RESEARCH ARTICLE

Negotiating mentoring relationships and support for Black and Brown early-career faculty

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Abstract

In this essay, we share historical and structural components of mentoring within institutions of higher education and grapple with technical and moral obligations of support. We argue for more humanizing approaches that embed personal, social, and cultural aspects of mentoring, and seek to disrupt the purposes of mentoring, and for whom? Using a critical approach, we promote justice-oriented and equity-driven models of mentoring that account for excessive teaching loads and service commitments for faculty at minority-serving institutions and Black and Brown faculty at predominantly White institutions. Current promotion and tenure publish or perish models neglect the intellectual and scholarly contributions made through teaching and service and therefore hold the same level of expectations for engagement in and dissemination of research. We share our own stories as Faculty of Color navigating institutional structures during the promotion and tenure process, while also negotiating incongruent cultures of our personal and professional lives. Furthermore, we address the need for mentoring and networking within exclusionary spaces to support the productivity and critical research agendas of Black and Brown faculty that often challenge the white heteronormative cultures of our institutions, professional organizations, peer-reviewed jour-nals, and prestigious funding mechanisms. Implications of this essay include an acknowledgment of oppressive systems that early-career Black and Brown faculty often

navigate and a call for diverse mentoring programs and supports that conform with and validate our lives and needs. Furthermore, we provide recommendations on evidence-based resources and approaches that are available to science, technology, engineering, and mathematics faculty and science educators.

I have made a conscious decision to take up space in the academy because of those who have paved the way before me. I understand that my mere presence as a Black woman in the professoriate is needed, and that I am a rare jewel in my career as a science educator and STEM advocate. There is a constant struggle between my kneeling posture – at the feet of Black women giants in the field who can show me the ropes and teach me how to navigate this space, and an extended stance indicating my will to climb and deep determination to pay it forward. "It" being the lessons learned, stories of how we overcame, and strategies for success – all without passing on the undue barriers and pressures to conform to an inauthentic norm. How do I balance the expectations of instantaneously being sought after to mentor (even as a junior faculty member in the academy), with my own need to seek and receive exemplary mentorship to earn promotion and tenure in spaces that were not designed with my success in mind? I carry this weight and responsibility on my shoulders.

Natalie

INTRODUCTION

In this paper, the authors provide historical perspectives regarding the mentor–mentee relationship and share multiple mentoring models. In discussing the influence of mentoring within the academy, we intertwine vignettes of our own struggles, successes, and experiences as a Black woman early-career faculty member who recently earned promotion and tenure and a tenured international scholar. While our scholarly work addresses issues of social justice and equity within science education, our focus shifts to the researcher and what it means to traverse these critical issues in K-12 contexts while also navigating and negotiating our own spaces within academia. An important question that foregrounds this study is understanding mentoring for what purpose(s) and for whom? Our decision to center Black and Brown early-career faculty members within the academy and particularly in the science, technology, engineering, and mathematics (STEM) disciplines is intentional as more attention is needed to detoxify and humanize hostile spaces.

This essay is separated into five major sections delving deeply into the following topics:

1. What is mentoring?: Exploring historical perspectives.
2. Identifying underrepresented groups in the academy and their mentoring relationships.
3. Tenure and promotion guidelines and the plight of Black and Brown faculty.
4. Mentoring Black and Brown faculty: A moral responsibility.
5. Reenvisioning mentoring, tenure, and promotion.

We open the paper by critically exploring historical perspectives on mentoring and draw close attention to how the academy has not served certain groups well due to a disconnect between cultural and social values. We illuminate challenges experienced within predominantly White institutions (PWI) and historically Black colleges and universities (HBCUs) and provide examples of national mentoring programmes. In exploring how mentoring is being enacted within academic institutions, we must be willing to grapple with the moral responsibilities of mentorship and decoding the tenure and promotion process. This requires a restructuring and reenvisioning of what mentoring should look like to emphasize wholeness, wellness, and community-engaged scholarship.

1 | WHAT IS MENTORING?: EXPLORING HISTORICAL PERSPECTIVES

Mentoring has its roots in the Western framework – from the time of Homer (1999) in his famous writing *The Odyssey* where the Mentor teaches his good friend Odysseus' son about the ups and downs in life and how to recognize and learn from prior errors. On the other hand, the Eastern framework is based on Confucianism and Hinduism and perceives mentoring as a relational bond where an elder shows the path to better judgment and decisions about life through knowledge of the practical and virtue. We agree with scholars that mentoring and mentor–mentee relationships need to value cultural differences across ethnic and racial groups (e.g. Mack, Watson, et al., 2013; Stanley, 2006). Therefore, there is a growing recognition in bioethics and other fields that nonwestern cultures have views about mentoring that could be more conducive to the success of the mentee and more satisfying to the mentor (e.g., Moberg & Velasquez, 2004; Siow-Ann, 2009; Tai, 2008). The Confucian framework of the mentor–mentee relationship stands on the premise that mentors are guided by their own personal sense of virtue and morality that are exhibited through their actions for the benefit of mentees rather than their own personal gain (Tai, 2008).

1.1 | Hindu and Buddhist mentoring philosophies

In Hindu and Buddhist philosophies, a disciple (mentee/student) chooses a mentor from whom one wants to learn because mentors align with what the disciple hopes to accomplish in life. The idea of a disciple in the Hindu and Buddhist philosophies is different from the Western idea. The disciple is not about physical and mental subservience but a psychological, cognitive, and moral bond that allows freedom of learning and growth to be prepared in the service of the larger good to the community. In these philosophies, the assumption is always that mentoring is a relationship that builds a virtuous person – one guided by moral goods, leads by example, and embodies moral being. There are many stories in both the Hindu and Buddhist texts where mentees have surpassed their mentors in new knowledge and novel interpretations of existing and old ways of thinking. Mentor–mentee relationships are not based on the mentee's wealth, social status, race, politics, knowledge, achievements, or any other hierarchies. Rather, these relationships are established on the mentees' willingness to learn and desire to lead a moral life in service to those who are oppressed or less fortunate. A hallmark of mentor–mentee relationships in Hindu and Buddhist traditions is that mentees are always introduced to and known by their mentors (even if their accomplishments have surpassed that of the mentor). Therefore, the relationship with and credit to mentors endure across generations.

1.2 | Indigenous framework of mentoring

Similarly, the Indigenous framework of mentoring is based on relationships, giving back to the community, and humility (Windchief et al., 2018). The goal of the mentor in the Indigenous framework is to sustain the community's

values by continuously expanding knowledge for its overall wellbeing (Indigenous Peoples' Health Research Centre [IPHRC], 2007). The mentor expects the mentee to be inquiring, free, and of service to the community. In Indigenous contexts, mentors encourage and impart knowledge to their mentees that are applicable in real life and continuously reflects their cultures and values. Therefore, mentoring in Indigenous communities is about nurturing relationships with the people and land that provide growth of knowledge and contribute to their sustenance.

