Gender Differences in Pathways to Career Satisfaction

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UD ADVANCE

NSF ADVANCE Institutional Transformation grant

Focus on effective institutional practices and policies for faculty development and career progression. Emphasis on women faculty in STEM and women faculty in leadership.

- Dr. Pam Cook, PI (Math, College of Engineering)
- Dr. Robin Andreasen, co-PI (Linguistics & Cognitive Science)
- Dr. Heather Doty, co-PI (Mechanical Engineering)
- Dr. John Sawyer, co-PI (Business Admin., Institutional Research)
- Dr. Shawna Vican, UD ADVANCE Director

Why study faculty career satisfaction?

It's an important step toward understanding how to improve faculty retention and advancement.

Satisfied faculty are less likely to leave their institutions.
- Loss of investment: money, time, and energy
- Disruption to departmental operations
- Negative impact on morale

Satisfied faculty are more likely to be promoted through the academic ranks toward leadership positions.

Women Faculty Career Satisfaction

Understanding factors associated with job satisfaction is especially important in fields like engineering, where women are underrepresented and tend to occupy lower ranks.
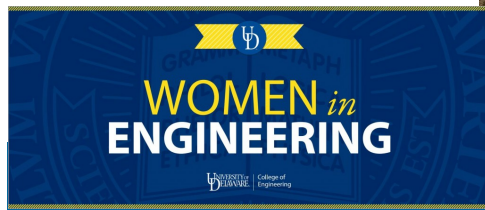
Bilimoria, et al. (2006)

Effective Chair Leadership
Is the chair an effective, fair administrator? Does (s)he help me obtain needed resources? Articulate clear vision?

Mentoring
Formal (assigned) *and* informal mentoring within department, within institution, external.

Internal Academic Resources
Professional development funds (travel, etc.); computers and tech support; clerical support; teaching, advising, service relief

Collegial Relationships
Colleagues value my work; can be trusted; provide feedback on research; solicit my opinion on research, professional activities. I feel welcome and included by colleagues.
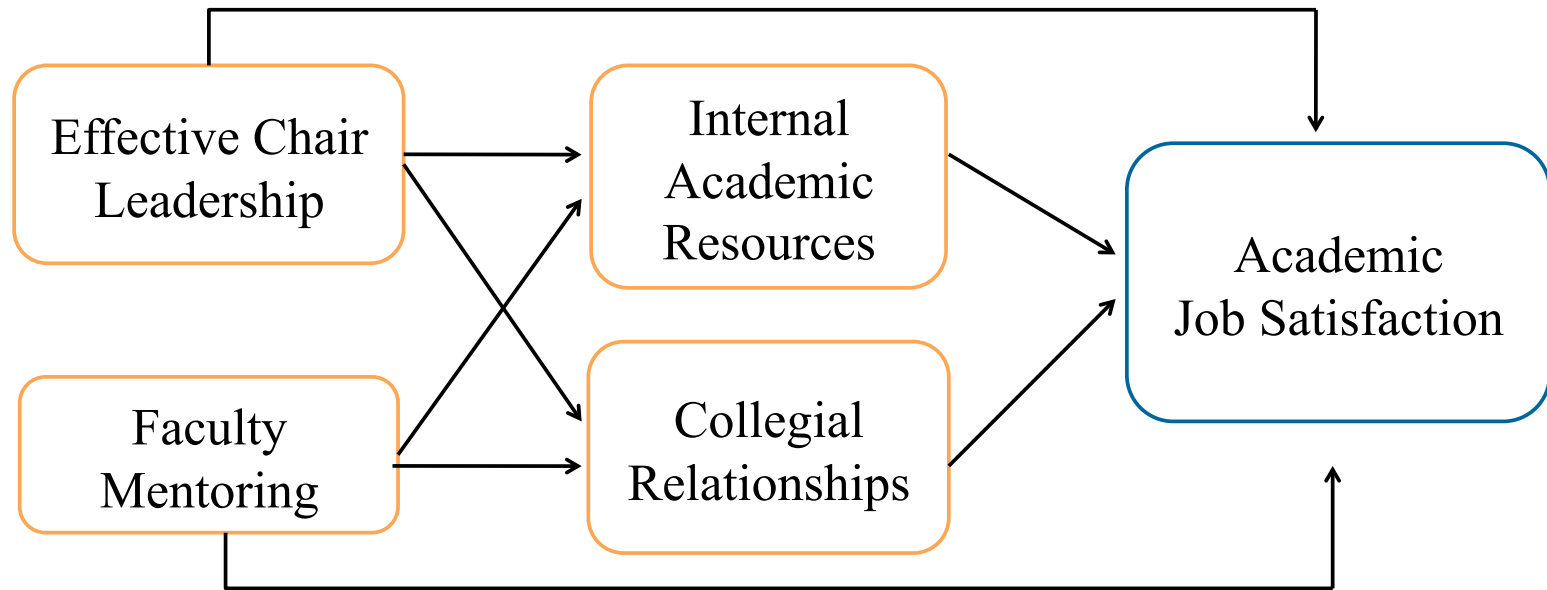
Academic Job Satisfaction
Experience of community; experience of collegiality in department; experience of being faculty member; teaching/research balance

