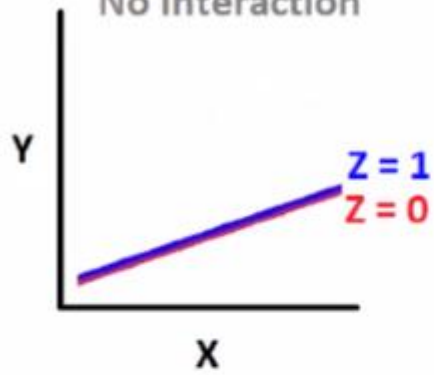
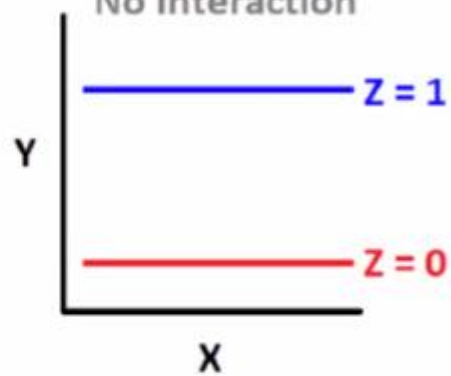


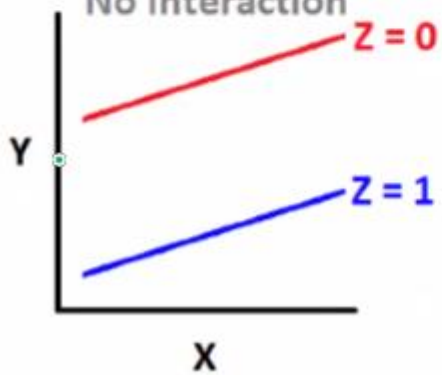
X Related to Y
Z Not Related to Y
No Interaction



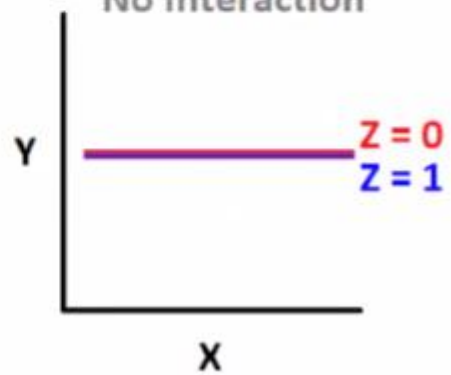
X Not Related to Y
Z Related to Y
No Interaction