1.3 | The influence of culture on mentoring relationships

Furthermore, research in academic medicine shows that there are cultural differences in approaches to mentoring. While overarching goals may be similar in terms of supporting the development and retention of junior faculty members in productive, collegial, and socially responsible ways, one cannot deny the influence of culture in determining how this is accomplished. For example, in a study conducted to explore the influence of culture on the mentoring relationships of Japanese physician–scientists, it is noted how hierarchical and rigidly organized the relationships are in the mentee's *Ikyoku* (or medical organizational system). The philosophical underpinnings of Confucianism influence mentoring relationships by focusing on respect, good moral character, and the different roles in society. These relationships have paternalistic interactions that are often mentor-centered where the mentee accepts the power differential and trusts the advice given by the mentor. This may be misunderstood as suppressing a mentee's autonomy and appear at odds with Western-centered ideals of mentoring. However, it is in line with non-Western cultural values and maybe a more favorable and acceptable form of mentoring for certain junior faculty members. Western ideas of mentoring tend to focus on the culture of individual success and gain and personal relationships rather than on community well-being (Obara et al., 2021; Sambunjak, 2015; Sawatsky et al., 2016). A study exploring failed and successful mentoring relationships in North America highlighted this focus on more individual characteristics of mentors and mentees. For example, participants described effective mentors as altruistic, active listeners, accessible, and able to facilitate the mentee's development (Straus et al., 2013). Effective mentors also provide career advice, offer emotional support, and assist the mentee with finding a work-life balance. Another study that described characteristics of good mentors in American universities (from the perspective of graduate students and early career scholars) were ones who served as role models on how to use coping strategies, facilitate opportunities for scholarly productivity, network with colleagues to form a collective power, and establish an empathetic connection with the mentee (Espinoza-Herold & Gonzalez, 2007). While mentoring plays a critical role in the development of early-career faculty and their identity formation, one cannot ignore the influence of culture, the economy, language, religion, and even politics in these mentoring relationships (Sambunjak, 2015).

In Buddhist, Confucian, Hindu, and Indigenous philosophical frameworks, mentoring is a relational bond between the mentor and mentee where the mentee learns skills and knowledge that builds a virtuous individual with morally guiding principles for the community's benefit. The mentor is a psychological, sociological, and cognitive guide all in for the mentee and larger society (Zellers et al., 2008). However, these frameworks of mentoring seemed to be based on the guru-disciple (guru–student) model where one expert individual (mostly a senior faculty) is responsible for all aspects of the mentee's (a junior faculty) needs. In everyday faculty life, one person cannot be an expert for all aspects of concern to early-career faculty members. Thus, this framework could produce many unintended challenges for effective and workable mentoring experiences on both sides. While there are benefits of one-to-one mentoring (particularly with women who often thrive in these environments) (Montgomery & Page, 2018), other considerations must be addressed. For example, cultural differences bring another layer of challenge to the mentoring system that the current institutional practices of mentoring – assigning available senior faculty to an early career faculty – create more failed or less satisfactory mentoring experiences.

2 | IDENTIFYING UNDERREPRESENTED GROUPS IN THE ACADEMY AND THEIR MENTORING RELATIONSHIPS

Black and Brown faculty representing different cultural and social values may find mentoring based on Western White cultural values disconnected and hyperfocused on personal and institutional gains rather than on the larger community's well-being. This dissonance often creates psychological and moral barriers between the mentor and mentee resulting in great harm to the mentee's success and distrust in the mentoring relationship and process. Thus, we believe in the need for documenting and understanding mentoring frameworks, values, moral responsibilities, and supports that have the potential to produce healthy and long-lasting mentor-mentee relationships. Natalie shares a vignette highlighting a few mentoring experiences that facilitated her success in graduate school and as an early-career scholar:

> After serving as a high school science teacher for several years, I made the decision to pursue my doctorate degree full time. I was recruited by a Black woman professor who saw the science educator in me, agreed to serve as my advisor, helped to secure a fellowship, and guided me along this career path. Once I was accepted into the program, I can vividly recall my doctoral advisor and another senior level administrator (both Black women faculty with tenure) giving me "the talk". They shared the importance of my daily actions because unfortunately I do not have the luxury of them reflecting me as an individual – particularly at a predominantly white institution, but rather as an essentialized group. They poured into me so that I understood the larger sociopolitical implications of what it meant to be in this space – the privilege as well as the pressures. There were times during my doctoral program where I felt inadequate or that I did not belong and depended on the recollection of their words to strengthen my spirit. There were other moments that I needed a safe place to vent and cry when I could not formulate words to adequately express my levels of frustration or even grief. What was this burden that I decided to carry as a first-generation PhD student and was the load even worth the sacrifice? As I neared completion of my degree program, those same mentors helped me to prepare for the job market and taught me the importance of negotiating contracts. Thus, I refused to sign on any dotted line without the blessing and approval of my mentors. When I think about mentorship, I envision this kind of selfless guidance and relationship built on trust and respect. As I faced my own challenges with papers being rejected from journals, grants rated as highly competitive yet unfunded, and struggles to balance my demanding personal and professional lives - they were there to listen and guide me through. So, while I initially had goals of successfully earning promotion and tenure, the true satisfaction of being a faculty member is bestowing this same level of mentorship on other Black and Brown doctoral students and early career faculty. We have the potential to increase diversity and retain talent by standing in solidarity and remaining in community with one another.

2.1 | A story behind the numbers

In a primarily White and male academy, Black and Brown faculty are largely underrepresented (Abdul-Raheem, 2016; Griffin et al., 2013; Herbert, 2012; McNeal, 2003). According to the U.S. Department of Education, National Center for Education Statistics (2020), among full-time professors and degree-granting postsecondary institutions, 53 per cent identified as White males, 27 per cent as White females, 9 per cent were Asian/Pacific Islander males, and 3 per cent as Asian/Pacific Islander females. Black males, Black females, and Hispanic males accounted for only 2 per cent of the full-time professoriate population, while Hispanic females made up approximately 1 per cent. Wheeler and Freeman (2018) note that Black faculty are even more underrepresented

in certain disciplines such as STEM, and are more likely to be hired in nontenure-track positions. When institutions are confronted about the lack of ethnic/racial diversity in the faculty, they often make up excuses about the selection pool not having enough "qualified" individuals to assume certain positions. Buchanan (2020) asserts that Black women represent only 0.8% of assistants, 0.5% of associates, and less than 0.3% of full professors – attributing racism, sexism, classism, and elitist beliefs about their scholarly work and publication outlets as leading causes for these disparities and underrepresentation. Even amongst those who do join the ranks of professors, Faculty of Color are less likely to be represented in senior-level positions, especially in fields such as STEM (Dekelaita-Mullet et al., 2021; Griffin et al., 2013; Modica & Mamiseishvili, 2010). So, while the number of Black and Brown faculty joining the academy is increasing, their ranks and statuses remain stagnant (Dekelaita-Mullet et al., 2021; Vassar & Barnett, 2020; Voytko et al., 2018; Wheeler & Freeman, 2018).

In addition to overall underrepresentation in institutions of higher education and difficulty securing senior-level positions, Black and Brown faculty often have greater responsibilities in their roles. The demands of scholarship, teaching, and service are not easy to balance, but when also considering the impacts of race and gender, some faculty face much more complex challenges (Evans & Cokley, 2008; Herbert, 2012; Tindall, 2009). For example, Black women and others who are considered *minorities* in the academy often have additional duties such as being required to serve on multiple committees asked to complete more administrative tasks and given more advisees and other informal assignments (Griffin et al., 2013; Herbert, 2012; Tindall, 2009; Vassar & Barnett, 2020). Their desire to serve and secure tenure makes it difficult to recuse themselves from these additional roles.

