The Role of Mentorship in Academic Productivity &
Thoughts of Quitting for Women Assistant Professors
A Baseline Analysis from the NIH-TAC Trial

Alyssa F. Westring, Mary D. Sammel, Emily F. Conant, Patricia Scott, Rebecca M. Speck, Lucy Wolf Tuton, Jeane Ann Grisso, Stephanie B. Abbuhl

Overview: A cluster-randomized trial of an intervention at the Perelman School of Medicine to enhance the institutional culture, increase academic productivity, and improve job satisfaction for women assistant professors.

Multilevel intervention targeted 3 critical levels:
- Senior Leadership (Deans, Vice Deans, Dept. Chairs, Division Chiefs) provided oversight and input.
- Department/Division Task Forces provided customized, local interventions to target unit-specific needs.
- Women Assistant Professors participated in:
  - Total Leadership
  - Manuscript writing
  - Targeted workshops

NIH-TAC Trial (Transforming Academic Culture)

Baseline Analysis: Specific Aims

Background: Women in academic medicine are not achieving levels of career success on par with comparable men colleagues. Mentorship is frequently cited as a key intervention to remedy this gap.

Purpose: The purpose of this cross-sectional analysis was to assess whether measures of mentoring were associated with criteria for faculty success at baseline.

Hypothesized Relationships

Mentoring Variables
- # of formal mentors
- # of informal mentors
- Satisfaction with mentoring

Outcome Variables
- Publications
- Grants
- Intention to quit

Data Collection

Baseline data (Time 1) used for this analysis. Data were collected prior to randomization.

Measures:
- Web-based, baseline survey
  - satisfaction, well-being, work-family conflict, commitment, self-efficacy, and culture conducive to women's academic success (CCWAS)
- Participant CVs
  - number of publications & grants
- Multi-variable, generalized linear regression model

Sample

- 133/134 respondents completed the survey (99%)
- Participants:
  - Mean age: 41 yrs
  - 59% white
  - 92% full-time faculty
  - 84% married/domestic partnership
  - 76% had 1 or more children

Results

Outcomes Summary

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publications since appointment</td>
<td>16.4</td>
<td>13.2</td>
<td>0</td>
<td>59</td>
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<tr>
<td>Intent to quit Scale</td>
<td>4.9</td>
<td>5.7</td>
<td>0</td>
<td>25</td>
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<tr>
<td>Total grants*</td>
<td>4.4</td>
<td>2.6</td>
<td>0</td>
<td>11</td>
</tr>
</tbody>
</table>

*Assumed to be zero at first reported

Publications

- Mentor satisfaction is marginally associated with publications (p = 0.08)
- # of informal mentors is positively associated with grants (p = 0.03)
- Perception that dept. places high priority on mentorship is positively associated with # grants (p = 0.01)

Intention to Quit

- Mentoring variables explain 11% of variance in intention to turnover
- Satisfaction with mentorship is negatively associated with intention to quit (p = 0.03)

Conclusions

This cross-sectional analysis of baseline data reveals:
- Informal mentoring and perception that department values mentorship appear to be important for academic productivity related to grants.
- Satisfaction with mentoring is important for reduced intention to quit.

The longitudinal analyses of our 4-year trial are underway.