



Mentorship: A Scientific Perspective #6

Culturally Responsive Mentorship Part 2: Understanding Difference and Finding Common Ground

Part 1 of Culturally Responsive Mentorship dealt with understanding identity. This installment will discuss how to approach identity differences between mentor and mentee, as well as how to find deeper commonalities when surface-level differences exist.

Do Mentor-Mentee Identities Need to Match?



While there is value, particularly for URM students and faculty, in sharing identity categories with their mentors, evidence shows that it is not the most important factor. More important than matching gender or ethnicity, for example, is a match on underlying characteristics, like values. Sharing deep level similarities “predicts interpersonal comfort, which in turn predicts psychosocial and career (instrumental and working) support,” which are important factors for a positive outcome for mentees (66).

A Non-Comprehensive List of Underrepresented Identities in STEMM Contexts



While the following is not a complete list, it does represent the categories that have been the subject of research in mentoring or have been identified as needing to be the subject of research. While many such studies focus on mentoring students, we can make some tentative observations in the mean time.

- Race/Ethnicity
- Gender/Sexuality
- Socioeconomic Status
- First Generation Status
- Neurodivergence
- Disability



Race/Ethnicity and Mentoring

Substantial research shows the importance of race and ethnicity in STEMM fields. As part 1 suggested, the lack of researchers among various demographics contributes to a lack of knowledge about certain diseases that disproportionately affect those underrepresented groups. Because of the severe underrepresentation in biomedical research, matching mentor and mentee identity along racial or ethnic lines can be impossible in every context. Therefore, training everyone to recognize the critical nature of racial and ethnic identity in forming science identity is essential.

Studies show that when mentees are paired with mentors who refuse to acknowledge racial categories as meaningful, the mentees struggle to develop a close relationship with the mentor or receive psychosocial support. Even if they receive career support, the lack of racial or ethnic awareness in mentoring has a profoundly negative effect (63). Trust is more likely to develop between mentor and mentee when both agree that race and ethnicity can and do play an important role in the workplace (64).

Mentors may have to learn more about how race and ethnicity impacts their mentees and be willing to openly discuss these issues, even if it makes them uncomfortable.

This information is adapted from chapter 3 of the following text:

Consensus Study Report [The Science of Effective Mentoring in STEMM](#) (2019). The study was sponsored by the Howard Hughes Medical Institute, Alfred P. Sloan Foundation, Burroughs Wellcome Fund, and by a grant from the Gulf Research Program. Copies of the Consensus Study Report are available from the National Academies Press, (800) 624-6242; <http://www.nap.edu>. For the study's accompanying online guide see: www.nationalacademies.org/MentorshipinSTEMM.

Infographic created by Julie Hawk, PhD

Identities and Mentoring



Gender/Sexuality and Mentoring

There is not a strong correlation between gender similarity and satisfaction in the mentor-mentee relationship, though there are more reported relational challenges in dyads with male mentor and female mentee than there are in other possible dyads (studies so far seem only to address a binary view of gender, which is a substantial gap). Important differences do seem to exist based on a mentor's gender in terms of how mentors are perceived by their mentees and in what kinds of support mentees feel like they receive from male mentors versus female mentors. Male mentors are more associated with career support, while female mentors tend to be more associated with psychosocial support.

Studies looking at career progression are quite mixed, with some finding that female mentees with male mentors progress more quickly and others finding the opposite (64-65). In short, more research needs to be done, especially on sexuality, as well as research that considers changing cultural understandings of gender.

Socioeconomic/First Generation Status

Socioeconomic status and, particularly, first generation status, are large topics of research in higher education and tends to focus on how to retain these students through graduation. After that, however, little research explores how FGCS with STEMM careers, particularly academic ones, might navigate the system. The barriers that existed in the educational process do not fall away upon completing degrees, though many may have lessened. This is another place with a need for empirical research in mentoring contexts beyond the college level.



Disability and Neurodivergence



Like many of the other categories here, much of the research is on mentoring students, not professionals. Studies show that mentees with disabilities need good mentorship, particularly at times of transition at any career stage. As with other identity categories, an important consideration is in matching mentor to mentee with aligned values, and for mentors to see their mentees for who they are. This means that more is needed at systemic levels to educate mentors on the breadth of disabilities and the impact they can have.

While classifying neurodiversity as a disability is contentious, the few studies addressing it do so in this context. Almost no empirical studies of neurodiversity in mentoring exist. This is a critical gap in knowledge as this identity category is an important defining characteristic for many academics and terminal degree holders. This gap in knowledge translates to a gap in mentoring, something that must be addressed in new iterations of mentoring training programs (69-73).

Questions to Consider



- Think about your previous mentoring experiences, either as a mentee or a mentor. What shared similarities were important to developing a close relationship and to feeling mutual safety and trust? Were there differences that made that development difficult? If so, could someone have done something differently to mitigate that difficulty?
- Mentors who acknowledge the validity and impact of the mentee's identity have the most positive impact. In what ways have you done that well in the past? In what ways might you improve that skill? Are there examples of identity categories where the opposite strategy might be true, and if so, why?
- Are there identity categories that are not addressed here that you think should be? If so, what strategies here might be usefully applied to that context?