Bilimoria, Perry, Liang, Stoller, Higgins, Taylor. 2006. *Journal of Technology Transfer* 31: 355-365.
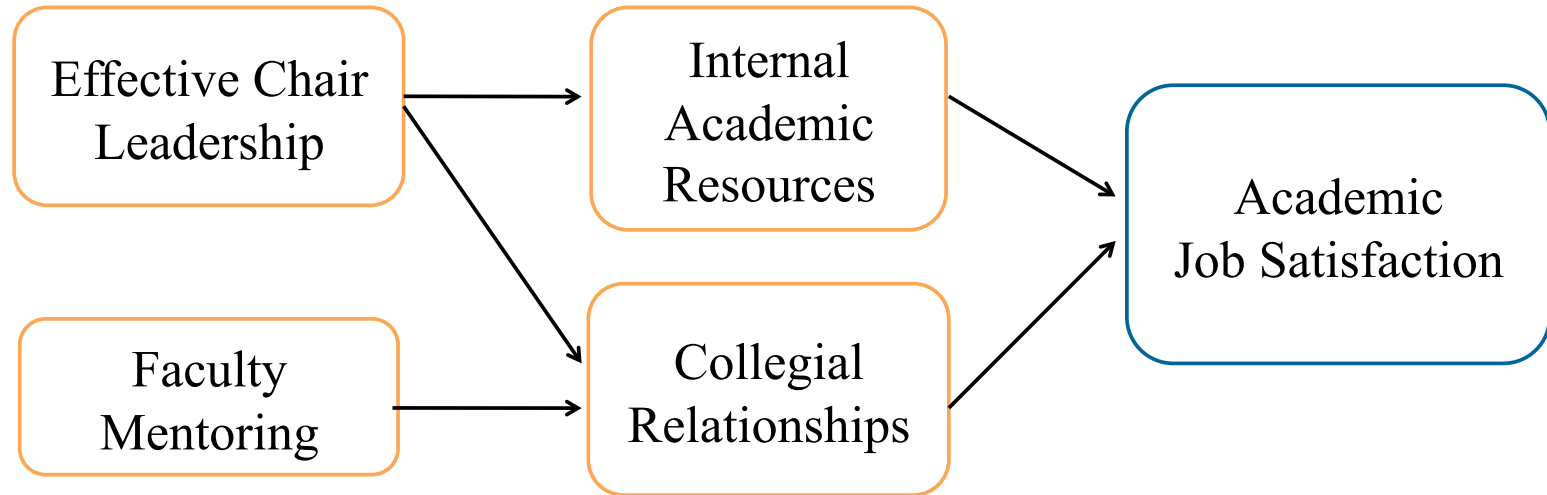
# Hypotheses: Bilimoria, et al. (2006)

- Faculty perception data collected via climate survey at a Midwestern research-intensive institution.
- Path analysis used to test whether hypothesized pathways are statistically significant and if so, how "strong" they are.
- Data for men and women faculty analyzed separately and compared.

