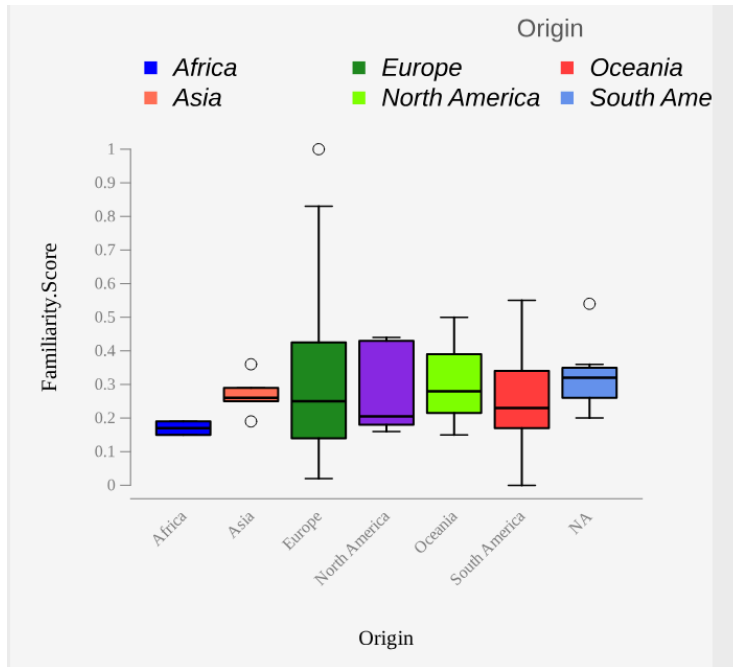


Question 1

ANOVA:

1. **Assumptions:** First we must assume the subjects chosen were randomly selected and that the observations were independent.



In addition based on the boxplots for each group we can see they are somewhat normally distributed.

2. Null and Alternative hypothesis:

Ho: The means among each group are the same

Ha: The mean in at least one group is different

ANOVA Table

Model: Familiarity.Score ~ Origin
H0: The means for all levels are equal

Source	DF	Sum of Squares	Mean Square	F Value	Pr>F	BFB
Origin	6	0.086189	0.0143648	0.378705	0.891193	1
Residual	108	4.0966	0.0379315			

3. **Conclusion:** At $p = 0.8912$ which is greater than alpha at 0.5, we reject the alternative hypothesis in favor of the null hypothesis. This means that among the different origins there's no significant difference between mean Familiarity Score.

Question 2

Chi Squared test

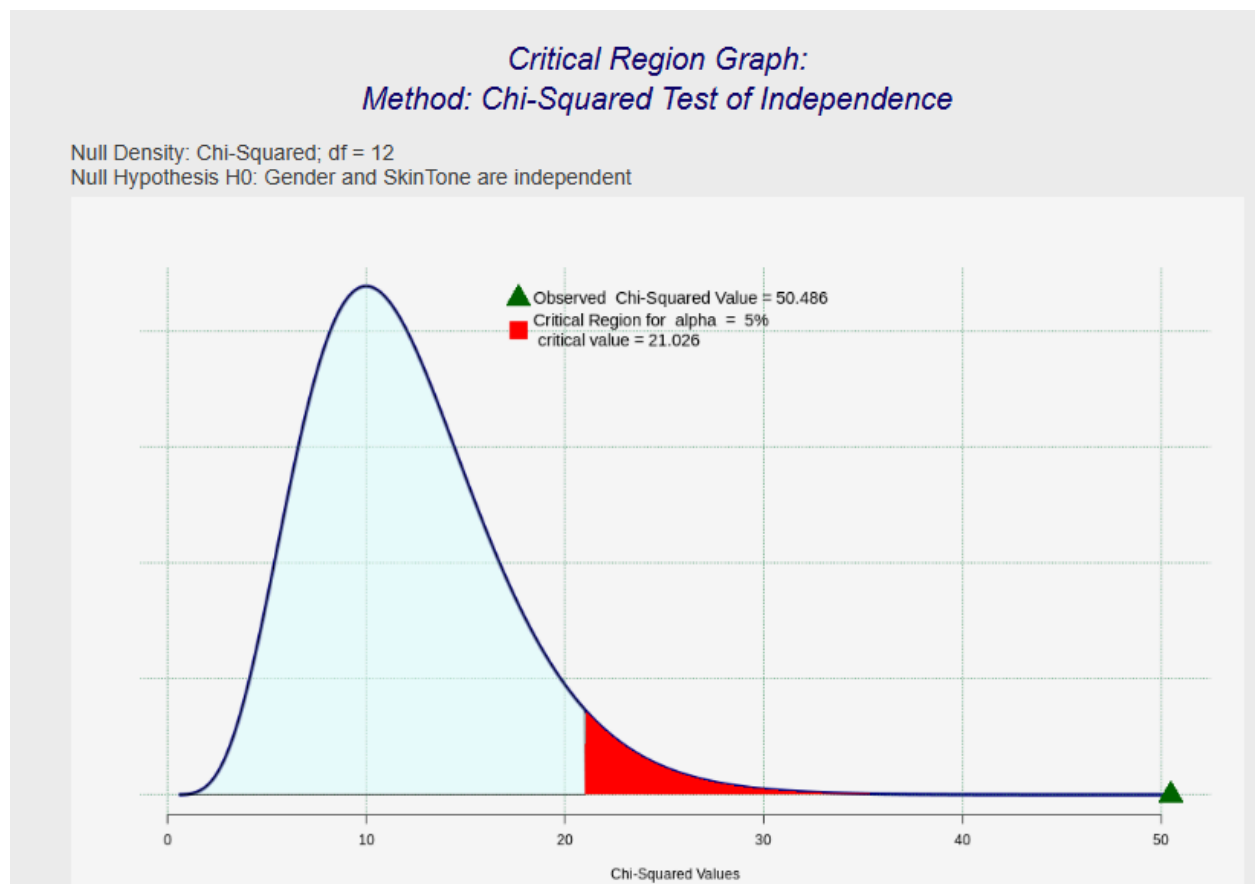
1. Assumptions:

Each case is independent of all other cases in the table
DF is greater than one.

2. Null and Alternative hypothesis:

Ho: Gender and SkinTone are independent

Ha: Gender and SkinTone are associated



- 3. Conclusion:** At $p = 0$ which is less than alpha at 0.5, we reject the null hypothesis in favor of the alternative hypothesis. This means Gender and Skin Tone are associated