Furthermore, Black and Brown's faculty often face obstacles related to their research agendas, which oftentimes are undervalued because they contribute scholarship that others may deem as nontraditional or too critical, or controversial (Griffin et al., 2013). Some scholars have chosen to avoid research related to race and other topics due to the risk of it negatively impacting their tenure, promotion, or career advancement (Beverly, 2012; Buchanan, 2020; Tindall, 2009). While these challenges are real and commonplace, many Black and Brown faculty have navigated the politics and experienced success. Dekelaita-Mullet et al. (2021) noted several strategies and coping mechanisms that high-ranking women in the academy have attributed to their success. Some of these include openness, risk-taking, humility, and care for others. However, additional resources and institutional support are necessary to maintain career satisfaction and advancement.

2.2 | Navigating institutional structures and challenges of being "the first"

There are many challenges with establishing positive mentoring relationships, especially when you are a first-generation faculty member. Being the first Black or Brown academic in your family, particularly in the field of science education, has its challenges, yet presents many opportunities. There are often uncertainties regarding who to trust and confide in to ask sensitive questions about how to navigate this terrain. There are many kinds of firsts in science education – the first Faculty of Color, first female faculty, first-generation, and first faculty who studies critical issues such as equity, race, multiculturalism, and diversity. Each of these requires attention to the mentoring process and forces us to acknowledge intersectionality and the importance of naming and understanding overlapping forms of oppression. Faculty of Color exists in racialized bodies. Therefore, one cannot ignore racialization and the ways in which society orients itself toward us. It is impossible to consider the individual without acknowledging the institutional structures with which we must navigate and negotiate. Natalie shares her intersectionality story within academia and offers considerations for mentoring:

> What does it mean to be a Black woman science education researcher whose work often challenges current traditional approaches? As a cis-gendered heterosexual Black woman from a middle-class family, these multiple identities shape who I am as a science educator and inform my scholarly work. I was labeled as gifted and talented at an early age and had to navigate predominantly White learning

environments for most of my life. The intersectionality of my identities affect how I experience, perform in, and negotiate academic spaces. In my work, energy is often spent navigating systems of oppression while simultaneously seeking to dismantle them for future generations. It means lifting as I climb and ensuring that even though I was the first in my family to earn a PhD, I will not be the last. It is recognizing the science educator in others because of a mentor who recognized and nurtured the science educator in me. To thrive in the academy, I established a board of mentors who provided guidance in my personal and professional life. My board consisted of a team of formal and informal mentors within my academic institution and beyond who shared advice about the tenure process, opportunities for networking, writing support, how to protect my time, and my overall wellness as I navigated hostile spaces. My team was self-selected because I first identified the support required for me to be successful within my institution and professional organizations, and then sought out mentors who could provide that level of expertise. One important aspect of effective mentoring has been to admit when I needed help or when I did not know what to do next. My vulnerability and willingness to ask questions has facilitated productive mentor-mentee relationships

Successful mentoring has allowed me to bring my full self into teaching, research, and service as I refuse to undergo erasure of my values, morals, and lived experiences to exist in spaces that were not created with me in mind. While the academy wants us to think about identity singularly and essentialize experiences, it is impossible to separate the composite of who I am to be evaluated by stringent, antiquated, and misaligned promotion and tenure guidelines. Therefore, effective mentorship is required to preserve my sense of self while simultaneously negotiating my contributions to my professional organizations and field of study.

Russell (2022) discussed the importance of mentoring relationships in institutions of higher education writ large, but at PWIs in particular. Mentoring has the potential to be empowering and serve as a form of resistance for African–American women faculty to grow their professional identities and thrive in the academy.

2.3 | Mentoring relationships and support for Black women and Latina faculty

In making the transition from graduate school to the STEM workforce, research reveals that Women of Color unduly experience limited access to mentoring that could provide essential tools to negotiate success in the academy (Mack, Watson, et al., 2013). However, a lack of culturally competent mentoring that addresses cultural complexities and demonstrates an awareness of social pressures and influences is not readily accessible. One major contribution to the retention and growth of Black and Brown professors in the academy is the relationships that they form (Beverly, 2012). A study exploring faculty who are considered underrepresented minorities in the academy revealed the presence of a mentoring glass ceiling that often led to significant career miscalculations, well-intentioned mentors devaluing their scholarship, and a lack of accountability for mentors being disengaged with the early-career faculty member's development (Espino & Zambrana, 2019). Mentors and peers are especially vital to the success of women in the professoriate (Allen & Joseph, 2018; Beverly, 2012). This is particularly true for women in the sciences and medicine (Leggett-Robinson, 2020; White et al., 2020) where nontraditional mentoring models (e.g., facilitated peer mentoring) have successfully improved their academic productivity.

An analysis of the literature reveals that Black and Brown faculty members at PWIs benefit from mentorship opportunities with faculty from similar racial and ethnic backgrounds (Hsieh & Nguyen, 2020). While research documents the heavy service commitments for Black professors overall, disaggregation of the data reveals stark gender differences in mentoring patterns (Griffin & Reddick, 2011). For example, women tend to engage in personal relationships and face high gender-based expectations regarding student contact, while men potentially forge more

formal and compartmentalized relationships due to surveillance and their attempts to prevent (accusations of) inappropriate relationships with female students. An intersectional analysis helps to examine how racial and gendered experiences influence one's approach to the mentoring experience.

There are networks that are specially designed to meet the needs of certain affinity groups. For example, in their study investigating the experiences of Black women in a mentoring group called the Sistah Network, Allen and Joseph (2018) found that Black graduate students and faculty at a PWI valued the affinity group. Based on their findings, the mentoring group provided academic support, emotional benefits, social advantages, and advanced identity and empowerment. Hsieh and Nguyen (2020) also noted the importance of identity-formed mentoring models for Asian–Americans and other Faculty of Color to connect across intersectional identities. Another study focused on Latina tenure-track faculty who participated in a peer mentoring group-housed in a Hispanic Serving Institution – the Research for the Educational Advancement of Latin@s (REAL) collaborative valued the space that they created and shared (Murakami & Núñez, 2014). The REAL collaborative employed nonhierarchical peer-mentoring structures for Latina faculty to develop personal and/or professional transformation. This affinity group helped the participants to build a scholarly community to counter the historical isolation that faculty who are underrepresented often feel in academia.

Latino/a faculty members face significant barriers to professional advancement and are often the only one (or one of the very few Latino/a faculty members) in their institutions (Gonzále & Padill, 2008). A phenomenological study exploring the experiences of Latino faculty members in higher education revealed that the main challenges center on cultural taxation, discrimination, and feelings of isolation. Participants emphasized the importance of family values and their desire to pay the mentoring experiences forward (Salinas Jr et al., 2020). In exploring the role of mentoring for Hispanic students in graduate school, research suggests that those who received effective mentoring had an increased sense of belonging and academic self-efficacy (Holloway-Friesen, 2021). This finding has implications for those who decide to pursue a doctorate degree and transition into the professoriate. Furthermore, mentors who model skills and provide examples of resilience, professionalism, and effective interpersonal communication have the potential to enhance Latino/a students' confidence and self-esteem. Additional research that highlights faculty who serve as mentors for Hispanic undergraduate students reveals the importance of mentors' interactions with students in an organized manner and willingness to listen to and understand their needs (Estepp et al., 2017). Establishing affinity groups and support networks can help to retain early-career Latino/a junior faculty members and provide a welcoming space to develop and disseminate research and advance their educational attainment (Alanís et al., 2009).