Results: Bilimoria, et al. (2006)

- Only statistically significant pathways are shown.
- Same pathways were significant for men and women.
- No direct pathway between chair and satisfaction or between mentoring and satisfaction.
- No pathway between mentoring and resources.
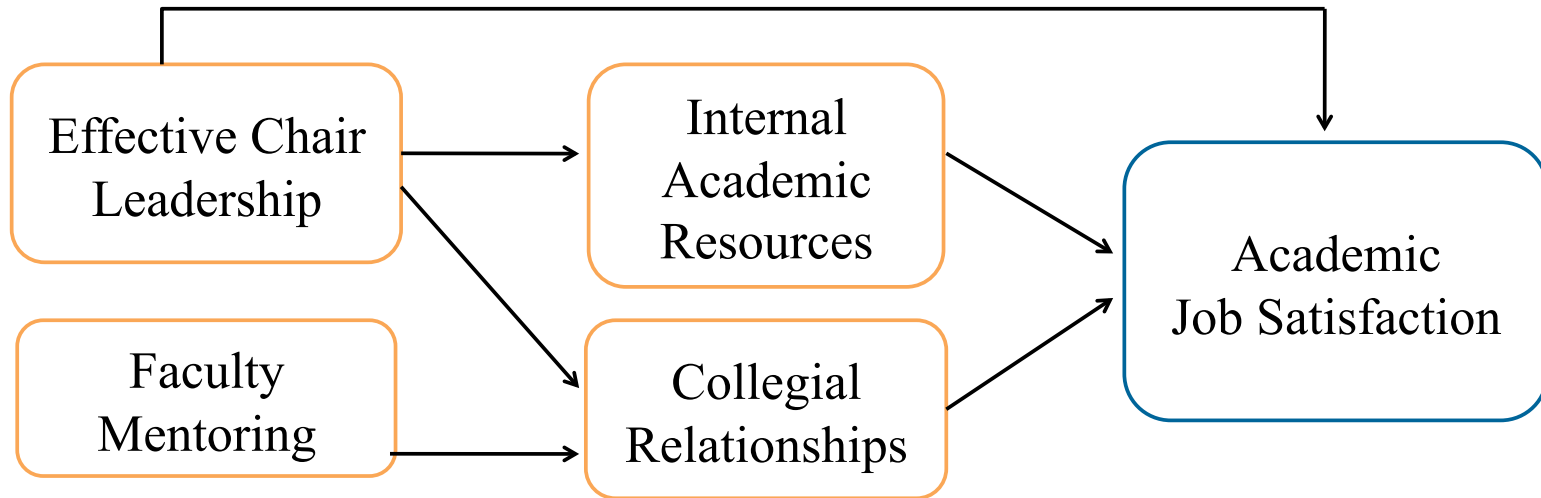
Results: Bilimoria, et al. (2006)
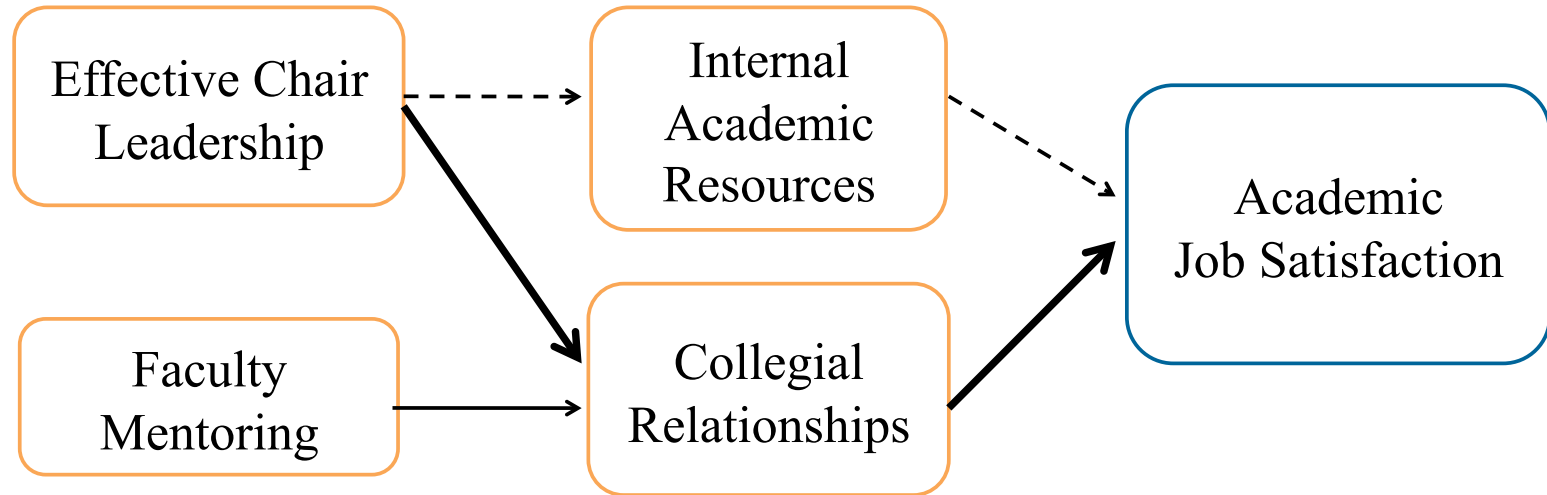
- Pathway from chair to resources to satisfaction weaker for women than for men (shown in dashes).
- Pathway from chair to collegial relationships to satisfaction stronger for women than for men (shown in bold).

