ADVANCING UNIVERSITIES’ ORGANIZATIONAL MENTORING CLIMATE

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DISCLOSURE & ACKNOWLEDGEMENTS

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  • University of New Mexico School of Medicine Research Allocation Committee
PURPOSE

• To provide an overview of recent research about organizational mentoring climate
• To discuss practical strategies for strengthening that climate
### Most Critical Issues for Faculty Development and Retention

**School of Medicine**

<table>
<thead>
<tr>
<th>Most Critical Issues (Top 3)</th>
<th>School of Medicine (n=319)¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater mentoring of junior faculty</td>
<td>37.9%</td>
</tr>
<tr>
<td>Better leadership</td>
<td>33.9%</td>
</tr>
<tr>
<td>Better compensation</td>
<td>33.5%</td>
</tr>
<tr>
<td>Better organized faculty development activities</td>
<td></td>
</tr>
</tbody>
</table>

¹ No significant difference between physician and non-physician faculty

Sources: Faculty Exit Surveys, University of New Mexico School of Medicine 2009-2017
CULTURE VS. CLIMATE: WHAT IS ORGANIZATIONAL CULTURE?

Shared values and assumptions that explain why organizations do what they do and focus on what they focus on; exists at fundamental, perhaps preconscious level...grounded in history and tradition.

WHAT IS ORGANIZATIONAL CLIMATE?

Faculty’s shared perceptions of and meaning attached to policies, practice, and procedures; employee’s experience and behaviors supported, expected, or rewarded

- When related to the quality of the mentoring environment – the organizational mentoring climate
- Until recently, little known . . .

SCHNEIDER B ET AL, (2013), ANNUAL REVIEW OF PSYCHOLOGY, P. 362
MEASURES DEVELOPED: ORGANIZATIONAL MENTORING CLIMATE (OMC)

• (1) Organizational Mentoring Climate Importance (OMCI) Scale and (2) Organizational Mentoring Climate Availability (OMCA) Scale
  - Sample: 355 faculty; Univ. of New Mexico and Arizona State Univ, US
  - Measures (15 items each, 5-6 items/subscale)
    - OMCI: Very important (1) to Very unimportant (5)
    - OMCA: No (-1), Don’t know (0), Yes (1)
    - 3 subscales each scale: Organizational expectations, mentor-mentee relationships, resources (exploratory factor analysis)
    - Cronbach’s alpha = 0.94 (OMCI), 0.87 (OMCA) (subscales 0.74-0.90)

TIGGES, B, ET AL., (2020) JOURNAL OF CLINICAL AND TRANSLATIONAL SCIENCE.
MEASURES: ORGANIZATIONAL MENTORING CULTURE MENTORING VALUES

• Sample: 298 faculty; University of New Mexico and Arizona State University, U.S.

• 4 items (One factor, exploratory factor analysis)
  o My college/school/department/division recognizes the value of mentoring of junior faculty by senior faculty
  o My institution pays special attention to the importance of mentoring underrepresented minority faculty
  o Effective mentoring is valued at my college/school/department/division
  o Mentor development is valued at my college/school/department/division
  o Responses: No (-1), Don’t know (0), Yes (1)

• Cronbach’s alpha = 0.84 (all); 0.88 (underrepresented minority faculty)
<table>
<thead>
<tr>
<th>Climate Components Important to Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available mentorship training materials</td>
</tr>
<tr>
<td>A mentor training program</td>
</tr>
<tr>
<td>Leaders ensure that each senior faculty meets the requirement for mentoring junior faculty</td>
</tr>
<tr>
<td>Quality of the mentor-mentee relationship is discussed as part of the annual faculty review</td>
</tr>
<tr>
<td>A policy or guidelines that delineate criteria that can be used to evaluate mentoring success</td>
</tr>
<tr>
<td>A policy or guidelines that all faculty will have access to training in unconscious bias</td>
</tr>
<tr>
<td>Qualifications for mentors are discussed at faculty meetings/evaluations</td>
</tr>
<tr>
<td>The requirement that senior faculty will mentor junior faculty is discussed at faculty meetings/evaluations</td>
</tr>
<tr>
<td>P&amp;T Committees evaluate the success of mentoring relationships for promotion to junior faculty</td>
</tr>
<tr>
<td>An Office of Diversity that helps to facilitate relationships between mentors and URM faculty</td>
</tr>
<tr>
<td>A committee develops criteria for evaluating mentoring relationships</td>
</tr>
<tr>
<td>A policy or guidelines about managing conflict in the mentor-mentee relationships</td>
</tr>
</tbody>
</table>

Rated in order of importance; N=355 faculty; score < 2; Range: very important (1) to very unimportant (5)
CLIMATE COMPONENTS: IMPORTANT BUT OFTEN UNAVAILABLE

Most available

• 40% mentor training
• 37% mentor training materials
• 29% requirement that senior faculty mentor junior faculty discussed
• 26% policy-unconscious bias training

Least available

• 4% committee for hearing and adjudicating mentor-mentee conflicts
• 3% policy for managing mentor-mentee conflict
• 2% policy or committee; criteria for evaluating mentoring success

