
Supporting Students of Color on the Pathway to Graduate Education: Barriers and Supports to Mentoring

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Council of Graduate Schools
Spring Research and Policy Forum
May 18, 2016

WHAT'S AT STAKE FOR GRADUATE EDUCATION

- “Some of the counselors there [at CSU attended] have real preconceived notions of what minority students are capable of achieving, and they steer minority students away from graduate school. They even went as far as to steer me away from being a math and science teacher. When I started at [CSU attended] they [counselors] wanted to place me in basic [remedial] courses and were really surprised by my test score.” -Latina biology doctoral student
- “He [a Latino student who had just as much potential as I do] did not have the information he needed to even really know what graduate school is all about or what it would take for him financially.” – White genetics doctoral student

OVERVIEW

1. Who gets mentored and the importance of mentoring
2. What constitutes mentoring and motivations to mentoring
3. Barriers and supports to mentoring
4. Implications for supporting mentoring

WHO GETS MENTORED: RISING STARS

- High achieving students are more likely to be mentored
 - Rising stars fit the dominant paradigm for student success
 - In this dominant paradigm, “the student is an autonomous and self-motivated actor who exerts effort in behaviors that exemplify commitment, engagement, regulation, and goal-orientation” (Bensimon, 2007, p. 447)
- “Rising stars” (Ragins, 1999; Singh et al., 2009) — students performing at high level, demonstrating motivation and proactive behaviors—are more likely to be mentored (Eagan et al., 2011, Fuentes et al., 2012; Robertson, 2010)
- Students who interact informally early during college are more likely to be mentored (Fuentes et al., 2012)