# Our study at University of Delaware

- Phase 1: re-test Bilimoria model
- Phase 2: expand upon Bilimoria model

- Data collected via faculty climate survey, spring 2014 (all full-time tenured, tenure-track (t/tt) and non-tenure track faculty).

- Final sample:
  - t/tt faculty only
  - N = 260, 114 women and 146 men, 83% white
  - Rank/gender distribution representative of full t/tt faculty in 2014
  - *Full professor subsample heavily male (74 vs. 36 women)*

Results: Phase 1

- Only statistically significant pathways shown.
- Significant pathways the same for men and women.
- We find direct pathway from chair to satisfaction not observed in earlier study.

Results: Phase 1
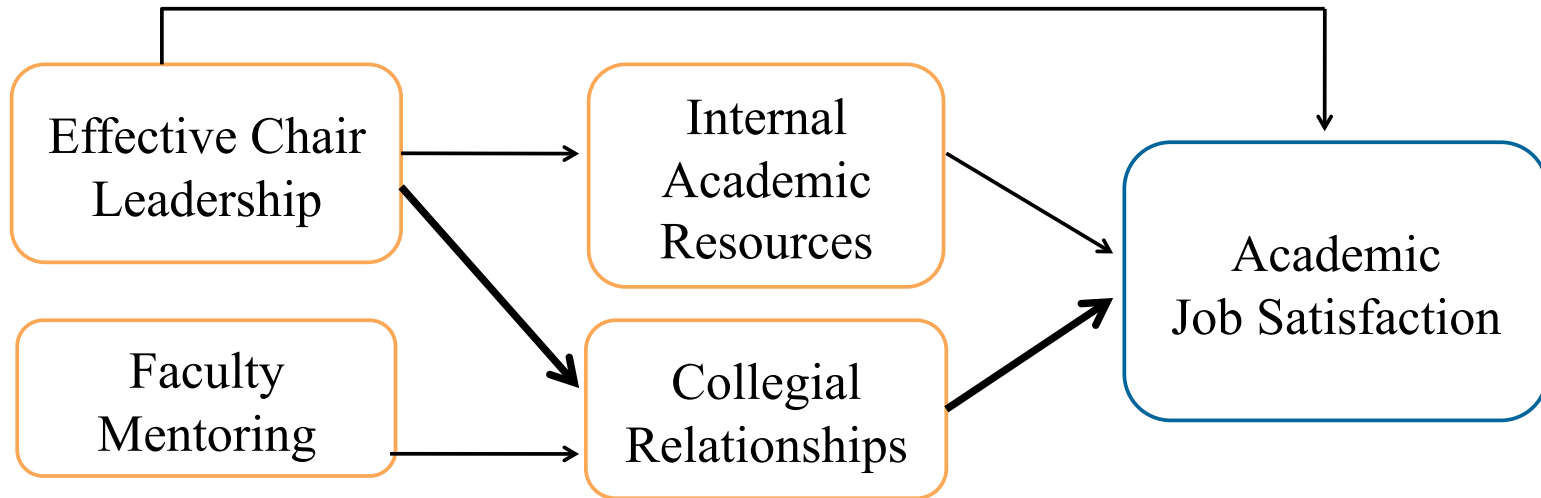
• Pathway from chair to collegial relationships to satisfaction stronger for women than for men (same as earlier study).
• Difference: pathway from chair to resources to satisfaction is not weaker for women than for men.

Conclusions: Phase One

There are a number of similarities between our results and those from the earlier study, but there are also differences.

It may not be straightforward to aggregate data across institutions.

UD study: Phase 2

Under our ADVANCE IT grant we work with administrators and faculty to communicate and clarify polices that are relevant to faculty development. To study this element of our work we added a new factor to the model:

