

Module 4 - Contingency Tables

{{Student Name}}

2020-08-24

Instructions

I am giving you both the raw data and the answer for the *report* section. Your goal is to: * Make a **rmd** file that knits to the PDF answer * Answer the questions in the *analysis* section * Do not hard code the *report* section * Hard coding the *analysis* section is allowed Please match the *report* and *analysis* sections as close as you can.

Please submit both the **rmd** and your knitted PDF to the link on Canvas.

The data file is on Canvas as **data.csv**

Remove the Instructions section from your final Knit.

Analysis

1. **Table 1** has a χ^2 value of _____ and is/is not significant.
2. The **Odds Ratio** for Table 1 tells us that _____.
3. **Table 2** has a χ^2 value of = _____ and is/is not significant.
4. The **Odds Ratio** for Table 2 tells us that _____.
5. The Odds Ratios for the two tables seem to be at odds. This can be **explained** as _____.

Tables

Table 1: Company wide hiring

	Hired	Not Hired	Total	% Hired	Odds(Hired)
Male	1655	2062	3717	44.5	0.803
Female	769	1765	2534	30.3	0.436

Table 2: Division based hiring

		Hired	Not Hired	Total	% Hired	Odds(Hired)
A	Male	707	432	1139	62.1	1.637
	Female	123	26	149	82.6	4.731
B	Male	488	286	774	63.0	1.706
	Female	23	11	34	67.6	2.091
C	Male	166	283	449	37.0	0.587
	Female	279	540	819	34.1	0.517
D	Male	191	385	576	33.2	0.496
	Female	181	337	518	34.9	0.537
E	Male	73	191	264	27.7	0.382
	Female	130	413	543	23.9	0.315
F	Male	30	485	515	5.8	0.062
	Female	33	438	471	7.0	0.075