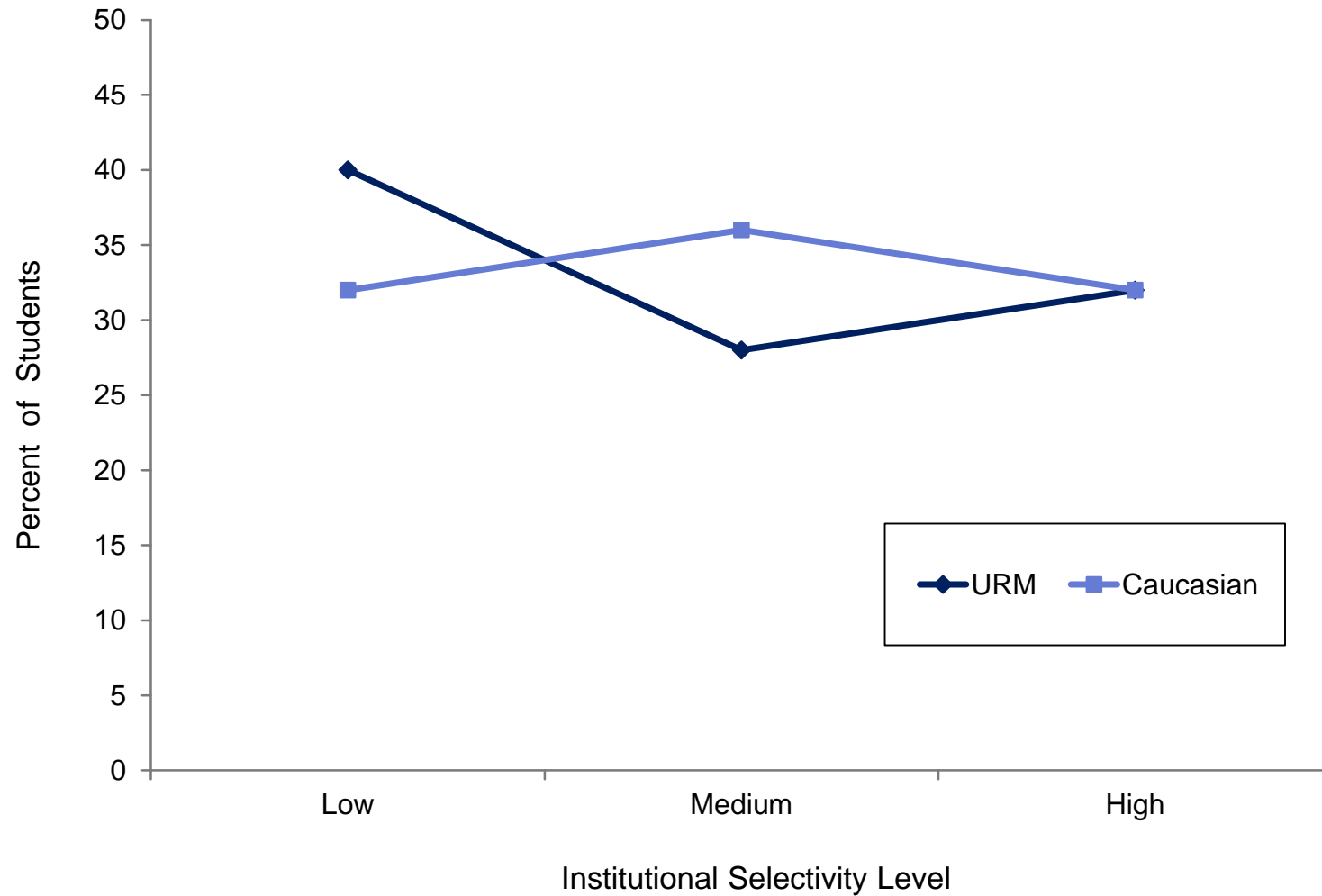
WHO GETS MENTORED: RACE & ETHNICITY

- Racial minorities have degree aspirations as high as or higher than white students, but are less likely to pursue graduate study (Cole & Barber, 2003; Weiler, 1993)
- Minority students are less likely to be mentored than white students (Johnson, 2015; Felder, 2010; Milkman et al., 2014; Thomas et al., 2007)

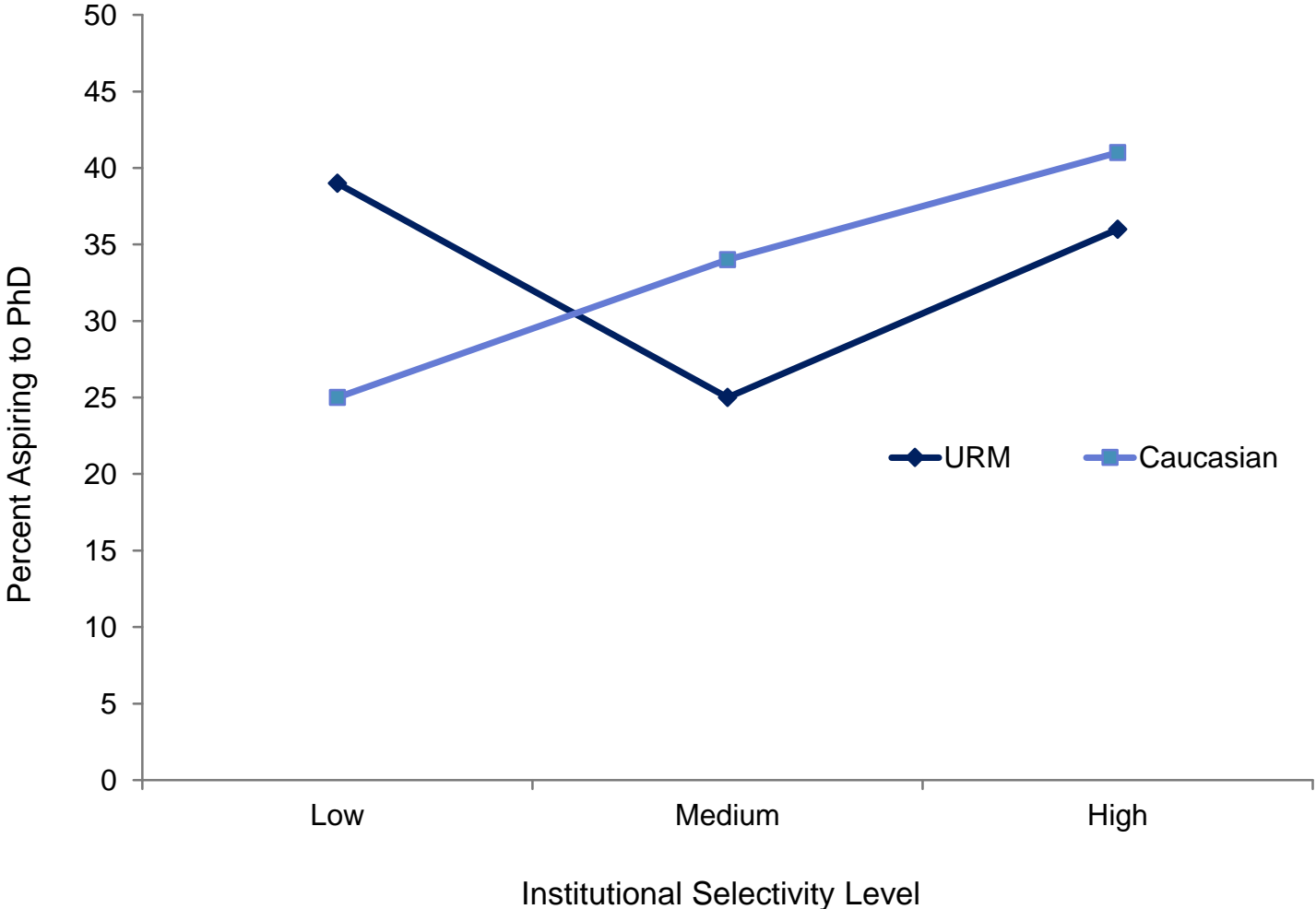
MENTORING IMPORTANCE: RACE & ETHNICITY

- For students of color intensive mentoring relationships may be particularly important for pursuing graduation study (Davis, 2008; Davidson & Foster-Johnson, 2001 DeAngelo, 2008, 2009, 2010; Felder, 2010)
- Faculty mentors serve as role models within the discipline and provide cultural and social capital for diverse students, especially in fields where women and minorities are particularly underrepresented (Whittaker & Montgomery, 2014)