Similar to Latina scholars in the academy, research suggests that sex- and race-related factors have directly and indirectly affected African–American women faculty's research; specific mentoring is needed before, during, and postdoctoral studies to increase career advancement in research institutions (Evans & Cokley, 2008). Racism and sexism push many African–American women out of academia prematurely or decrease the research productivity of those who choose to persist. According to Beverly (2012), common institutional barriers for Black academics are policies related to promotion and tenure and the devaluing of their scholarly research. However, the author found that career mentoring significantly impacted their professional advancement. Additionally, Evans and Cokley (2008) highlight the importance of mentorship between senior and early-career faculty in developing and strengthening their research agendas, co-authoring papers, and advancing into independent researchers. Another successful approach is peer mentoring which, according to Varkey et al. (2012), offers collaboration that improves career satisfaction and increases levels of academic skills and scholarly outputs.

Moreover, research also suggests that faculty at HBCUs benefit from strong mentoring relationships and opportunities (Johnson & Harvey, 2002; Lee et al., 2021). Johnson and Harvey (2002) explain that many Black professors are employed at HBCUs but found that heavy workloads and lack of mentorship opportunities between senior and junior faculty often serve as barriers to the promotion and tenure process. More specifically, early-career faculty expressed the need for guidance about informal policies and practices that may not necessarily be explicit. According to Lee et al. (2021), Black women STEM faculty at HBCUs seek out internal and external mentorship

opportunities related to scholarship and tenure. Even at HBCUs, they indicated being more likely to have their expertise questioned, and experience sexism, racism, and gendered racism (Lee et al., 2022). The authors recommended having institutional accountability and oversight, more leadership training and opportunities, and increased support for Black women STEM faculty's research agendas to facilitate institutional transformation for their success and advancement in the academy.

2.4 | Challenges of Black and Brown immigrants in teacher education

Many Black and Brown scholars are recruited and hired as tenure-track faculty members in the STEM fields as well as science education. There are those who have immigrant status. Mentoring this group of faculty requires a new layer of urgency and patience that many U.S.-born faculty and those from White European and other English-speaking nations may not need. The mentoring of Black and Brown immigrant faculty adds multiple cultural, experiential, and academic dimensions to the tenure and promotion process. The challenge of the legal status of immigrant faculty members is real and very time-consuming, needing both professional legal support as well as personal support to succeed in tenure and promotion when the time arises. Here is an experience from Bhaskar as an immigrant status faculty:

> I was hired while on a student visa status with permissions to work in the United States. My family and I had to navigate the ever changing and complex maze of immigration requirements and provide evidence of "real marriage not a fake one." This was during a time when we still needed to go develop photos at a neighborhood corner store that had a 1-hour photo facility. We had to provide evidence of a "real job" which required reams of paperwork. The most tedious part was waiting months or years for face-to-face interviews. I received permanent resident status in about eight months, but the anguish and tension did not go away during this process. I always questioned whether the hard work of publishing, teaching, and service in the tenure and promotion process was worth it.

Bhaskar reflected on how traumatic and time-consuming the process of transitioning from a student visa to permanent residence was for him as an early-career faculty member. Then, another situation arose when the state board of teacher licensing required that all faculty and instructors who taught had teaching licenses in those grade bands. Many faculty members who were immigrants from African and Asian nations did not have teaching licenses but had experience teaching for many years (and even decades) in their home countries because they only needed an undergraduate degree in the relevant content area in which they were teaching. Just recently the state licensing board revised the eligibility requirements for teaching licensure and Bhaskar recounted how he navigated the situation:

> I have a Master of Science degree in physics but do not hold a teaching license to teach in K-12 classrooms because before 2010, my home country only required middle and high school teachers to have an undergraduate degree in science. I have years of experience teaching science to elementary, middle, and high school students with a very high success rate in the National and State assessments. Yet, unless the current Professional Educator Licensing and Standards Board (PELSB) in the state changes its requirement for course instructor eligibility in the teacher licensure programs, I was ineligible to teach any of the courses in the teacher education program. That meant that I could not contribute to preparing science teachers for equity and diversity. Based on the current rule, an instructor must have a P-12 teaching license in a grade band (K-5 and 9-12) to teach any required courses for teaching licensure. If this narrow interpretation is adopted by the PELSB, many Black and Brown international scholars would be out of the teacher licensure program jeopardizing their research and teaching for tenure and

promotion. If the PELSB Board chooses not 'grandfather' faculty like me, who were teaching these courses before the new rule went into effect, I may be ineligible to teach any science education courses required for P-12 licensure. Thankfully, some new options are currently being considered to resolve this issue but the stigma of being an immigrant has already caused professional and psychological stress.

Another challenge of mentoring Black and Brown immigrant faculty is their legal status. In most institutions of higher education, a faculty hired under a work authorization visa must have a permanent residency status (popularly known as a Green Card) before the faculty can be granted tenure. Even though this is beyond the idea of mentoring, the psychological trauma and anguish are real for the mentee and for a mentor who cares about the success and the invaluable contributions of the scholar. As science education values diversity amongst its tenured faculty ranks, this group cannot be ignored as they contribute greatly to scholarship and teaching. Furthermore, as institutions of higher education continuously look to internationalize their education, immigrant Black and Brown faculty can be at the vanguard of success in these initiatives. They are often the ones who lead Study Abroad and international research groups in their home countries. Mentoring immigrant faculty has added layers that would look different from other Black and Brown faculty. The next section explores the importance of mentorship for early-career faculty members as it relates to tenure and promotion.

3 │ TENURE AND PROMOTION GUIDELINES AND THE PLIGHT OF EARLY-CAREER FACULTY

Mentorship in the academy has the potential to support Black and Brown faculty through the tenure and promotion process. Abdul-Raheem (2016) explains that the underrepresentation of Faculty of Color in tenured positions results from institutionalized racism and the lack of cultural diversity in higher education because these individuals may not have the status, platforms, or positions to adequately advocate on behalf of their colleagues. A study presenting tenure and promotion denial lawsuits of Black professors against historically White institutions provided evidence of discrimination, but courts often fail to recognize social inequities (Ward & Hall, 2022). The findings of this study shed light on intersectional barriers to tenure attainment due to inadequate institutional support, divergence from policies, inconsistent guidelines, and problematic academic politics. The authors called for more humanity-affirming work environments and new approaches to tenure and promotion policies that are anchored in antidiscrimination or critical procedural justice (Ward & Hall, 2022).

Women and Faculty of Color disproportionately face barriers such as hostile work environments, racism and discrimination, and limited access to mentorship and other resources (Abdul-Raheem, 2016; Dade et al., 2015; Hannon et al., 2019). Furthermore, feedback from peers and student evaluations regarding their teaching can negatively impact the ability of Black faculty members to earn tenure because they are more likely to receive less favorable reviews (Hannon et al., 2019). This study also uncovered personal dispositions that tenured faculty attributed to their achievements. First, early-career faculty members were open to community building and mentorship. They also had heightened self-awareness and understood their areas of growth, strengths, and how to navigate the culture and climate of their academic institutions. Finally, they had a clear vision of the direction of their research, and resilience to see the process through completion (inclusive of dissemination through presentations and publications). In addition to individual actions that are taken by Black faculty, Hannon et al. (2019) emphasize the need for institutional support that includes clear expectations and mentorship initiatives. A primary goal should be to dismantle institutionalized systems of oppression so that they are not perpetuated across generations by teaching Black and Brown early-career faculty how to navigate, cope, and be resilient instead of thriving and being whole.

