

Example

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.578(a)	.334	.331	.389

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.916	.089		10.331	.000
	Religiosity	.229	.100	.187	2.291	.022
	GWB Therm	-.008	.001	-.432	-6.240	.000
	Rel*GWB Therm	-.003	.001	-.248	-2.294	.022

Dependent Variable

Degree of unfairness of the last election (higher values more unfair, measured on a 4 pt scale)

Independent Variables

Religiosity/X₁: dummy, 0 not religious, 1 religious

GWB Therm/X₂: 0-100 self placement scale for how much they like Bush, higher values like GWB more

Rel*GWB Therm/X₃: interaction term between religiosity and GWB thermometer (no interaction if not religious)

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3$$

X₁

When the respondent is religious, they perceive the election to be .229 points more unfair than a non religious individual.

Intercept for non religious: $Y = .916 + .229 * X_1 \rightarrow Y = .916 + .229 * 0 \rightarrow Y = .916$

Intercept for religious: $Y = .916 + .229 * X_1 \rightarrow Y = .916 + .229 * 1 \rightarrow Y = 1.145$

X₂

As the respondent places Bush one point higher on the Bush thermometer, the perceived unfairness of the election decreases by .008 points. Makes sense, people who liked Bush more would think that the election was fairer.

Regression for nonreligious: $Y = .916 + (-.008) * X_2 \rightarrow Y = .916 - .008 * X_2$

Regression for religious: $Y = (.916 + .229) + (-.008) * X_2 \rightarrow Y = 1.145 - .008 * X_2$

X₃

As a religious respondent places Bush one point higher on the Bush thermometer, the perceived unfairness of the election decreases by (-.003+-.008) points. Religion acts as a mediating factor. Respondents who liked Bush more think the election was fairer than people who didn't, and religious people who liked Bush think the election was even fairer than non-religious people who liked Bush.

Regression for non religious: $Y = .916 + (-.008 + (-.003 * X_3)) * X_2 \rightarrow$

$Y = .916 + (-.008 + (-.003 * 0)) * X_2 \rightarrow Y = .916 - .008 * X_2$

Regression for religious: $Y = (.916 + .229) + (-.008 + (-.003 * X_3)) * X_2 \rightarrow$

$Y = (.916 + .229) + (-.008 + (-.003 * 1)) * X_2 \rightarrow Y = 1.145 - .011 * X_2$

IMPORTANT THINGS TO REMEMBER:

Dummy variables modify the constant.

Interaction terms modify the slope.

Coefficients: Interpret as a one unit increase in the independent variable results in a _____ unit increase/decrease in the dependent variable. Must be as specific as possible when interpreting coefficients, tell me what the units are (\$, % pts etc.), independent, dependent, whether it is an increase or decrease and what the change. Telling if it is positive or negative is not enough

When doing a hypothesis test: say accept or reject and when answering why you made this decision, must address significance and direction (does it match the hypothesized direction). Need all three to receive full credit.