Transparency of policies & procedures

Policies included workload, merit pay, sabbatical, parental and family leave. Faculty asked: how clearly are policies communicated in written documents, by the department chair, by faculty colleagues in the department?
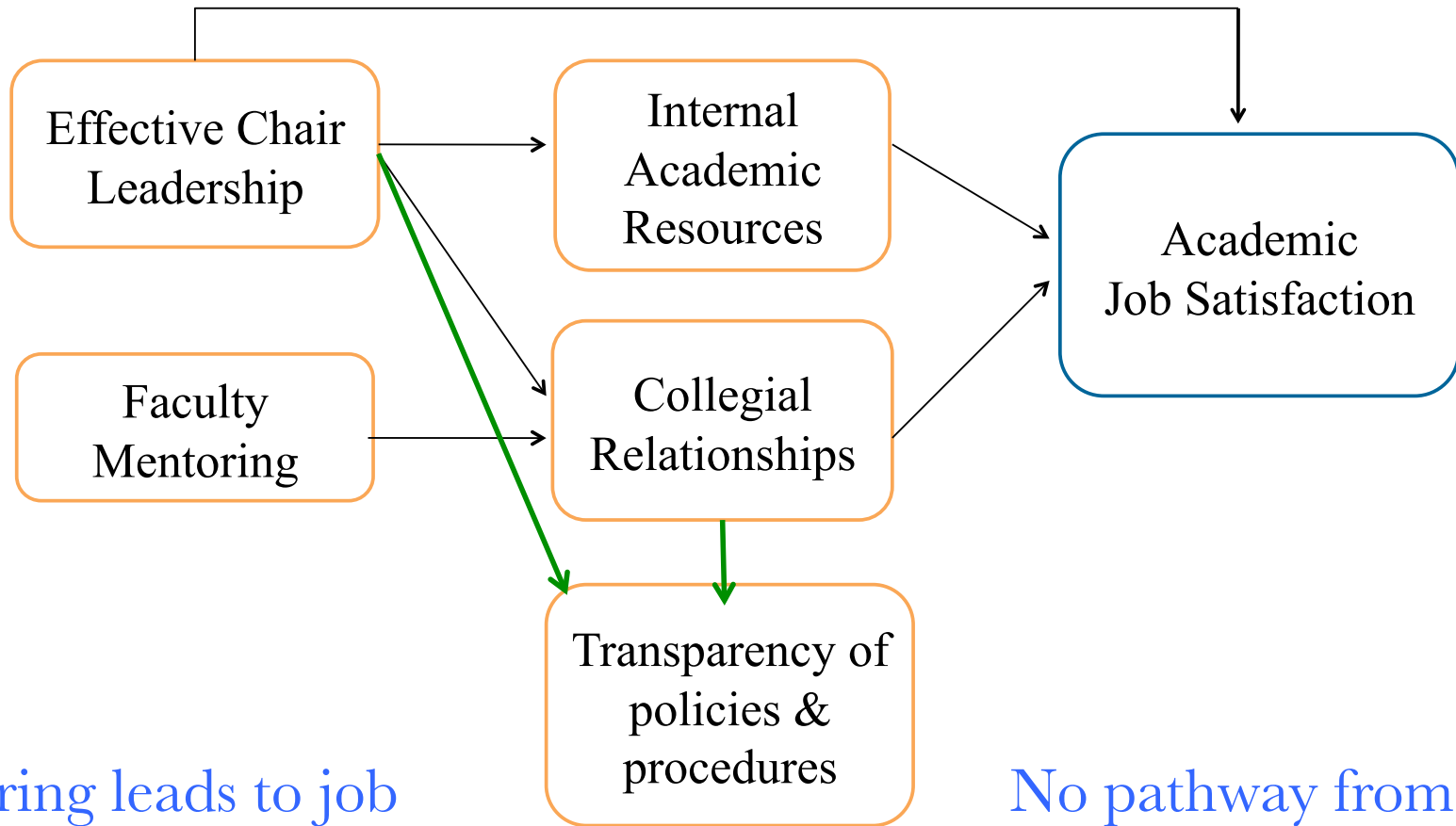
Hypothesized Model, Phase 2
