

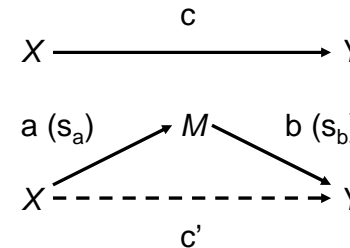
Week of April 6

1. Mediation: What it is
2. Mediation: What it's good for
3. Mediation: How to do it
4. Mediation: An example

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.

Mediation: What It Is

- Mediation occurs when some or all of an effect is transmitted by way of a third variable—the **mediator** or **intervening variable**



Direct and Indirect Effects

- The part of the effect that passes through the mediator is the **indirect effect** of X on Y (i.e., $a * b$)
- The part of the effect that does not pass through the mediator is the **direct effect** of X on Y (i.e., c')
- Together, the indirect and direct effect equal the **total effect** of X on Y (i.e., $c = ab + c'$)

Mediation: What It's Good For

- Most commonly, a mediator is proposed as a specific mechanism by which X affects Y
 - Example: A study has its participants interact with a previously unknown partner for 5 minutes. Afterwards, their partners rate how much they enjoyed the interaction. Partners of extraverts enjoyed the interaction more than did partners of introverts. Why?

Mediation: How To Do It (Baron & Kenny, 1986)

1. Establish that X is related to Y (i.e., establish that there's a relationship to mediate)
 - Regress Y on X (to get c)
2. Establish that X is related to M
 - Regress M on X (to get a and s_a)
3. Establish that M is related to Y
 - Regress Y on M
4. Establish that there is an indirect effect of X on Y transmitted through M
 - Simultaneously regress Y on X and M (to get b , s_b , and c'), then use a , s_a , b , and s_b to conduct a test of the indirect effect

The Sobel Test

- The Sobel test (Sobel, 1982) is the most commonly-reported test of an indirect effect
- Kris Preacher's website includes a Sobel test calculator, as well as a discussion of some alternatives to the Sobel test:
<http://www.unc.edu/~preacher/sobel/sobel.htm>

Exercise

http://psych205.50webs.com/presentations/data_060406.sav

- Working with a partner, follow Baron and Kenny's four steps to determine whether friendly behavior mediates the effect of Extraversion on partners' enjoyment of the interaction. Be sure to...
 - Summarize the direct and indirect effects in a path diagram (like on slide #2)
 - Conduct a formal test of the indirect effect