DISTRIBUTION OF STUDENTS BY SELECTIVITY



DISTRIBUTION OF PhD ASPIRANTS BY SELECTIVITY



RELATIONSHIP BETWEEN FACULTY ENCOURAGEMENT FOR GRADUATE STUDY AND PhD ASPIRATIONS

- Faculty encouragement for graduate study is the most important individual experience a student can have on campus
- Although faculty encouragement is important for all students, encouragement is particularly important to URM students

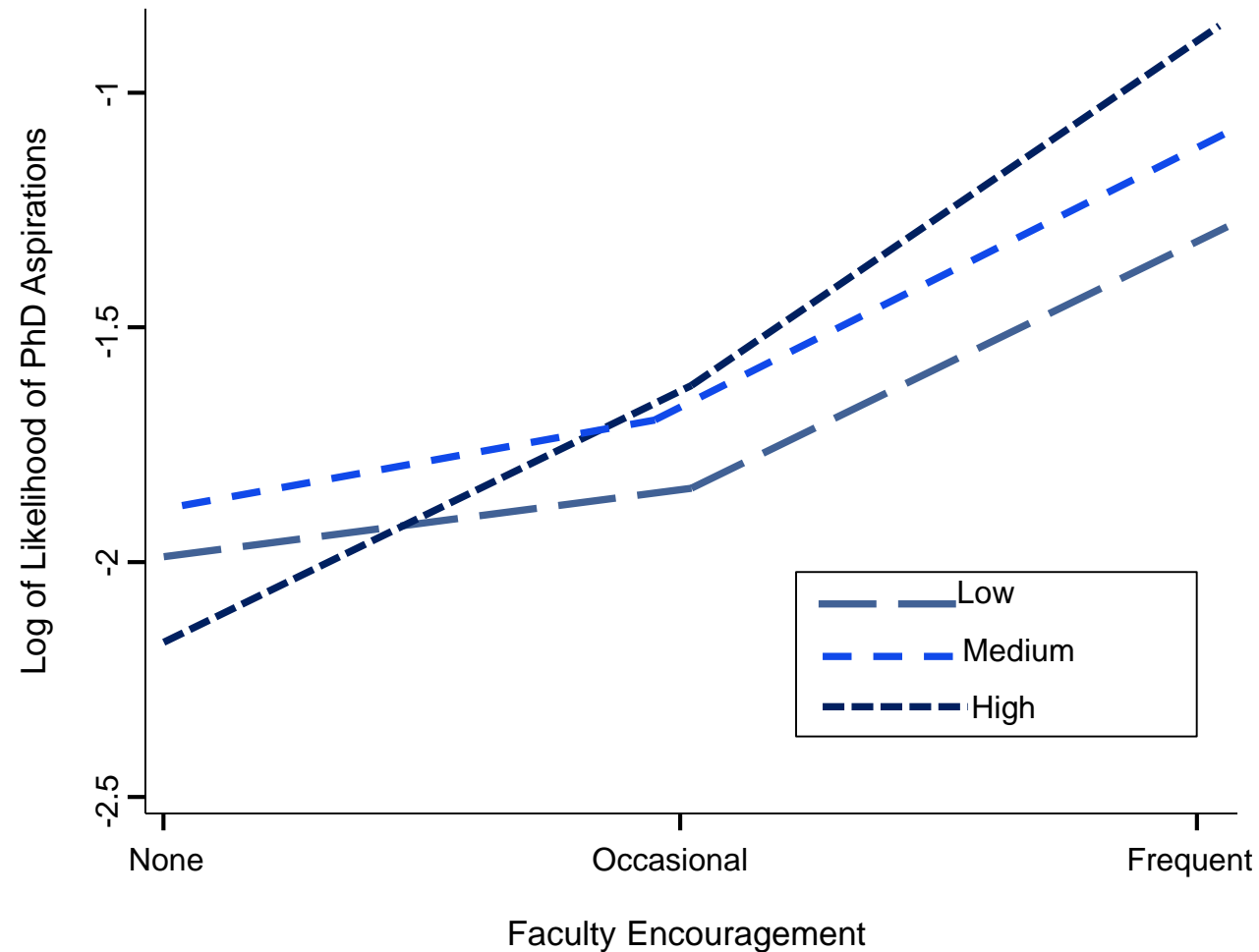
RELATIONSHIP BETWEEN FACULTY ENCOURAGEMENT FOR GRADUATE STUDY AND PhD ASPIRATIONS

- Occasional encouragement:
 - ↑238% for URM students
 - ↑42% for Caucasian students
- Frequent encouragement:
 - ↑332% for URM students
 - ↑170% for Caucasian students

Question: Is there a relationship between institutional selectivity and faculty encouragement for graduate study?

