

GVPT 722: Illustrations of Bias Created by Excluding a Relevant Variable

(1) 2004 NES - regressions of comparative candidate evaluations on religious commitment, without and with control for party identification

```
. reg candeval commit, beta
```

Source	SS	df	MS	Number of obs =	1162
Model	1.96963811	1	1.96963811	F(1, 1160) =	27.85
Residual	82.0370524	1160	.070721597	Prob > F =	0.0000
				R-squared =	0.0234
				Adj R-squared =	0.0226
Total	84.0066905	1161	.072357184	Root MSE =	.26594

candeval	Coef.	Std. Err.	t	P> t	Beta
commit	.1318307	.0249804	5.28	0.000	.1531215
_cons	.4399762	.0152365	28.88	0.000	.

```
. reg candeval commit partyid, beta
```

Source	SS	df	MS	Number of obs =	1146
Model	48.5430465	2	24.2715232	F(2, 1143) =	804.71
Residual	34.4749094	1143	.030161776	Prob > F =	0.0000
				R-squared =	0.5847
				Adj R-squared =	0.5840
Total	83.0179559	1145	.072504765	Root MSE =	.17367

candeval	Coef.	Std. Err.	t	P> t	Beta
commit	.0903098	.0164697	5.48	0.000	.1047417
partyid	.0963376	.0024515	39.30	0.000	.7506561
_cons	.1842843	.0119366	15.44	0.000	.

(2) State-level data: regression of Bush percentage of vote in 2004 on evangelical percentage of population, without and with control for state opinion liberalism

```
. reg pbush04 ev_tot, beta
```

Source	SS	df	MS	Number of obs =	48
Model	819.236731	1	819.236731	F(1, 46) =	14.97
Residual	2517.35953	46	54.7252073	Prob > F =	0.0003
				R-squared =	0.2455
				Adj R-squared =	0.2291
Total	3336.59627	47	70.9914099	Root MSE =	7.3976

pbush04	Coef.	Std. Err.	t	P> t	Beta
ev_tot	.3678852	.0950827	3.87	0.000	.4955105
_cons	47.54229	1.819247	26.13	0.000	.

```
. reg pbush04 ev_tot opinlib, beta
```

Source	SS	df	MS		
Model	1944.09886	2	972.049431	Number of obs =	48
Residual	1392.4974	45	30.9443868	F(2, 45) =	31.41
Total	3336.59627	47	70.9914099	Prob > F =	0.0000
				R-squared =	0.5827
				Adj R-squared =	0.5641
				Root MSE =	5.5628

pbush04	Coef.	Std. Err.	t	P> t	Beta
ev_tot	.0959252	.0845384	1.13	0.263	.1292032
opinlib	-53.56804	8.884788	-6.03	0.000	-.68652
_cons	44.90986	1.435994	31.27	0.000	.

(3) State-level data: regression of Bush percentage of vote in 2004 on % graduated from college, without and with control for state opinion liberalism

```
. reg pbush04 college, beta
```

Source	SS	df	MS		
Model	740.607276	1	740.607276	Number of obs =	48
Residual	2595.98899	46	56.4345432	F(1, 46) =	13.12
Total	3336.59627	47	70.9914099	Prob > F =	0.0007
				R-squared =	0.2220
				Adj R-squared =	0.2051
				Root MSE =	7.5123

pbush04	Coef.	Std. Err.	t	P> t	Beta
college	-.865586	.2389399	-3.62	0.001	-.4711315
_cons	75.65632	6.281837	12.04	0.000	.

```
. reg pbush04 college opinlib, beta
```

Source	SS	df	MS		
Model	1917.98726	2	958.99363	Number of obs =	48
Residual	1418.609	45	31.5246445	F(2, 45) =	30.42
Total	3336.59627	47	70.9914099	Prob > F =	0.0000
				R-squared =	0.5748
				Adj R-squared =	0.5559
				Root MSE =	5.6147

pbush04	Coef.	Std. Err.	t	P> t	Beta
college	-.1414409	.214319	-0.66	0.513	-.0769852
opinlib	-55.62608	9.102176	-6.11	0.000	-.7128955
_cons	49.79559	6.320608	7.88	0.000	.