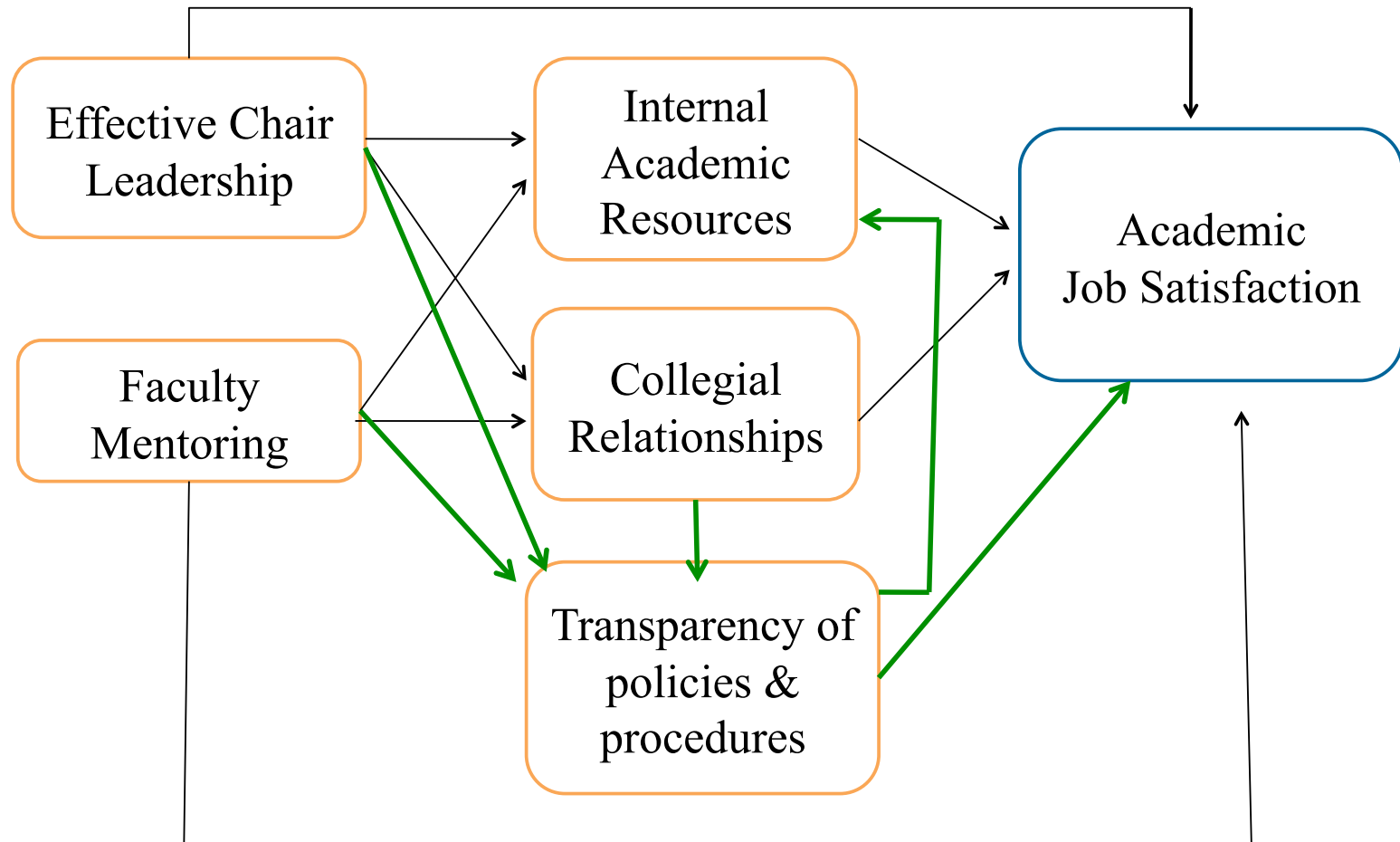
Green indicates pathways not studied in phase 1.
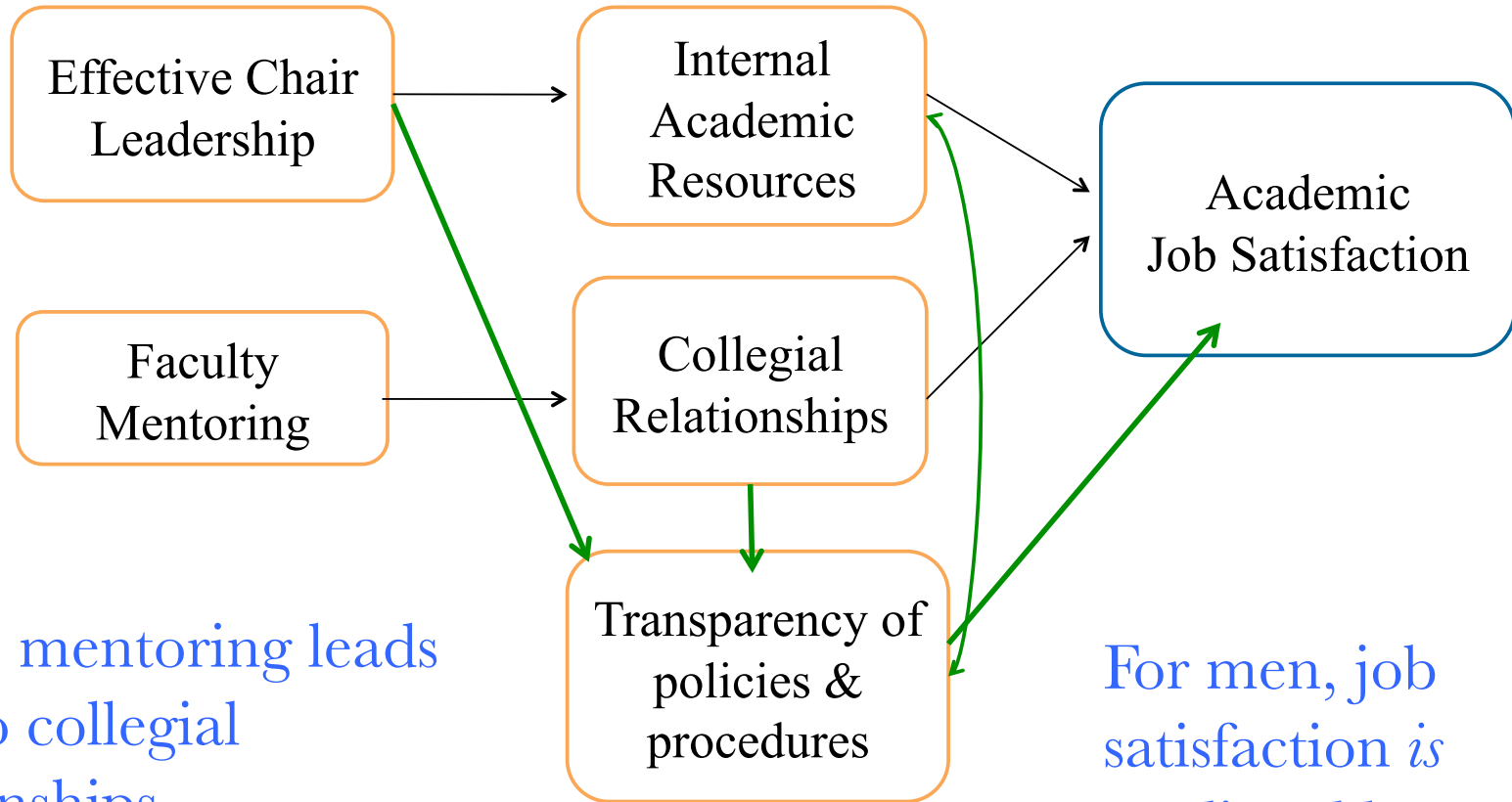
Results, Phase 2, Women Faculty

