

Chi-sq association test set-up

Obs	Color_code	Color_code_num	Group	group_code	Freq
1	Orange	1	class	1	440
2	Orange	1	mybag	2	2
3	Not_oran	0	class	1	1581
4	Not_oran	0	mybag	2	54

Chi-sq association test of bag_size vs likelihood of selecting the orange color

The FREQ Procedure

Frequency Percent Row Pct Col Pct	Table of Group by Color_code			
	Group(my bag vs class)	Color_code(orange or not orange)		
		Not_oran	Orange	Total
	class	1581 76.12 78.23 96.70	440 21.18 21.77 99.55	2021 97.30
	mybag	54 2.60 96.43 3.30	2 0.10 3.57 0.45	56 2.70
	Total	1635 78.72	442 21.28	2077 100.00

Statistics for Table of Group by Color_code

Statistic	DF	Value	Prob
Chi-Square	1	10.7744	0.0010
Likelihood Ratio Chi-Square	1	15.0643	0.0001
Continuity Adj. Chi-Square	1	9.7153	0.0018
Mantel-Haenszel Chi-Square	1	10.7692	0.0010
Phi Coefficient		-0.0720	
Contingency Coefficient		0.0718	
Cramer's V		-0.0720	

Fisher's Exact Test	
Cell (1,1) Frequency (F)	1581
Left-sided Pr <= F	0.0002
Right-sided Pr >= F	1.0000
Table Probability (P)	0.0001
Two-sided Pr <= P	0.0004

Sample Size = 2077