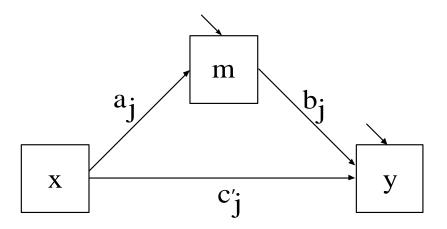
Two-Level Mediation



Indirect effect:

$$\alpha * \beta + Cov(a_j, b_j)$$

Bauer, Preacher & Gil (2006). Conceptualizing and testing random indirect effects and moderated mediation in multilevel models: New procedures and recommendations. Psychological Methods, 11, 142-163.

Input For Two-Level Mediation

```
MONTECARLO:
        NAMES ARE y m x;
        WITHIN = x_i
        NOBSERVATIONS = 1000;
        NCSIZES = 1;
        CSIZES = 100 (10);
        NREP = 100;
MODEL POPULATION:
        %WITHIN%
        c | y ON x;
        b y ON m;
        a m ON x;
        x*1; m*1; y*1;
        %BETWEEN%
        y WITH m*0.1 b*0.1 a*0.1 c*0.1;
        m WITH b*0.1 a*0.1 c*0.1;
        a WITH b*0.1 c*0.1;
        b WITH c*0.1;
        y*1 m*1 a*1 b*1 c*1;
        [a*0.4 b*0.5 c*0.6];
```

Input For Two-Level Mediation (Continued)

```
ANALYSIS:
       TYPE = TWOLEVEL RANDOM;
MODEL:
         %WITHIN%
         c y ON x;
        b | y ON m;
         a m ON x;
        m*1; y*1;
         %BETWEEN%
         y WITH M*0.1 b*0.1 a*0.1 c*0.1;
         m WITH b*0.1 a*0.1 c*0.1;
         a WITH b*0.1 (cab);
         a WITH c*0.1;
         b WITH c*0.1;
        y*1 m*1 a*1 b*1 c*1;
         [a*0.4] (ma);
         [b*0.5] (mb);
         [c*0.6];
MODEL CONSTRAINT:
        NEW(m*0.3);
        m=ma*mb+cab;
```