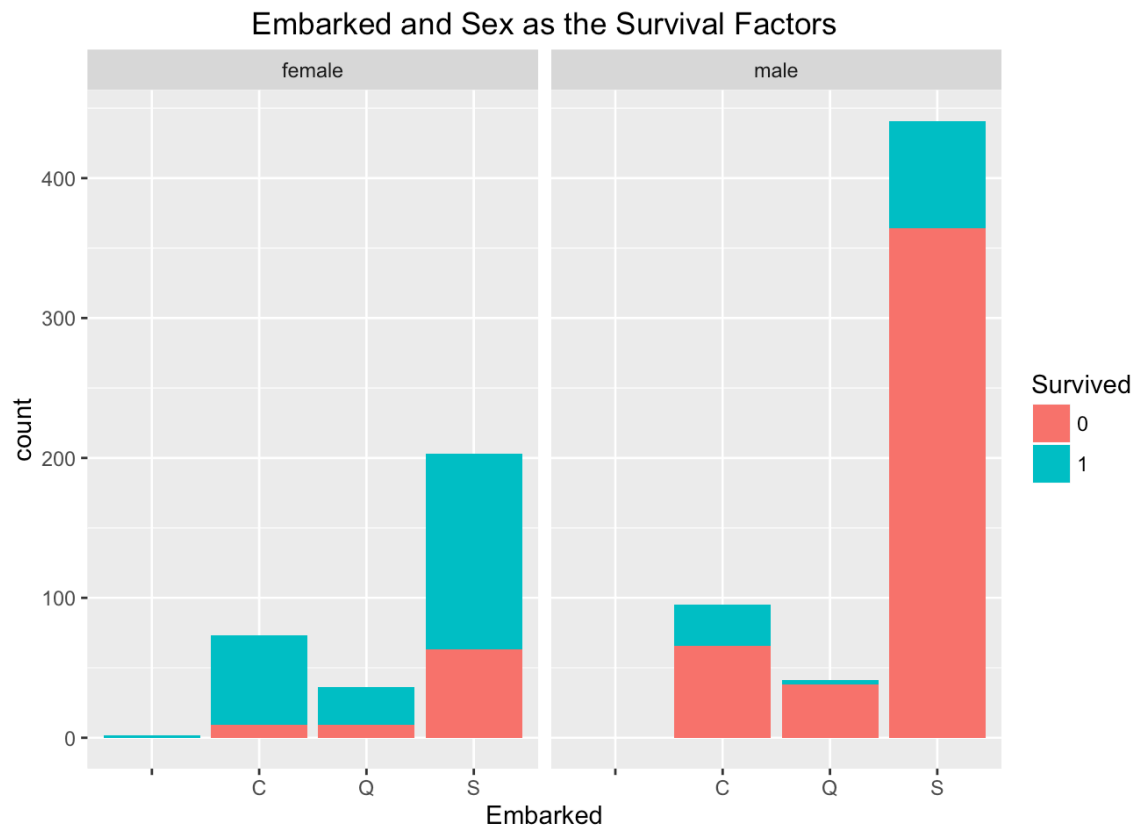
1. Pclass is a really important factor to influence final result. When Pclass equals to 3 or 2, male passengers maintain really low chance to survive

So we can say that most of passengers on the Titanic are gentleman for they left opportunities to women.

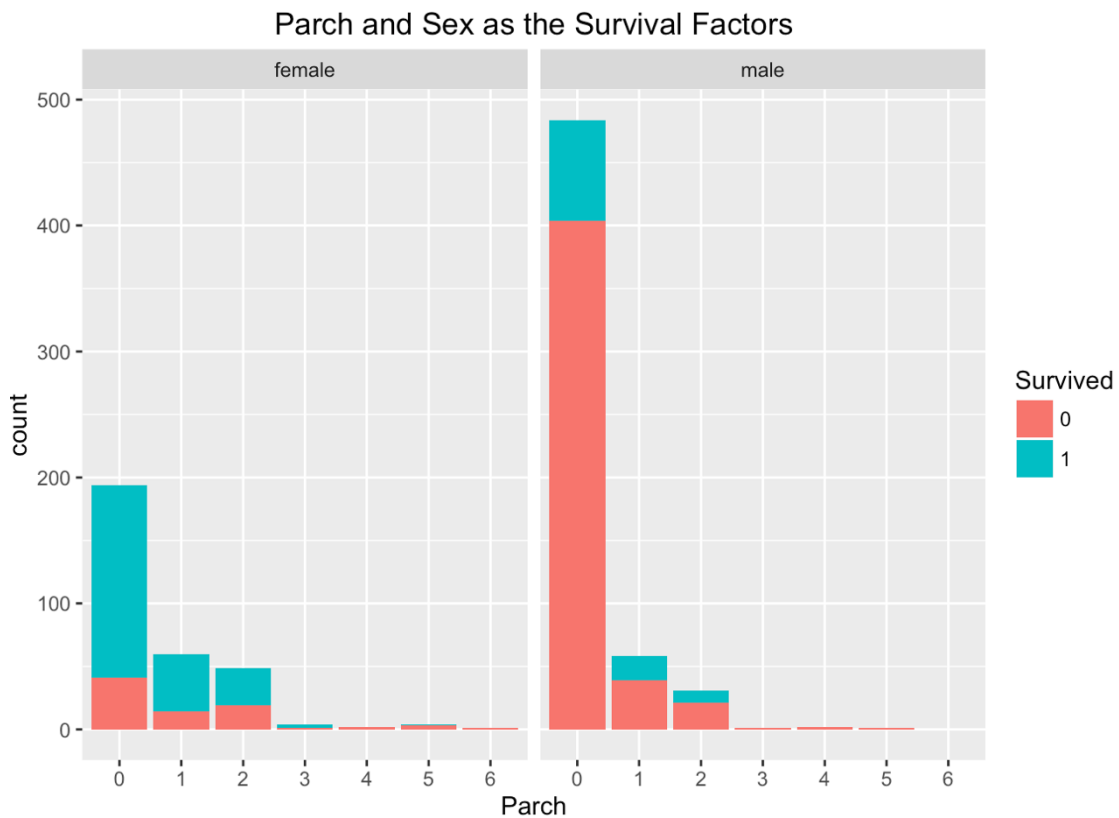
Combine gender with age as influenced factor:



