

Andrea Negron
 EDG 500
 April 15, 2023

Ch. 16

Candidate			
	Observed N	Expected N	Residual
Jane Smith	11	10.0	1.0
John Doe	9	10.0	-1.0
Total	20		

Test Statistics		Candidate
Chi-Square		.200 ^a
df		1
Asymp. Sig.		.655

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 10.0.

Ex. 16

Color			
	Observed N	Expected N	Residual
Tan	5	6.7	-1.7
Blue	12	6.7	5.3
Brown	3	6.7	-3.7
Total	20		

Test Statistics		Color
Chi-Square		6.700 ^a
df		2
Asymp. Sig.		.035

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 6.7.

- A. $n = 5$
- B. $n = 12$
- C. $n = 3$
- D. Chi-square is 6.70.
- E. The associated probability is 0.035.
- F. Yes, the values are statistically significant.
- G. Students favored blue pants ($n = 12$) over tan and brown ($n = 5$ and $n = 3$ respectively).
The difference was statistically significant at the .05 level (Chi-Square = 6.70, $df = 2$).

Ch. 17

Case Processing Summary

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * Vote	24	100.0%	0	0.0%	24	100.0%

Gender * Vote Crosstabulation

			Vote		Total
			Yes	No	
Gender	Male	Count	8	4	12
		% within Gender	66.7%	33.3%	100.0%
	Female	Count	5	7	12
		% within Gender	41.7%	58.3%	100.0%
Total		Count	13	11	24
		% within Gender	54.2%	45.8%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.510 ^a	1	.219		
Continuity Correction ^b	.671	1	.413		

Likelihood Ratio	1.527	1	.217		
Fisher's Exact Test				.414	.207
Linear-by-Linear Association	1.448	1	.229		
N of Valid Cases	24				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.50.

b. Computed only for a 2x2 table

Ex. 17

Case Processing Summary

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
Experience * Approval	20	100.0%	0	0.0%	20	100.0%

Experience * Approval Crosstabulation

		Approval		Total	
		Approve	Disapprove		
Experience	Experienced	Count	7	3	10
		% within Experience	70.0%	30.0%	100.0%
	Inexperienced	Count	3	7	10
		% within Experience	30.0%	70.0%	100.0%
Total		Count	10	10	20
		% within Experience	50.0%	50.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.200 ^a	1	.074		

Continuity Correction ^b	1.800	1	.180		
Likelihood Ratio	3.291	1	.070		
Fisher's Exact Test				.179	.089
Linear-by-Linear Association	3.040	1	.081		
N of Valid Cases	20				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.00.

b. Computed only for a 2x2 table

- a. 7 experienced teachers approved.
- b. 3 inexperienced teachers approved.
- c. Chi-square is 3.200.
- d. The associated probability is 0.074.
- e. No, the results are not statistically significant.
- f. More experienced teachers approved of the new curriculum than inexperienced teachers. However, the relationship between experience and approval was not statistically significant at the 0.05 level (Chi-square = 3.200, $df = 1$).