INTERACTION BETWEEN SELECTIVITY AND FACULTY ENCOURAGEMENT

Caucasian
Students



COMPONENTS OF MENTORING

- Focus on achievement and development of potential
- Nature of relationships is reciprocal and personal
- Mentors are individuals with greater experience, influence, and achievement
- Mentors take on emotional and psychological support and directly assist with career aspirations/planning through role modeling

Crisp & Cruz, 2009; Jacobi, 1991

WHAT CONSTITUTES MENTORING

Expected Role: Advising & Teaching (2/3)

- Behavior that is aligned with institutional or departmental expectations of faculty role
 - Advising that is limited to formal topics like course and matriculation
 - Involvement of students in research experiences and teaching of hard skills required for admission and success in graduate education
 - Interaction is not enough - Intention Matters!

Extra-Role Mentoring (1/3)

- Behavior that is not explicitly required. Recognized, or rewarded as part of faculty role
 - Actively identifying and approaching students to initiate mentoring relationships and promote graduate education as an option
 - Takes place both within and outside of formal channels; within formal channels goes above and beyond formally sanctioned role
 - Actively work to socialize students to the academic culture

quality of the interaction and intention of the faculty member determines whether behavior is mentorship

MOTIVATIONS FOR MENTORING

Personal Experience Related to Grad Edu

- Supporting others like me (student of color and/or first generation student)
- Supporting others in the way that I was supported or in the way that would have been beneficial to me

Personal Sense of Responsibility

- Supporting students to be well prepared for post-baccalaureate options or to encourage them to aspire to graduate study
- See this as an individual responsibility that they assume and not an institutionally stationed activity

BARRIERS AND SUPPORTS TO MENTORING

- Institutional Culture
- Culture of the Academic Discipline
- Culture of the Academic Profession

BARRIERS AND SUPPORTS: INSTITUTIONAL CULTURE

Regulating Extra-Role Behavior

- Institutional expectations related to teaching and advising can hinder the development of mentoring relationships
- Educational mission related to workforce can impede engagement in mentoring toward graduate study
- Support for graduate study relegated to a program that serve a few students/faculty, not part of culture

Promoting Extra-Role Behavior

- Settings (departments) where a group of faculty were jointly committed to promoting mentoring and graduate study
- These settings created cultural supports for mentoring despite an overall cultural ethos that was different

without a supportive institutional culture faculty members who wish to engage in extra role behavior must, in general, work against the tide of the overall institutional culture

BARRIERS AND SUPPORTS: ACADEMIC DISCIPLINES

61% of STEM faculty compared to 18% of Humanities and Social Science Faculty discussed research experiences as a way to engage in interaction with students

Humanities and Social Sciences

- Using the classroom and class activities as a way to engage students and begin to develop mentoring relationships

STEM Disciplines

- Research labs provide a structure to facilitate interaction and opportunities for mentoring relationship to develop

BARRIERS AND SUPPORTS: ACADEMIC PROFESSION

Regulating Extra-Role Behavior

- Promotion and tenure – need for research productivity barrier to engagement in mentoring
- Lack of recognition for the time it take to engage in mentoring students (does not count at all toward tenure)
- Workload related to teaching especially; focus on teaching as interaction may become substitute for mentoring

Promoting Extra-Role Behavior

- ???

SUPPORTING MENTORING – THE PATHWAY TO GRAD STUDY

- Must move beyond seeing mentoring as something that occurs naturally and actively promote and support behavior – this means addressing the barriers to the enactment of this behavior
- Need to value mentoring, provide support for mentoring, and develop infrastructure to support mentoring practice – creates a culture in which this type of activity is normalized and expected
- Must create generative culture where faculty mentorship is encouraged and the shared institutional purpose includes mentoring

SUPPORTING MENTORING – WHAT CAN YOU DO?

- Talk and write about the benefits of mentoring and the need to support, encourage, and value mentoring at the institution as well as systems level
- Understand and recognize that we face a crisis of sorts as it relates to mentoring and that until we make headway toward more inclusive mentoring practice we will not make much of an impact on diversity in graduate education, in the professoriate, or in the professions
- Fund additional research on mentoring, and the pathway to graduate education for those both in and outside of STEM disciplines



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THANK YOU!

QUESTIONS AND DISCUSSION



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