Mentoring leads to job satisfaction only through collegial relationships

No pathway from transparency to satisfaction

No direct pathway between chair and job satisfaction.

Again, mentoring leads only to collegial relationships.

For men, job satisfaction *is* mediated by transparency

Conclusions

Effective <u>chair</u> leadership has a direct effect on job satisfaction for women but not men faculty → we are on the right track with the work we do with department chairs with respect to the goals of ADVANCE.

For men and women, <u>mentoring</u> is related to collegiality, but not acquisition of resources or transparency of policies and procedures. (We would like this to change!)

We do a lot of work on increasing the transparency of policies and procedures. Is this time poorly spent?

Limitations and Future Work

Our results may be skewed by the nature of our sample. Our male subsample is senior compared to our female subsample. Observed gender effects may be related to rank. We cannot disaggregate by rank for this type of study because our N would be too small.

Likewise, cannot disaggregate by race/ethnicity.

There are other ways we can use our rich climate survey data to explore facets of faculty life. We complement our quantitative data with faculty interview data, including exit interviews.
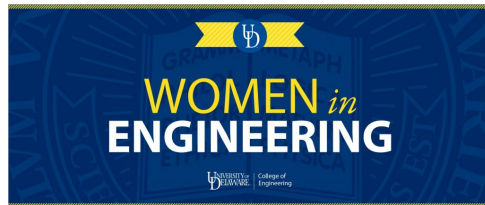
Thank you!

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