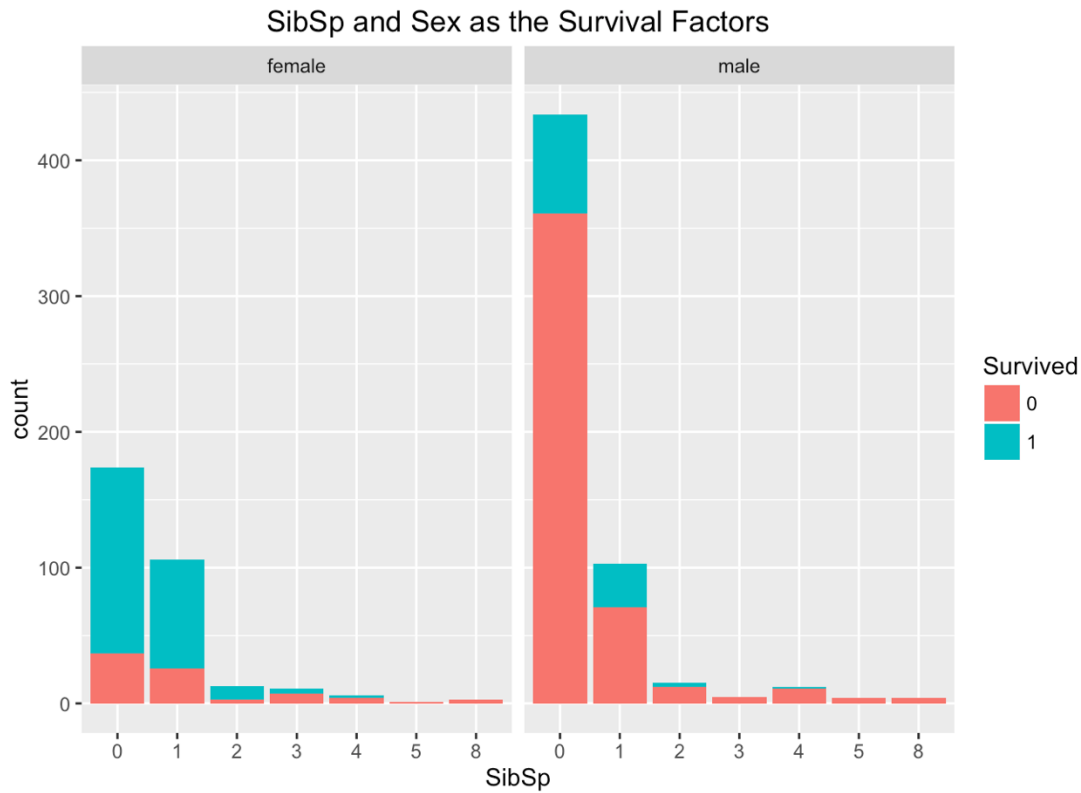
1. For female passengers, all ages have a higher survival rate.
2. For male passengers, although from 25 years old to 50 years old have the largest number of survive male passenger, it has much more male passengers didn't make it
3. Combine the two picture, we can see that passengers try their best to keep little kids survive. Because even for little boy, they have more survive than not.



1. Like Pclass, embarked also a really important factor influence final result
2. For male passengers, when embarked is Q, the have tiny chance to survive.
3. Only from the survive number, when passengers belong to "S" group, they have higher chance to survive.



1. Generally speaking, female passengers still have higher chance to survive in different parch group. And when parch is 0, more than half female passengers could survive
2. Only for survive number, the "0" parch group has the most survived male passengers
3. Also we can see that if the smaller parch number of group is, the more passenger of this group could survive.



1. Generally speaking, female passengers still have higher chance to survive in different SibSp group. And when the group number is 0 and 1, more than half female passengers could survive
2. Only for survive number, the "0" and "1" SibSp group has the most survived male passengers
3. Also we can see that if the smaller SibSp number of group is, the more passenger of this group could survive.

Final conclusion :

From the result of our above analysis, we can draw the following two conclusions:

- 1 The Titanic with a group of a gentleman, because with different combination of other factor with gender. We can see that female passengers group maintain higher survive possibility than male passengers under similar situation
- 2 Gentlemen' s good will only for women, within the whole male group, the higher class the male passenger belongs to, the higher possibility he will survive