READING STATISTICAL RESULTS

APPLYING WHAT WE KNOW TO NARANYANAN, TAI, & KINIAS, 2013

WHAT IS THE STUDY'S DESIGN?

Design	
Is this an experiment?	
(If so) What is/are the independent variable(s)?	
How many levels does each IV have and what are they?	

WHAT ARE THE STUDY'S MEASURES AND HOW ARE THEY ANALYZED?

| Measures	
What is (are) the dependent variable(s)?	
Were there any other measures? If so, how are they used (covariate, mediator…)	
Analysis	
What kind of analysis did the researchers perform?	
Was that analysis appropriate given the design and measures?	

WHAT ARE THE STUDY'S RESULTS? WHAT DO THEY MEAN?

Results	
What effects were reliable? Were they large or small? (if they report effect size)	
Are those effects consistent with the researchers' hypotheses? (the direction of the effects or what contrasts are reliable is necessary to answer this question, as well as the p-values of tests).	
(Optional, but useful) Even broader: Do the results raise additional questions that must be answered with a new study?	

NARANYANAN ET AL (2013) EXPT 1 RESULTS

We conducted a single factor (power: high power/low power/ control) between-participants Analysis of Variance (ANOVA) on intention to connect with others. As predicted, there was a significant effect of power on the intention to connect, $F(2,42) = 5.48$, $p < .01$, $\eta_p^2 = .21$. Specifically, high power participants ($M = 8.85$, $SD = 1.84$) showed a significantly greater intention to connect with others than low power participants ($M = 6.40$, $SD = 2.38$), $t(42) = 3.07$, $p < .01$, and control participants ($M = 6.82$, $SD = 2.10$), $t(42) = 2.67$, $p < .05$. There was no significant difference in intention to connect with others between low power participants and control participants, $t(29) = -.52$, $p = .61$.

NARANYANAN ET AL (2013) RESULTS EXPT 2
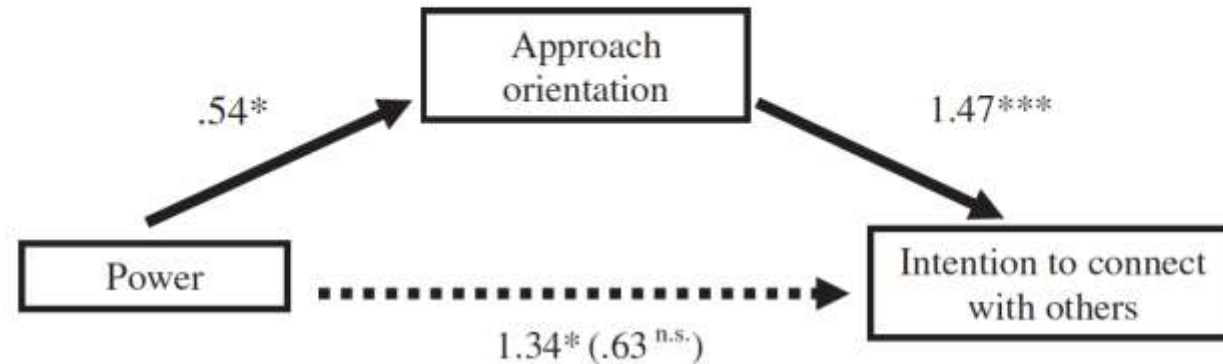
Fig. 1. Results from Study 2: Approach orientation mediates the effects of power on intention to connect with others. Numbers represent standardized regression coefficients; the number in parentheses represents a simultaneous regression coefficients.