3.1 | Tenure and promotion ambiguity

For many Faculty of Color, an academic position is the first time that they have ever encountered tenure and promotion guideline documents. We heard about the tenure process and rhetoric around "publish-or-perish," but may have never engaged with those documents before assuming a tenure-track position. Therefore, the tenure and promotion policies, guidelines, and processes can be mysterious, vague, and outright anxiety-producing. Bhaskar shares his reflection on first reading the tenure and promotion document:

> When I first read my college's promotion and tenure criteria and procedures document, I found it very scary and got filled with a sense of achievable goals that only "extremely intelligent" and mainly U.S. born and White individuals could attain. Being the first in the family to go to graduate school in the United States and the first to complete a doctoral degree (Ph.D.) only added an extra sense of hopelessness once I read the document that held my future life hostage. To me, the message seemed to be "leave everything, including starting your new family, and just dedicate every minute of being to meeting these seemingly unattainable targets"

> So where would a Person of Color who is an immigrant, and first family member to hold a tenure track assistant professor position at a research 1 institution go for some advice and comfort - a social, cultural, and mental comfort? This is where other Black and Brown colleagues and White allies who care about our success need to intervene and mentor. Most of these supports are in the form of decoding the White codes of success instead of obscuring them further. Sometimes senior level and well-intentioned colleagues recycle more anxiety-producing and less socially supportive generic statements like "not all journals are created equal," "publish in prestigious journals," "get grants rather than seek grants," and "have a focused research trajectory." If all journals are not created equal, then why do established scholars in the field publish in varieties of journals that are ranked as top tier? How are we expected to publish in these journals when most times they do not appreciate the type of work that we are contributing? Furthermore, how can we have focused research agendas when in many cases, our dissertation studies were more aligned with the interests of our advisor and not our own?

> The list of questions can be long based on one's research and institutional contexts. These statements shared by mentors and promotion and tenure committees from the university level all the way to the departmental level are unhelpful to Black and Brown faculty because they are still codes that hold no one accountable if the process works against you in the event that a committee does not deem the journals that house your scholarship as prestigious. Many times, Black and Brown researchers experience pushback from most mainstream journals because their work challenges the status quo both in the paper's conceptual framing and research approach. Therefore, the entire process can evoke feelings of anxiety rather than serving as a space to grow as an emerging scholar in one's field. Mentors can help to decode statements such as 'publish in prestigious journals' by adding that prestige does not only apply to the impact factor or acceptance rate; it also includes historical name recognition, audience of the journal, focus area of the journal, geographical reach, theoretical focus, specific community or groups, and much more. Senior colleagues could provide a list of journals in which they have published and may add more names of journals to show the variety of outlets and audiences that one would publish and still be considered prestigious. Decoding the tenure and promotion document is vital to Black and Brown faculty's mentoring success.

Otieno (2013) provides similar recommendations to understand tenure codes that are often confusing and have many hidden assumptions about research and publications activities. He suggests that intentionally seeking help

from senior colleagues within and across the departments could alleviate some of these challenges. Furthermore, this paper cautions that when Black and Brown's faculty have research agendas focused on their own communities/ groups there may be exclusionary practices that prevent their research accomplishments from counting toward tenure and promotion. Stein (1994) noted that research conducted by these emerging scholars on their own groups/communities seems to be more subjective; thus, their research contribution is deemed as less valuable which later influences tenure and promotion decisions. Anecdotally, Black and Brown colleagues have shared amongst themselves that they heard some senior White faculty wonder "why minority faculty study minority groups." This kind of statement makes tenure and promotion codes even more suspicious because many were written and approved for by the majority of White and male faculty. Otieno (2013) suggests that early-career Faculty of Color should clarify in writing that research on race and their own ethnic and geographical regions are acceptable for tenure and promotion.

Research on tenure and promotion in the academy continuously shows that Black and Brown Faculty are taxed with carrying the load for the entire department on equity and diversity commitments of an institution (Leggett-Robinson, 2021). The burden of being at the vanguard of equity work in a university stretches in multiple directions without much time left for their own research, writing, and publishing. Bhaskar shares a retrospective reflection on what it meant to be the first Faculty of Color in his department:

> As one of the first tenure and tenure-track Faculty of Color hired in the department, I got "requested" to be in multiple committees that were heavy on frequent meetings and with subcommittee work. I was assigned to committees that dealt with the National Council for Accreditation of Teacher Education (NCATE) and state teacher education unit evaluation reviews. Similarly, I was assigned to the Diversity Committee that had ad-hoc status then and requested to be a guest lecturer in courses and workshops that dealt with diversity and equity. Even though they were presented as "requests," for me they were all required because you cannot say 'no' as a new untenured Faculty of Color.

> One day, I think in my second year in the professoriate, students in my science methods course informed me that they saw my photo on diversity and multicultural posters all over campus. When I saw the poster in the hallways and common spaces, I knew where the photo was taken. I still cannot recall if I was asked if it could be mass produced and I felt exploited to represent the diversity within faculty ranks. To be truthful, I would have agreed to be on the poster but at least provide me with the option to help the larger cause of improving racially and ethnically diverse students to feel like they are in community with a faculty member who was an immigrant and had a foreign accent.

> Unfortunately, in my annual reviews and tenure and promotion process to associate professor, these contributions never became front-and-center. They were listed as "and also did this for diversity". In all annual reviews, a constant sentence that appeared was, "publish more in highly regarded journals". This same sentence still appears in my post-tenure reviews required by the University policy. The hard work of community engagement, outreach, and teaching courses that are about race, equity, and social justice, along with mentoring (mostly informal) disappears in the pages of tenure and promotion requirements as service.

3.2 | Tokenism, isolation, and scrutinization: Is the burden worth bearing?

These stories are not novel and occur across racial and ethnic groups. Not only are Faculty of Color frequently tokenized within their institutions, but their scholarly work is often scrutinized. Stanley (2006) presents a case of a

Native American associate professor in education who was discredited and questioned about his expertise when he challenged the history as written in textbooks and encouraged White students to view American history from a different (Native) point of view. Similarly, an African American assistant professor found criticism about his class in the campus newspaper describing it as more of a "racial sensitivity" class rather than a political science and government class which the students felt was an academic "ambush" (Stanley, 2006, p. 708).

Other scholars have argued that the amount of responsibility and expectation put on Faculty of Color (men, women, and non-gender conforming) outweigh the benefits and recognition that they receive during tenure and promotion (Coleman, 2013; Garcia et al., 2013; Pottinger, 2013). In many instances, where the salary raise is based entirely on annual merit, teaching only gets a relatively small weight in the overall merit score. Therefore, many Black and Brown faculty do not benefit from taking on the most difficult courses on race and diversity, and often experience undue stress from being challenged about their motives and level of expertise to teach the course.

