AMS7
Lecture 15
7/22/16

Office hours Mon 9-10
Final due @ noon

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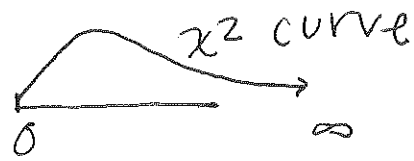
Smoking Case Study Continued

Remember: • mult. by proportions to get expected values $\hat{E}_{ij}$.
• residuals add up to 0



Chi-Squared $\chi^2 = 3.062$

residuals	+7.3	-7.3	0
	+1.8	-1.8	0
not →	-9.1	+9.1	0
	0	0	0
	free to vary	not	

only 2 cells are free to vary
So the correct way ... DF = 2

P-value ≈ 22%
↑ too big... null might be correct - this difference is not stat sig → didn't collect enough data (increase n)

Remember - these are just estimations
$\hat{SE}(p_G - \hat{p}_I)$ = estimated difference
= 4.6

Bonferroni Idea Adjust 1.96 to make C.I.
increase multiplier
$\hat{p}_I - \hat{p}_P \pm 2.39\, \hat{SE}$
etc

Are they stat sig? Pair wise analysis (Bonferroni) still NOT
should agree

Section 9: Decision Making

L-314

A is the set of actions, a is uncertain outcomes, C is consequences,
u is utility number (large u is preferred)
Maximizing Expected Utility
Find speed R
(if using calculus, derive)

20% chance getting ticket
Max 80.4