X Related to Y
Z Related to Y
No Interaction

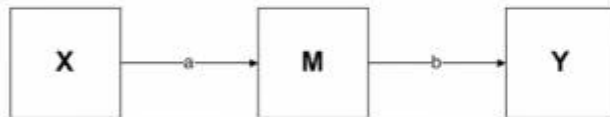


X Not Related to Y
Z Not Related to Y
No Interaction



Mediation

Complete Mediation

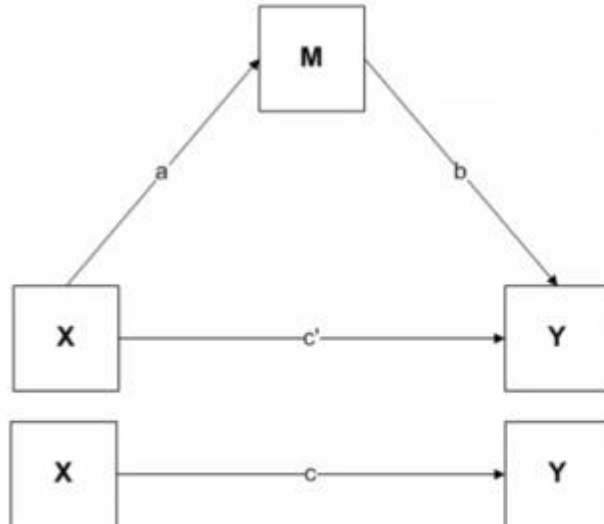


$$Y = B_0 + B_1X + e \rightarrow B_1 = c$$

$$M = B_0 + B_1X + e \rightarrow B_1 = a$$

$$Y = B_0 + B_1X + B_2M + e \rightarrow B_1 = c', B_2 = b$$

Partial Mediation



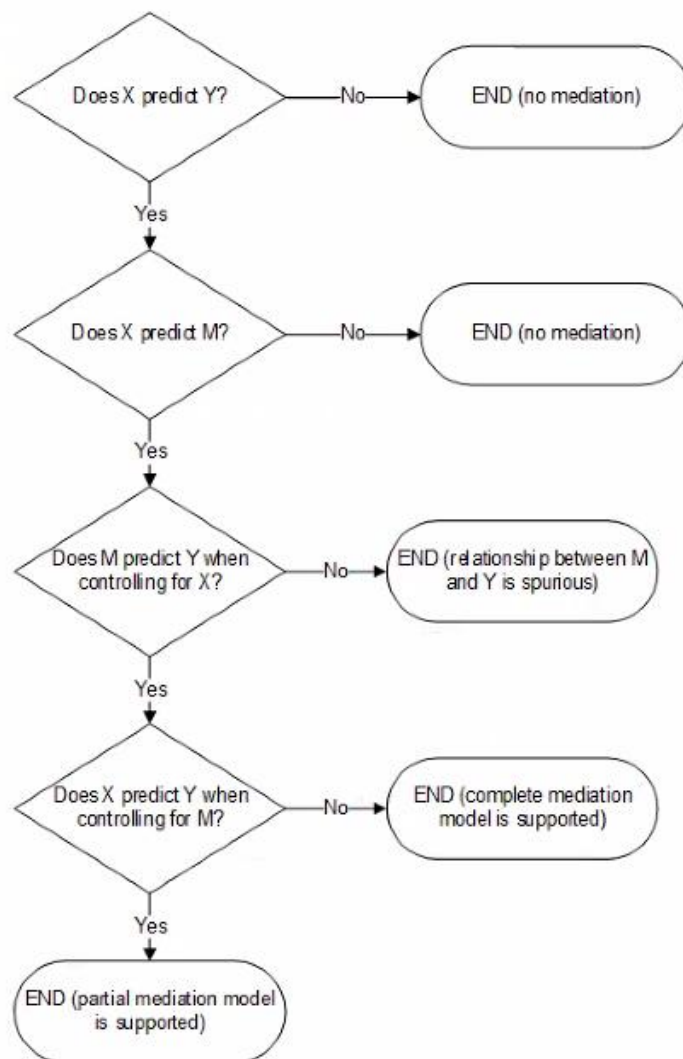
Total effect = Direct effect + Indirect effect

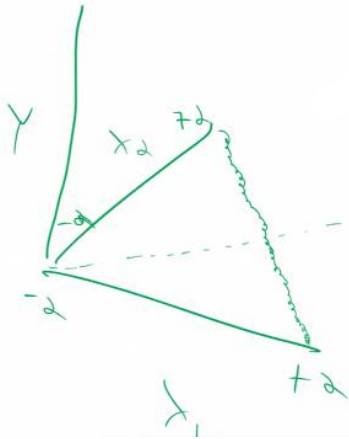
$$c = c' + ab$$

Complete Mediation: $c = a * b, \therefore c' = 0$

Partial Mediation: $c > (a * b), \therefore c' > 0$; direct effect = c'

Series of Tests to Support or Disconfirm Complete Mediation





$$a_1 \text{ linear-Agreement} = B_1 + B_2$$

$$a_2 \text{ quad-Agree} = B_3 + B_4 + B_5$$

$$a_3 \text{ linear-incongruence} = B_1 - B_2$$

$$a_4 \text{ quad-incongruence} = B_3 - B_4 + B_5$$

$$Y = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_1^2 + B_4 X_1 X_2 + B_5 X_2^2 + e$$