Additionally, many Black and Brown faculty are assigned difficult courses and time-consuming committees on race, diversity, equity, and multiculturalism across fields, even more in science education (Coleman, 2013; Stanley, 2006). These assignments are generally in White institutions where students often question the scholarly expertise and accuracy of the faculty member teaching them. Furthermore, the burden to carry the diversity and equity load mostly falls on the Faculty of Color the moment they assume academic positions. Very likely that was an underlying reason for being offered the position, but those agendas remain hidden or unspoken. In these instances, Black and Brown's faculty sense the pressure to "prove and over prove their presence and worth in the academy" (Stanley, 2006, p. 715). Effective mentoring has the potential to help early-career faculty navigate these situations for more positive experiences that both support and protect them in academic institutions.

4 | MENTORING BLACK AND BROWN FACULTY: A MORAL RESPONSIBILITY

In a recent paper, Starck et al. (2021) show that the diversity initiative to increase the number of Black and Brown students in universities and their academic success have mostly resulted in mediocre outcomes in attracting, retaining, and graduating this population of students in institutions where the foundation for diversity has been focused on outcomes that benefitted White students' learning. They called this "instrumental rationales" (p. 1) of diversity because they focused on outcomes that relied on how much White students would gain from their Black and Brown counterparts at the institution. This study revealed that universities who had "moral rationales" (p. 2) as the basis for diversifying their student population showed greater academic achievement, retention, graduation, and success. The moral rationale for diversity-focused on issues of equity, social justice, and social change that benefited Communities of Color directly rather than Whites only. Therefore, we see similar institutional steps necessary when hiring, granting tenure, and promoting Black and Brown faculty in universities for the benefit of the White faculty's desire to learn more about the "Other" but not for the wellbeing of the "Other." Thus, a lack of psychosocial support (Kram, 1980) in mentoring tends to be less beneficial and potentially unsuccessful mentoring outcomes (Stanley, 2006; Zellers et al., 2008).

From the point of view of mentoring as a moral and intellectual activity, principles of equity and social justice must be central to improving and building successful racial and ethnic representation amongst the faculty population. The *moral* is a focus on psychosocial needs such as counseling, identity-building, and friendship while *intellectual* emphasizes professional visibility, grant writing, publication, and sponsorship. Mack, Watson et al. (2013) in their book on mentoring Faculty of Color very decisively assert that the cost of success for Black and Brown faculty in universities is:

> One is often requested, if not pressured to acclimate to the mores, values and customs of the dominant culture. Your heritage, religion, sexual preference, cultural tastes, et cetera must often take a backseat or

become so obscured to the extent it does not make the majority group uncomfortable. The end result becomes a form of social isolation (p. 12)

This kind of demand from faculty to attain tenure and progress has to be examined through a moral stance and not just a checklist of guidelines that are often reduced to bean-counting to measure professional progress. What is left when an institution (and a mentor as the mediator) asks a person to leave their heritage, which can be viewed as unacceptable and cultural genocide? Institutions can only legitimately state that it seeks to increase and diversify representation in the ranks of faculty with equity, diversity, and social justice agendas that are principled on moral grounds of true justice. Therefore, we must consider innovative approaches to mentoring early-career faculty members for success where the mentee's cultures, identities, values, and social-emotional needs are met.

4.1 | Mentoring needs: What should be the focus?

Mentoring approaches based on moral, social justice, and equity frameworks are not neutral decisions but political acts. This means that any actions and activities during mentoring are not morally neutral (Gilligan, 1982) and social justice orientation within the mentoring process defies traditional models. Therefore, successful mentoring values relational, compassionate, and caring processes of mutually beneficial decision-making and actions that benefit both mentees and mentors. We also consider mentoring a moral obligation of multiple senior-level scholars to support early-career scholars to succeed in the craft, profession, and thinking that meets their goals and aspirations and aligns with their identities. Mentoring is about mutually beneficial relationships guided by honesty, flexibility, partnership, and listening and learning. The mentor has to support what the mentee needs to grow and thrive without imposing their own personal interests and agendas. Since mentoring consists of a complex set of interactions based on institution, department, research and teaching interests, and mentees' identities, there are varying definitions and models of successful mentor–mentee relationships or mentoring activities. We caution that any mentoring models we discuss or allude to have varying degrees of success based on the institution, individuals, disciplines, subdisciplines, race, gender, culture, politics, and many other factors. Therefore, there is no one-size fits all mentoring model. Yet, we argue that the chance of success is very high when the mentoring framework relies on the balance between psychosocial and professional support.

4.2 | Enacted mentoring models in the academy

A review of the literature shows that mentoring of any kind boosts the potential of Black and Brown faculty to persist within academia. Mentoring has the potential to improve research activity (number and quality), increase effective teaching practices and recruitment, and diminish attrition (Bland et al., 2009; Mack, Watson, et al., 2013) while also providing psychosocial support (Kram, 1998). An important aspect of mentoring is that it has the potential to create a more positive institutional climate for faculty who are underrepresented in these spaces (Melicher, 2000). Some scholars propose that a different kind of mentoring called sponsorship might be more beneficial than the traditional models (Ibarra et al., 2010). Sponsorship is the willingness of mentors or individuals who are in a position of influence to advocate on behalf of the mentee for increased resources and recognition. According to Ibarra et al. (2010):

All mentoring is not created equal, we discovered. There is a special kind of relationship - called sponsorship - in which the mentor goes beyond giving feedback and advice and uses his or her influence with senior executives to advocate for the mentee. ...Furthermore, without sponsorship, women not only are less likely than men to be appointed to top roles but may also be more reluctant to go for them (p. 3)

One of the benefits of sponsorship is that it tends to accelerate promotion and access to resources rather than more traditional models. The study also reveals how women, despite receiving more mentors than men, tend to be mentored by junior or less influential senior people (Ibarra et al. 2010). The effect of this disparity multiplies over time giving fewer opportunities for women to experience upward mobility, and we would argue that this is even more devastating for Women of Color. Thus, the authors suggest that Black and Brown faculty may benefit more from sponsorship models of mentoring because the mentors are vested in "fighting" for opportunities and resources and "protecting" their mentees from "negative publicity" (p. 6). However, the sponsorship model of mentoring is intermittent and not all mentees are in this model of mentoring in their institutions. Therefore, other kinds of mentoring models could be useful for faculty success.

The most popular and age-old traditional mentoring model is based on dyadic or one-on-one hierarchical professional relations between a senior mentor and a junior mentee (Montgomery & Page, 2018; National Academies of Sciences Engineering and Medicine [NASEM], 2019). In the Dyadic model, there is a high likelihood of mentor–mentee mismatch such as differing psychosocial skills, values, and identities (NASEM, 2019; Zellers et al., 2008). On the other hand, peer-to-peer or peer-to-near-peer mentoring has a diffused power imbalance between mentor and mentee allowing for more informal relationships (Montgomery & Page, 2018; Pololi & Knight, 2005). Group mentoring relies on multiple senior faculty with specific skills who are willing to invest time and support in a single junior mentee (De Janasz & Sullivan, 2004; Ko et al., 2014; Martinez et al., 2015). In group mentoring, the mentee can receive support, guidance, and directions on research, teaching, and service through various experiences for expansive mentoring support. Network mentoring is similar to group mentoring but differs in that it provides a network of senior faculty with a multitude of skills (Ko et al., 2014; McClurken, 2009; Montgomery & Page, 2018; Yun et al., 2016; Zellers et al., 2008). Since the network model is broad in scope and value, it also brings challenges of managing varied skills, personalities, values, and expertise (NASEM, 2019; Zellers et al., 2008). However, the network mentoring model has been beneficial to the Faculty of Color by providing more opportunities to engage in transdisciplinary activities (Pololi & Knight, 2005; Zellers et al., 2008).

