










Lab 9: Marginal effects

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How does the data look like?

Variable							→	Average 
humancause	1	0	1	1	1	1		
party7	7	3	3	6	5	3		4.14
white	0	1	1	1	0	0		0.71
educ	11	13	16	13	13	14		12.33
male	1	0	1	0	0	0		0.51
age	23	30	76	26	27	27		49.7
agesq	529	900	5776	676	729	729		2769.8
incomecat	17	19	18	7	14	16		13.9













Marginal effects at means (MEMs)

Variable	Average 	Average 
Humancause(HC)	$\widehat{Pr}(HC = 1 \text{male} = 1, \text{at means})$	$\widehat{Pr}(HC = 1 \text{male} = 0, \text{at means})$
party7	4.14	4.14
white	0.71	0.71
educ	12.33	12.33
male	1	0
age	49.7	49.7
agesq	2769.8	2769.8
incomecat	13.9	13.9

Marginal effect of being male:

$$\widehat{Pr}(HC = 1 | \text{male} = 1, \text{at means}) - \widehat{Pr}(HC = 1 | \text{male} = 0, \text{at means})$$

Average marginal effects (AMEs)

						→	
$\widehat{Pr}_1(HC = 1)$	$\widehat{Pr}_2(HC = 1)$	$\widehat{Pr}_3(HC = 1)$	$\widehat{Pr}_4(HC = 1)$	$\widehat{Pr}_5(HC = 1)$	$\widehat{Pr}_6(HC = 1)$...	$\widehat{Pr}_{\text{mean}}(HC = 1 \text{male} = 1)$
						→	
$\widehat{Pr}_1(HC = 1)$	$\widehat{Pr}_2(HC = 1)$	$\widehat{Pr}_3(HC = 1)$	$\widehat{Pr}_4(HC = 1)$	$\widehat{Pr}_5(HC = 1)$	$\widehat{Pr}_6(HC = 1)$...	$\widehat{Pr}_{\text{mean}}(HC = 1 \text{male} = 0)$

Marginal effect of being male:

$$\widehat{Pr}_{\text{mean}}(HC = 1 | \text{male} = 1) - \widehat{Pr}_{\text{mean}}(HC = 1 | \text{male} = 0)$$