MEDIATION REVIEW

Mediating Variable

β_2

β_3

Independent Variable

Dependent Variable

β_1

β_4
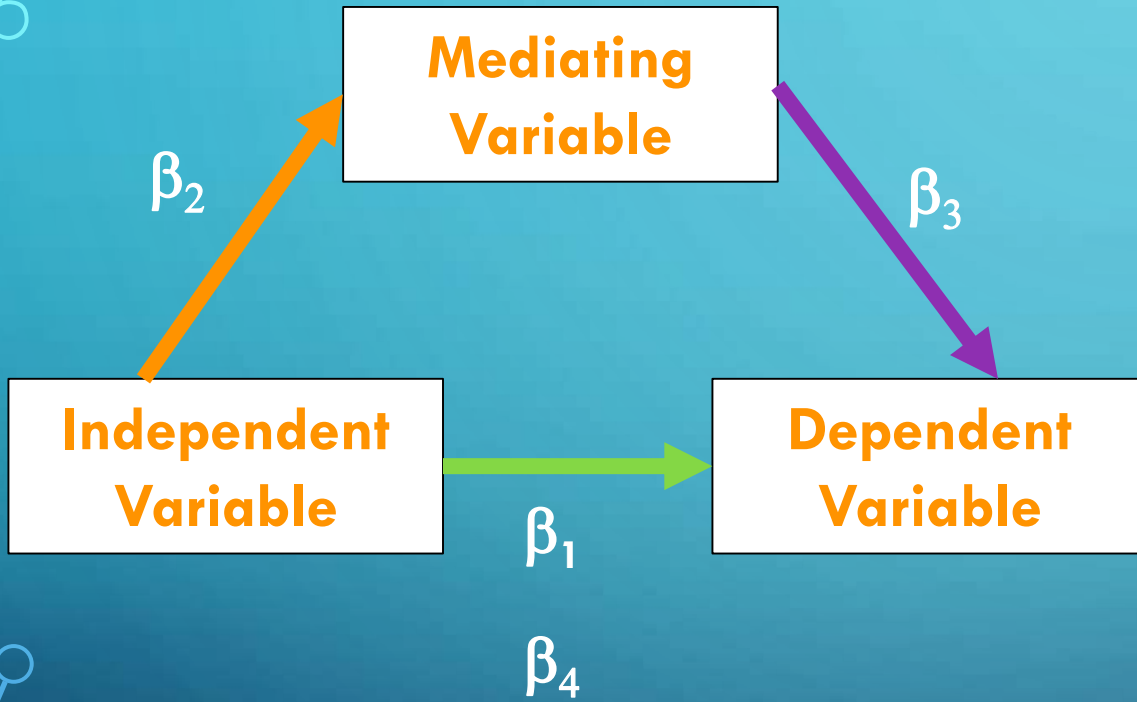
- Three regression equations:

- Direct Path: IV on DV (experimental effect) β_1

- Part of Mediation Path: IV on Mediator
  β_2

- Part of Mediation Path: Mediator and IV on DV

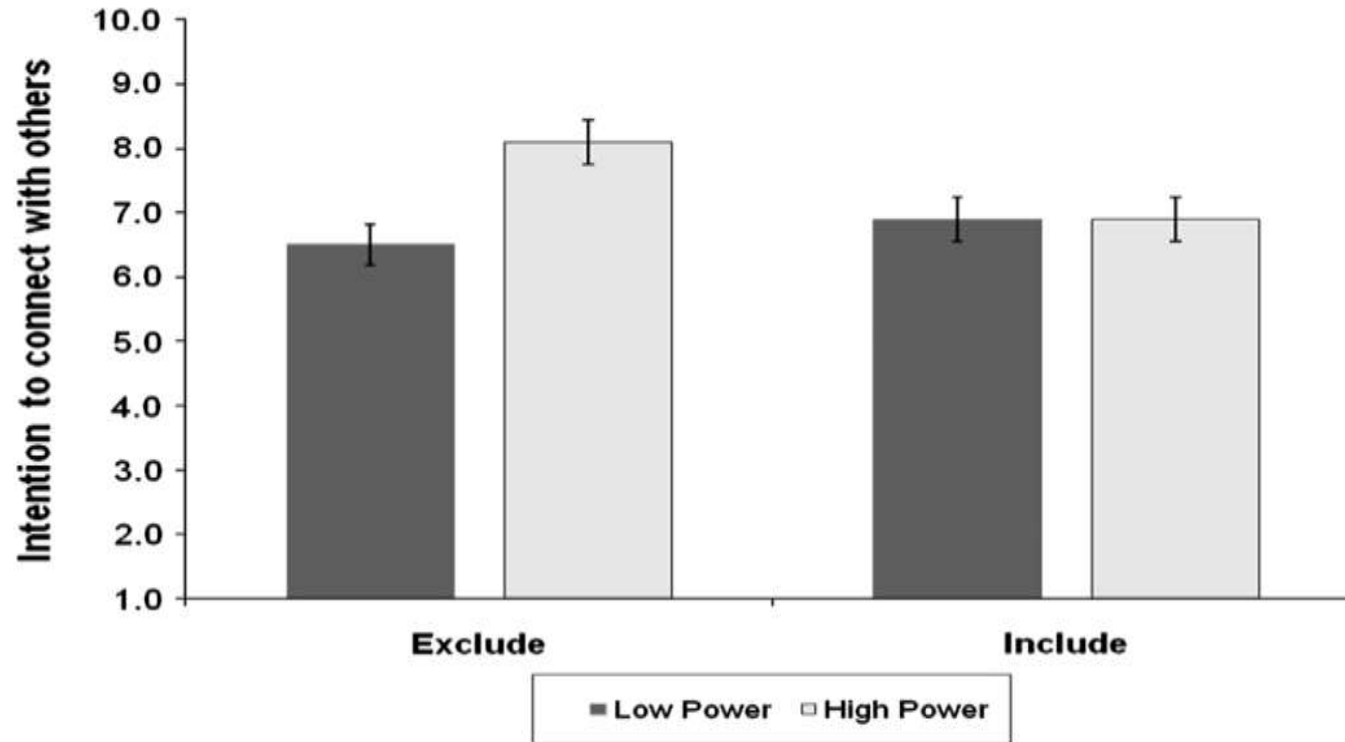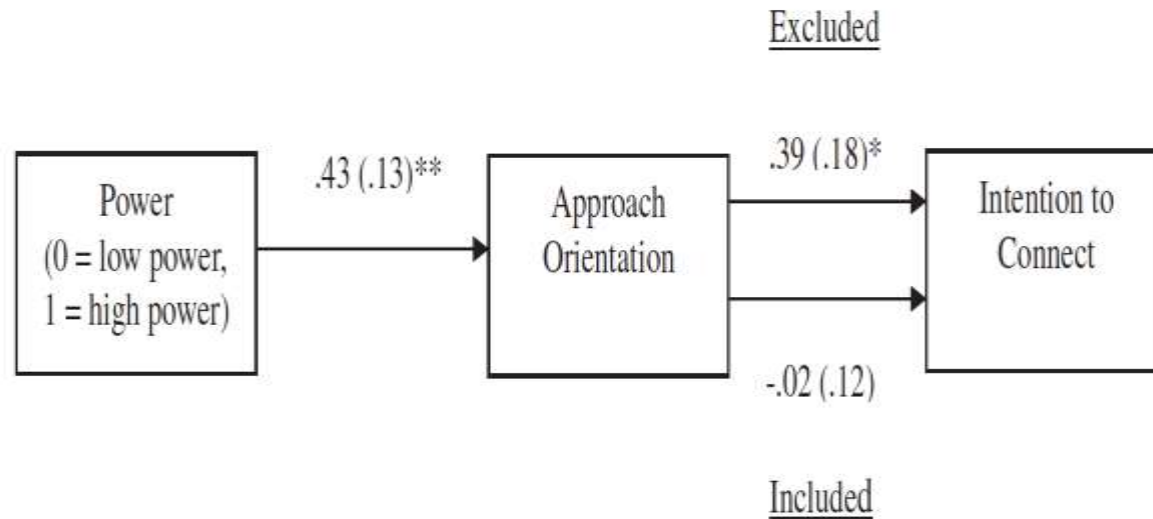 β_3 β_4

EXPERIMENT 3 RESULTS

Fig. 2. Results from Study 3: Mean score on intention to connect with others in respective social feedback conditions (exclude, include). Error bars indicate standard errors of the means.

EXPERIMENT 4 RESULTS

Fig. 4. Results from Study 4: Approach orientation mediates the relation between power and intention to connect when individuals are excluded but not when individuals are included. The b coefficients with standard errors are in parenthesis.

SUMMARY OF RESULTS

- Expt 1: Power (IV) → Intention to Connect with Others (DV)

- Expt 2: Power (IV) → Approach/Avoid Orientation (Mediator) → Intention to Connect with Others (DV)

- Expt 3: Moderation; Contingency for Expt 1 effect

  - Excluded condition: Power (IV) → Intention to Connect with Others (DV)

  - Included condition: NO Power (IV) ⊘ Intention to Connect with Others (DV)

- Expt 4: Combination of Expt 2 and Expt 3 effects, with new DV.