With the rise in access to technology and social media, e-mentoring and the professional organizational models of mentoring show promise because they allow for greater flexibility amongst mentors and mentees. Furthermore, since mentees have the option to select their own mentors without institutional pressures, there is a greater chance that the mentor-mentee matches are compatible (NASEM, 2019). This type of mentoring could promote focused professional growth and networking within and across disciplinary groups, but the onus is on the mentees. In this instance, academic institutions seem to have less responsibility for success or support. Research suggests that regardless of the mentoring model employed, the act of mentorship has a demonstrably positive effect on the individual, the profession, and the institution. Even though the mentees are adults with doctoral degrees, they often lack knowledge of institutional culture and many idiosyncrasies that are useful to build relationships and networks of advocates. Therefore, mentoring is about reducing the knowledge gap and empowering mentees to build stronger professional and psychosocial relationships. Table 1 below provides a brief snapshot of mentoring models and their potential strengths and successes. Institutions will benefit immensely if the mentoring system was in place and actively supported for the success of faculty who are underrepresented.

4.3 | Importance of mentoring and examples of institutional and national mentoring programs

Much of the literature highlights the advantages of mentoring for tenure track and early career faculty members. Davis et al. (2011) explore the benefits of an initiative that supports tenure track faculty, specifically Black women. Sisters of the Academy (SOTA) is an organization that provides networking, writing assistance, and mentorship opportunities to Black women in academia during a one-week intensive boot camp. In exploring one woman's experience with this initiative, the authors found that in just 1 week, the programme increased the participant's

TABLE 1 Mentoring models

	Traditional (dyadic)	Peer-to-peer	Group	Networks	E-mentoring or professional organization	Sponsorship
Structure	Hierarchical institutionally structured, preassigned	Peer, mentee initiated, departmental	Mostly hierarchical, time bound (limited)	Any level of faculty with different expertise, mentee or department initiated	Mostly senior faculty with closely related interests	Extremely hierarchal, highly influential senior faculty, advocate for opportunities within and outside institutions
Format	One mentee with one mentor or team of mentors	One-to-one or small collaborative group nonhierarchical power dynamic reciprocal information sharing and psychosocial support	One or small number of mentors with specific skills, education/training, or information distribution	Multiple relationships with many advisors. Any length of duration, scope, and of nature of support	One or small number of mentors with specific or varied skills. Varied duration, scope and support, flexible and need-based	Apart from or in addition to ongoing mentorship, one or multiple individuals, intermittent in nature
Typical career stage of mentee	Early	All career stages	All career stages	All career stages	All career stages	Early career
Typical career stage of mentor	Mid or senior	All career stages	All career stages	All career stages	All career stages	Senior
Challenges	Recruiting and training enough and desirable skilled mentors, time commitment	Recruiting and training for peer mentoring, time commitment, and changing group membership	Differing needs, providing appropriate training, managing group dynamic, changing group membership	Differing needs, providing appropriate training, managing group dynamic, changing group membership	Differing needs, outside of institutional influence, time commitment	Recruitment is not possible, initiated by very senior person, intermittent, different areas of interest

engagement with her research. Additionally, offering this space on an institutional or national level helped to guard the participant from possible isolation within her department. Similar mentoring and support initiatives can be replicated across the nation to support Black and Brown early-career faculty. Fleming et al. (2015) discuss the outcomes of a more traditional mentoring initiative. This programme allowed senior faculty members to assist small groups of early-career faculty members with aligning their current tasks and responsibilities with their career goals. Consequently, early-career faculty reported improvement in their knowledge, skills, and attitudes toward professional development and scholarship. Mack, Rankins et al. (2013) reported that efforts targeting entry into and matriculation through graduate-degree programmes yield the most optional results for African American and American Indian women. On the other hand, Hispanic women benefit most from efforts that target their entry into the professoriate. In exploring the Society of STEM Women of Color (SSWOC), the founders and directors of this organization shared the necessary principles to provide an intersectional lens to report and understand the status of Women of Color in the STEM disciplines. The SSWOC Framework meaningfully addresses barriers that have systematically inhibited the participation of Women of Color as prominent thought leaders within academia and beyond. The next section explores how we can reconceptualize mentoring models for early-career faculty members that promote self-care and wholeness.

5 | REENVISIONING MENTORING, TENURE, AND PROMOTION

As we contemplate the nature and purposes of mentoring and mentoring relationships, we seem to find community and overall wellbeing as a common thread amongst Black and Brown early-career faculty whose research and teaching are often intricately intertwined with their backgrounds, cultures, and who they envision will benefit from their scholarship and service. Since a goal of science education for social justice and equity is to bring research into the lives of underrepresented youth and communities, mentoring that supports these initiatives has the potential to build more successful mentoring programme and yield better outcomes for the mentee and institution at large. Many Black and Brown faculty already engage with underrepresented communities in their courses through service-learning, community mapping, and out-of-school science activities. These could be accounted for in teaching and service rather than requiring them to choose either or in their annual reviews. Furthermore, many institutions of higher education want to engage with their geographical neighbors as outreach initiatives. Black and Brown's faculty overwhelmingly are tasked with this job. Therefore, a mentoring programme that supports community-engaged work with an eye on enhancing Black and Brown early career scholars' research and peer-reviewed publications would certainly show success and increase retention potential.

There has been a call for a more community-engaged scholarship to connect and share university-generated knowledge with individuals who could benefit, and have communities inform our research and teaching (Boyer, 1990). Boyer's community-engaged scholarship could be extended to consider youth and families who live in close proximity to the institutions yet are underserved. There is potential to have more immediate and positive impacts on the institution and surrounding community. An argument that Boyer makes is that institutions need to value and support the application of knowledge with community-based research, teaching, and service (Boyer, 1990). A study exploring the mentoring experiences of faculty who are underrepresented in research-intensive institutions revealed that their scholarly interests and commitments to community-engaged scholarship were undervalued. Therefore, connecting with mentors who understand the struggles associated with these barriers is critical to the retention of early-career faculty (Zambrana et al., 2015). There have been increased calls from higher education leadership for universities to encourage faculty members to bring their expertise into the community for long-term engagement and partnerships (Boyer, 1990; O'Meara, 2002). Yet, this call has not trickled down into all-important tenure and promotion criteria and procedures.

Despite the promise to support the success of Black and Brown faculty members, institutions of higher education have not embraced community-engaged work as a part of scholarship without peer-reviewed

publications. If the goal is to see success amongst the Faculty of Color, mentoring programmes must balance the old rule of producing a high volume of peer-reviewed publications with a need for the community-engaged scholarship.

