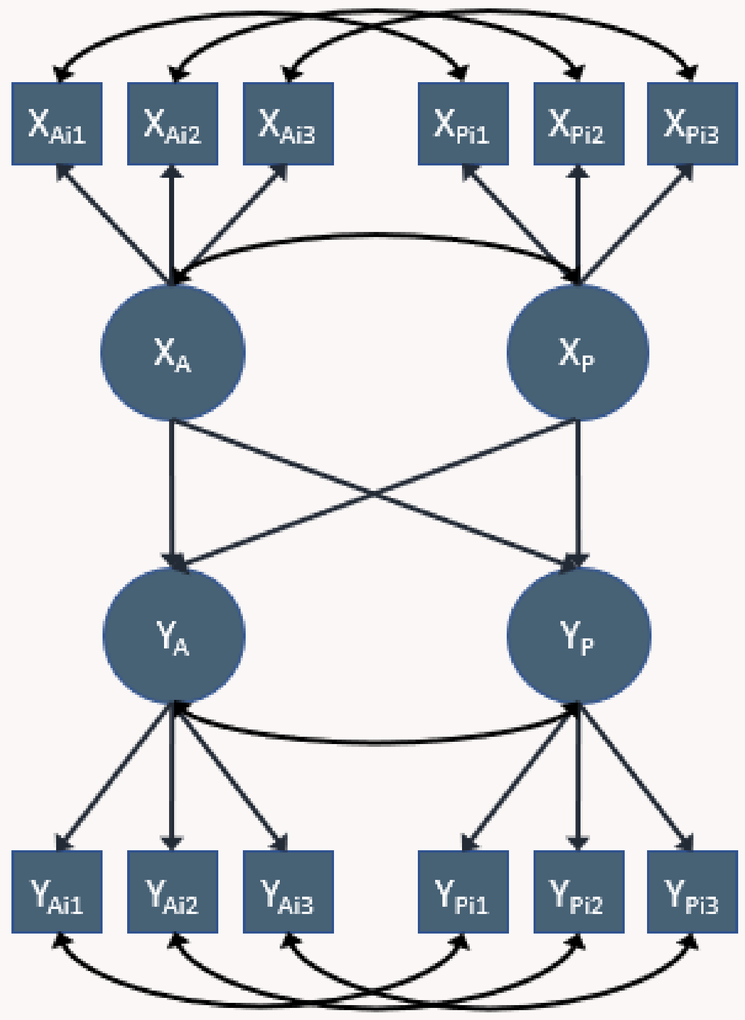
APIMs Next Top Model: Rationale, Empirical Trade-offs, and Analytic Resources of the Latent Actor-Partner Interdependence Model

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What are the methodological trade-offs of conducting an APIM with MLM, Observed SEM, or Latent SEM?



Note: this model does not show all variances and intercepts

The Actor-Partner Interdependence Model (APIM) is the most popular model for analyzing dyadic data and is most frequently done using **Multilevel Models** (MLM) or **Observed Structural Equation Models** (O-SEM).

Both approaches may have limitations, such as **higher Type I error** due to not modeling measurement error.

Latent Structural Equation Models (L-SEM) allows for measurement error to be account for and may be an intriguing solution.

Use simulated data to compare MLM, O-SEM and L-SEM models. (10000 simulations each)

Fixed Parameters

Population Model will be fixed to a L-APIM

Dyad Type fixed to indistinguishable

Number of items fixed to three for each latent variable

Varied Parameters

Sample Size (couples)
100, 200, 300, 500, or 1000

Effect Sizes (k ratio)
-1, -.5, 0, .5, or 1 ratio between actor and partner

Residual Correlation
Low, moderate, or high levels

Intraclass Correlation
Low, moderate, or high levels

What **parameters** should we vary and which can we keep fixed?

What is the best way to evaluate the trade-offs between the modeling approaches?

What conditions are the most useful to evaluate when comparing these approaches?

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