Understanding Mentoring: Analytic Perspectives

Lillian T. Eby, Ph.D.
Department of Psychology &
Owens Institute for Behavioral Research
• How can we enhance our understanding of the mentorship process by leveraging new tools, approaches & methodologies?
What are Key Unanswered Questions About Mentoring?
New Tools, Approaches & Methodologies
Existing research tends to examine amount of mentoring received or relationship quality in relation to mentoring outcomes.

What are the intervening psychological, cognitive, affective & behavioral processes linking mentoring received/quality to outcomes?
Laboratory research to pinpoint key relational behaviors
  * Observational research with behavioral coding
  * Manipulate identified relational behaviors in dyadic exchanges to see effect on outcomes
Field research to examine different potential mediating mechanisms
  * Structural equation modeling/path analysis
  * The mechanisms of action may vary across outcomes
Mentoring relationships are inherently dynamic but most research is cross-sectional. Existing research also uses a between-persons (nomothetic) approach. How do relational experiences over time culminate to predict outcomes? Can studying intra-individual variability (idiographic approach) shed new light on mentoring relationships?
Dynamic Processes

* Lagged (2 times) & longitudinal (3+ times) studies
  * Need to carefully consider time lags
  * Ideally measure all variables at all time points
    * Latent growth modeling to examine change trajectories
    * Cross-lagged panel studies to examine reciprocal effects
* Ecological momentary assessment (aka experience sampling) to examine within-person effects
  * Important for understanding both cumulative & more “immediate” effects of mentoring
Kram’s (1985) seminal work on mentoring phases has not been rigorously replicated

- Are there characteristic patterns or phases?
- If so, what are the defining features?
  - Relational processes & milestones
- Do relationship stages vary if data is from mentor vs. protégé perspective?
- Do relationship stages vary when comparing formal & informal mentorships?
In-depth qualitative research
  - Structured interviews followed by content analysis
  - Obtain data from both mentors & protégés
    - Sub-group analyses comparing mentor & protégé perspective; formal & informal mentorships

Latent class analysis
  - Quantitative exploratory method to identify unobservable sub-groups based on measured variables
Mentoring theory suggests relationships change over time.

Correlational research generally assumes linear change (e.g., “as trust increases, so does relationship quality”).

We know almost nothing about relational shifts & turning points.

- Are there predictable patterns of discontinuous change?
- What experiences fundamentally alter mentoring relationships?
* Qualitative research on relational turning points
  * What are the positive &/or negative relational events that fundamentally alter mentoring relationships?
  * Can positive turning points repair previously damaged mentorships?

* Latent transition analysis (an extension of latent class analysis) using longitudinal data to identify movement between sub-groups over time
We know surprisingly little about the best way to match mentors & protégés

- Demographics (e.g., race, gender), professional characteristics (e.g., academic discipline), needs-supplies, personality, other individual differences etc.?
- Is complimentary or supplementary fit important?
  - Do different types of fit matter for different outcomes?
- Is there an optimal algorithm for matching on multiple characteristics?
Dyadic Fit

- Quasi-experimental field studies are needed
  - Random assignment to different matching methods & examine outcomes
  - May be different in formal vs. informal mentorships
- Consideration of other matching factors (e.g., racial identity instead of same-race/cross-race comparisons)
- Polynomial regression & response surface methodology
  - Tests nonlinear effects
  - Provides information on similarity (congruence) & discrepancy (incongruence) effects
- Computational modeling(?)
Existing research focuses on this broad distinction

- Meta-analytic research finds small, but consistent effects in favor of informal relationships
  - Confidence interval includes zero suggesting moderators

What are the different aspects of formality & which are most important to consider?

- Matching by 3rd party, contract, pre-determined length, expectations for interaction, etc.
- Can formal relationships become informal over time?
Formal vs. Informal Mentoring

- Narrative review of research on formal mentoring to identify key features of “formality”
  - May help generate predictions about moderators
- Informant interviews – are there aspects of formality that we aren’t measuring &/or studying?
- Quantitative research
  - Develop new measures of relationship formality
  - Relative weights analysis to determine what matters most in predicting outcomes
  - May differ for protégé & mentor outcomes
Most research focuses on either the protégé (most common) or the mentor (less common)

Some studies have used in-tact dyads but typically examine crossover effects (M → P or P → M)

Very little, if any, research on multi-level influences

- Mentoring relationships are nested within work-groups/academic departments/research labs, nested within organizations/universities, nested within industries/academic disciplines
Effects Beyond the Individual

* Aggregate effects (unit/department/work group)
  * Average, minimum, maximum, variability in mentoring predicting mentoring outcomes
* Multi-level modeling to examine individual, dyadic, group, & organizational effects
Most research focuses on relationship with a single mentor.

In reality, protégés likely have multiple mentors over time & perhaps at the same time.
- Particularly common in academic settings
- Co-mentors, team mentoring & other hybrids

People also receive developmental support from many sources:
- Assigned mentors, informal mentors, collegial peers
Sources of Mentoring Support

* Retrospective life history analysis of mentoring across the life course
* Longitudinal survey-based cohort studies from adolescence to adulthood
  * Could allow for understanding of transition from protégé to mentor
* Social network analysis
  * Patterns of giving & receiving support
There’s A Lot of Work to be Done!
Thank you!