5.1 | Addressing social needs and an emphasis on self-care

The literature and research on mentoring success emphasize the crucial value of social or psychosocial support that mentees need (Allen & Joseph, 2018; Lloyd-Jones, 2014; Mondisa & McComb, 2015). Many Black and Brown faculty (women in particular) value mentoring to combat social isolation because academia can be a socioculturally isolating space. Sociocultural dissonance then seeps into their professional and personal lives making Faculty of Color vulnerable to leaving the profession. Therefore, some scholars have argued that mentoring needs to be culturally relevant to Black and Brown faculty and women mentees for success (Ireland et al., 2018; Montgomery, 2017). Culturally relevant mentoring "involves an ongoing, intentional, and mutually enriching relationship with someone of a different race, gender, ethnicity, religion, cultural background, socioeconomic background, sexual orientation, or nationality" (Crutcher, 2014). Culturally relevant mentoring also addresses issues that immigrant faculty members encounter in a new country. It has the potential to provide a "better understand [ing] [of] problems facing marginalized and minoritized [mentees] rooted in pervasive, systemic, and institutional inequity" and offers these mentors opportunities to "align those understandings with key components of mentoring processes" (Weiston-Serdan, 2017, p. 14).

We assert that social and cultural needs are core ingredients of one's identity. Faculty of Color are not retained by just relying on scholarly and research success; their sociocultural needs must be met. For example, since Bhaskar is from Nepal, his cultural holidays fall between October and November, which is the peak time of the fall academic semester. As his state has a nonexistent Nepali community, those 2 months are typically socioculturally isolating, making him wonder if he should stay or leave the job. The experience of social and cultural loneliness cannot be replaced by scholarly success and activities.

Natalie also reflects on times when she felt isolated in her work that centers on access and equity in STEM education and community-engaged scholarship. She tries to balance time spent in the community to learn more about the people and culture with obligations to seek external funding, publish, teach, and serve her professional organizations. Her cultural norms of working in interdisciplinary teams are incongruent with the values of the academy where the emphasis is on single-authored papers, establishing one's research agenda and independence, publishing in journals with high impact factors, and securing federal grants. She often must negotiate the contentions of culture, moral values, and disconnect within academic spaces. Furthermore, as a mother with school-aged children, it is often difficult to balance the demands of home with the desire to be active and visible within her professional organization. Natalie hopes to normalize being present with family while also maintaining a lifestyle and research agenda that is community-driven rather than self-centered motives that value recognition or accolades. While she has resisted conforming to these institutional structures, there is a need to address the sociocultural needs of Black and Brown faculty so that we not merely exist, but have opportunities to thrive.

In considering the Indigenous framework of mentoring – where giving back to the community and sustaining its values are central – faculty and administrators should consider embracing this approach within our academic institutions. While Western ideals that focus on individual and institutional success have their place, we must ask ourselves "who is benefitting from our work?" We may be well-known within our professional organizations, but can community members count on us to make a tangible impact within schools and other informal spaces? We must reconceptualize *impact factors* and embrace mentoring models that promote relationship building and community wellbeing.

In exploring the work lives of Black faculty in postsecondary science education, Parsons et al. (2018) documented that while Black faculty are few in number, they play essential roles in mentoring and graduating Black and Brown doctoral students. The authors used critical race theory (Bell, 1992; Delgado, 1989) as a lens to explore

how race and racism function and are materialized in various forms at the micro and macro levels. Findings revealed stressors associated with work overload and having to justify one's productivity because diversity-related services are not valued in promotion, tenure, and reappointment decisions (Diggs et al., 2009). Black faculty participants experienced being penalized and marginalized in tangible and intangible ways. They acknowledged the realities of students giving poor teaching evaluations, especially in courses about race and culture (Smith, 2007), and the racial microaggressions and microinvalidations from their colleagues, administrators, and students. To enhance faculty diversity by attracting, hiring, and retaining more Black and Brown scholars, efforts must be implemented to improve their experiences within the academy (Jones et al., 2020).

Furthermore, research also shows that Indigenous people often choose to leave institutions of higher education because of isolation and mentoring programmes that fail to recognize and address the social and cultural aspects of mentoring (Stanley, 2006). When these needs are unmet, they seek refuge in their own communities and isolate themselves from institutions of higher education (Turner, 2002). Thus, increasing the propensity to leave academia and pursue something that is meaningful for the person and community. Faculty of Color often leverage their roles within academia to create space for those who are underserved and underrepresented. Not only are their efforts rarely rewarded, but they are often discouraged or even punished. In a study exploring Black engineering and computing faculty exercise an equity ethic, the authors shared narratives of 39 professors to understand their motivations to reduce racial inequities in their disciplines (McGee et al., 2022). Findings revealed that participants guarded their time and energy to focus on self-initiated diversity-related services to broaden participation in their fields. However, their initiatives were often overlooked in annual reviews and the tenure and promotion process.

5.2 | A focus on wellness and self-care

A critical question that we posed in the introduction was a need to understand mentoring for what purpose(s) and for whom? In navigating hostile institutions and the politics of promotion and tenure, groups who have been marginalized have created their own spaces of refuge and support. Limas et al. (2022) acknowledge mental health struggles that result from larger dysfunctional research cultures in institutions of higher education. In discussing mental health interventions for the STEM academic community, they focused on systemic changes that are needed to create more inviting research environments where everyone can thrive. The competitive nature of scientific discovery and the scarcity of research funding impacts the researcher's mental health and can be detrimental to advancing one's career (Limas et al., 2022). The authors encourage institutions of higher education to move beyond performative action to support inclusive and thriving academic spaces that promote good mental health. Acknowledging institutional factors is important, but everyone has a role to play in changing research cultures – especially scholars who are tenured and served as senior-level faculty and administrators.

Specific actions that scholars who are interested in mentoring Black and Brown early-career faculty members can take are to make time to check-in, listen to what is and is not being said and offer ways to support. It can be intimidating to ask for help, and Faculty of Color are often not extended the same grace and resources that are offered to others. Provide insights on how they can manage their teaching and service loads while integrating them into their scholarship. Be willing to serve as a sponsor for Black and Brown faculty without feeling a need to be publicly recognized for any accomplishments they receive as a result. In other words, acknowledge your place of privilege and support Faculty of Color who are constantly navigating oppressive institutional and systemic structures. Try to reduce power dynamics within the mentoring relationship while maintaining trust and mutual respect. If Black and Brown faculty share their experiences of discriminatory practices, microaggressions, and microinvalidations – believe them. Do not ask for proof because these offenses are difficult to pinpoint and articulate although clearly felt. Finally, honor the ways in which they hope to be mentored. Their approach to mentorship may differ from your own, but common ground can be reached for healthy and effective mentor-mentee relationships.

Instead of reimagining what mentoring programmes could/should look like, we must first do our due diligence to understand the needs of early-career faculty members and the support needed to protect their communities. There is a need to complicate and disrupt spaces that are not conducive to personal and professional growth and wellness. This may require radical approaches that leverage socially sanctioned structures. We also need to disaggregate data to get true insights into the plight and experiences of specific demographic groups. This information has the potential to provide directions on funding and research initiatives as we strive toward equity within academia and STEM education in particular. Institutions of higher education must go beyond performative mentoring and be more accountable for supporting early-career faculty members who they recruit and hire. We must explore and create promotion and tenure models that embrace diversity and equity and create alternative pathways to the promotion that embrace community-engaged scholarship. To increase and diversify representation in the faculty ranks, equity, diversity, and social justice agendas must be principled on moral grounds of true justice for the overall wellbeing of Black and Brown early career scholars. This can be accomplished by renouncing Western ideals of mentoring that focus on individual success and embracing more emancipatory forms that center on community wellbeing.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no datasets were generated or analyzed during the current study

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