When available, usually ≥ 50% somewhat/very satisfied
FACULY SUBGROUPS RATE IMPORTANCE AND AVAILABILITY DIFFERENTLY

- Faculty Subgroups
  - Mentored (yes/no), mentoring (yes/no), gender (male/female), underrepresented (yes/no), faculty track (tenured vs. others), rank (assistant professors vs. others), health sciences campus (yes/no)

- Greater importance of climate components
  - Women [Effect size\(^1\) = 0.44 (CI 0.21, 0.67), p<.01]

- Greater availability of climate components
  - Health sciences campus [Effect size\(^1\) = -0.97 (CI -1.17,-0.77), p<.01]
  - Being mentored [Effect size\(^1\) = 0.58 (CI 0.32,0.83), p<.05]

- No differences for underrepresented minority faculty

\(^1\) Effect size in standard deviation units of normalized scale where \(M=0\) and \(SD=1\), using generalized linear model (GLM) regression techniques for multivariable models

SOOD, MYERS, TIGGES, DOMINGUEZ & HELITZER (2021) CHRONICLE OF MENTORING AND COACHING
MENTORING AWARD: IMPORTANCE, AVAILABILITY AND MENTORING OUTCOMES

4-19% reported availability of mentoring award

Women and Hispanic whites rated award as more important than counterparts

### Award Availability vs. Mentoring Outcomes

<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>AVAILABILITY OF MENTORING AWARD</th>
<th>[n=20]</th>
<th>[n=209]</th>
<th>[n=69]</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing Mentoring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td></td>
<td>0.13</td>
</tr>
<tr>
<td>Yes</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td></td>
<td></td>
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<tr>
<td>Being Mentored</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td></td>
<td>0.02</td>
</tr>
<tr>
<td>Yes</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of confidence in successfully mentoring another faculty member (scale 0-100)</td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
<td>(p)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(SD)</td>
<td>(SD)</td>
<td>(SD)</td>
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<td></td>
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<tr>
<td>Yes</td>
<td>75.8 (18.9)</td>
<td>70.4 (23.5)</td>
<td>60.9 (28.0)</td>
<td>0.03</td>
<td></td>
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</tbody>
</table>
MENTORING CULTURE ASSOCIATED WITH MENTORING CLIMATE AND INVOLVEMENT

- 298 [55 underrepresented minority (URM) faculty] faculty University of New Mexico and Arizona State University
- 24% of faculty being mentored (27% for URM)
- 43% were mentoring (38% for URM)
- Stronger mentoring culture associated with availability of more climate components \( (r > .40, p < .001 \text{ for all and URM faculty}) \)
- Stronger mentoring culture associated with increased odds of being mentored \( (OR=1.75, 95\% \text{ CI} 1.19, 2.61) \) and providing mentoring \( (OR=1.83, 95\% \text{ CI} 1.30, 2.58) \)
1. What is important for the mentoring climate is often not available
2. The most important component of organizational mentoring climate (OMC) is a mentor development program
3. Interventions that enhance the OMC may find greater support from women faculty.
4. Mentoring climate/culture perceptions and associations similar between URM and non-URM faculty.
SO WHAT TO DO…

- Identify gaps at your organization using the OMCI and OMCA scales
- Begin to implement structures, programs, and policies that support mentoring.
- If in leadership position, promote values related to mentoring to strengthen mentoring culture
STRATEGIES TO SUPPORT NEW MENTORS

1. Monetary support
   e.g., %FTE from NIH grants, incentives

2. Discounted access to core services
   e.g., NIH-funded research infrastructure grants

3. Grant and manuscript support
   e.g., greater budget management assistance, professional editing services, peer review

4. Mentor academies
   e.g., elite grouping for networking & collaboration

5. Mentor peer support
   e.g., Faculty Mentor Development Program

6. Mentor training
   e.g., Recognition and awards

7. Promotion

ADAPTED FROM BURNHAM ET AL. (2011) CLINICAL AND TRANSLATIONAL SCIENCE
SO WHAT TO DO...continued

- Promote mentor development programs and training materials
  - For example, U.S. National Research Mentoring Network programs (nrmnet.net)
  - Our research: Knowledge and self-efficacy improved
SO WHAT TO DO… continued

• Learn about and promote developmental networks (vs. dyadic mentoring)

• Our research: female faculty with less diverse networks; more “friends” than sponsors or allies; more psychosocial support

• Possible to improve knowledge and self-efficacy related to networks

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**Traditional Mentoring vs Developmental Networks**

- One-on-one relationships
- Long-term
- Work relationship
- Participants: only mentor & mentee
- Mentoring role: mentor as expert

- Multi-level networks*
- Short-term & long-term
- Work and non-work relationships
- Multiple Participants (developers): mentors, sponsors, friends, allies
- Mentoring role: mentor as co-learner
FINAL SUMMARY

- Crisis of lack of mentors in academia
- Quantitative studies of organizational mentoring climate and culture – new area of science
- Data suggests mentoring can be learned and possibly incentivized
- Mentoring climate interventions need to be implemented and evaluated -- do they change mentoring behavior and outcomes?