

Lab Session 3 Solutions

Here are short numerical solutions to the Lab Session 3 exercises 4 and 5. Solutions for questions 1, 2 and 3 can be found in the LabSession3.1.R, LabSession3.2.R and LabSession3.3.R.

1. See accompanying R file
2. See accompanying R file
3. See accompanying R file

4. Male

Observed test statistic	8.196
Degrees of freedom	2
Rejection Region	> 5.99
p-value	0.02
Conclusion	Evidence of an association between Age and TV viewing for combined males at 5% level

Female

Observed test statistic	3.273
Degrees of freedom	2
Rejection Region	> 5.99
p-value	0.15
Conclusion	Insufficient evidence of an association between Age and TV viewing for females at 5% level

Combined Male and Female

Observed test statistic	10.595
Degrees of freedom	2
Rejection Region	> 5.99
p-value	< 0.01
Conclusion	Evidence of an association between Age and TV viewing for combined male and female data at 5% level

5.

Observed test statistic	8.66
Degrees of freedom	4
Rejection Region	> 9.488
p-value	0.070
Conclusion	Insufficient evidence to reject that the data is due to chance (follows Uniform distribution) at 5% level