Summary Notes on Statistical Elaboration
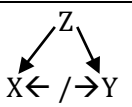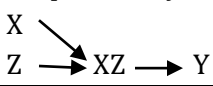
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Name of Effect	Symbolic Representation	Crosstab Results	Regression Results
Replication	Irrespective of Z X←→Y	Same results in control tables as in original table without controls	X predicts Y with and without Z being in equation
Interpretation	X→Z→Y	All control tables show weaker relationship than original table	Entering Z into equation reduces or eliminates X's influence on Y
Explanation	Z ↙ ↘ X← /→Y	All control tables show weaker relationship than original table	Entering Z into equation reduces or eliminates X's influence on Y

Specification	If Z = 1
	  X←→Y
	If Z ≠ 1
	  X←/→Y
	Or, preferably
	X ↘
	Z →XZ → Y
		Only one (or some) of control tables show relationship from original table	An interaction term of the form X*Z predicts Y

Suppression	Without control for Z:
	
	  X←/→Y
	
	With control for Z
	
	  X←→Y
		Control tables reveal a relationship that was not evident in original table without controls	Entering Z into equation allows X to predict Y