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RE-ENVISIONING DOCTORAL MENTORSHIP IN THE UNITED STATES: A POWER-CONSCIOUS REVIEW OF THE LITERATURE

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ABSTRACT

Aim/Purpose	Multiple barriers exist within doctoral education in the United States that can undermine the success of students, particularly for students with marginalized identities. While mentorship can provide an important form of support, it must be done in an intentional way that is mindful of issues of equity and power.
Background	By applying a power-conscious framework to current practices of doctoral mentorship in the U.S., we propose key considerations to help support doctoral students and shift power imbalances.
Methodology	As a scholarly paper, this work draws upon a comprehensive review of existing research on doctoral mentorship in the U.S.
Contribution	As a relatively recent development, the power-conscious framework provides an important tool to address issues of inequity that has not yet been applied to doctoral mentorship to our knowledge. Such a framework provides clear implications for mentorship relationships, institutional policies, and future research.
Findings	The power-conscious framework has direct applicability to and possibility for reshaping doctoral mentorship in the U.S. as well as elsewhere. Each of the six foci of the framework can be integrated with research on doctoral students to help formal and informal mentors enhance their practice.

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Recommendations Throughout our analysis, we pose questions for mentors to consider in order to reflect upon their practice and engage in further exploration.

Recommendations Research on doctoral mentorship should explicitly engage with broader dynamfor Researchers ics of power, particularly as related to understanding the experiences of margin-

alized student populations.

Impact on Society The demanding nature of and precarity within U.S. doctoral education leads to

high rates of departure and burnout amongst students. By re-envisioning mentorship, we hope to begin a broader re-imagining of doctoral education to be

more equitable and supportive of students.

Future Research To examine these claims, future research should explore doctoral student men-

torship relationships and how power dynamics are contained therein both

within the U.S. and in international contexts.

Keywords mentorship, doctoral students, power conscious, doctoral education, United

States

INTRODUCTION

As a doctoral student I attempted to share my experiences of institutional oppression at various iterations of my development, yet I was often cautioned about what and how I disclosed the specifics of my experiences. I was often reminded that the same professors who institutionally socialized me were also the ones with the power to make decisions about funding opportunities, student program evaluations, and professional networks. (S. Z. McCoy, 2018, p. 326)

Recent years have illustrated the precarity of doctoral students in their pursuit of higher education in the United States. Stories about the #MeToo movement in academia have demonstrated how powerful faculty members use sexual harassment and assault to control graduate students (Anderson, 2018). International students studying in the U.S. have been dehumanized as paychecks and pawns amidst xenophobic rhetoric that attempts to undermine their presence and value in higher education (Castiello-Gutiérrez & Li, 2020). At the time of this writing, higher education institutions are attempting to manage the COVID-19 pandemic through a myriad of virtual and in-person approaches, creating stress for graduate students who simultaneously navigate as students and employees, often with little authority in either role (Flaherty, 2020). Professional development opportunities are challenged by funding structures, employers with ambiguous expectations, and faculty attitudes about career paths outside of academia, which results in decreased engagement and ineffective career preparation (Denecke et al., 2017). It is unsurprising that there is a mental health crisis amongst graduate students (Evans et al., 2018), in which doctoral students are particularly vulnerable. The result is that there continue to be high rates of doctoral attrition, with only an average completion rate amongst students of 45% (Zhou & Okahana, 2019).

These national and international discourses play out across individual universities where, as exemplified by the S. Z. McCoy (2018) quote that opens this paper, institutions reify dynamics of oppression and inequity daily. Golde and Dore (2001) found that doctoral students in the U.S. experience barriers such as high workloads, competitive environments, and financial insecurity. Nearly two decades later, these challenges remain (Weidman & DeAngelo, 2020). One crucial form of support throughout doctoral education comes from mentors, who serve in roles such as advisors, instructors, supervisors, research collaborators, and professional references. Mentors are instrumental in contributing to doctoral students' socialization (Portnoi et al., 2015; Weidman & DeAngelo, 2020), sense of belonging (O'Meara et al., 2017), and research self-efficacy (Niehaus et al., 2018). However, due to the

hierarchical model predominantly used in the U.S., mentors can also perpetuate inequality by reproducing power inequalities and oppression, particularly for students with minoritized backgrounds (Blockett et al., 2016; Gardner, 2008b). It is true that the U.S. model of doctoral mentorship is one among multiple models (Lee, 2010); other countries, such as Denmark and Sweden, have fostered more collegial forms of doctoral supervision. However, even those models are changing as European higher education reforms have focused on increasing the number of doctoral students, program efficiency, and post-education employability (Bøgelund, 2015). Here, we hypothesize that while mentorship can serve as a tool to dismantle the barriers facing doctoral students, too often these relationships perpetuate existing oppression and homogeneity regarding who can be successful in academia and at what cost.

In this paper, we argue that the role of power that shapes doctoral student and faculty relationships needs to be reassessed with a critical framing. We examine the idea of mentorship as a relationship that encompasses both formal faculty-student roles (e.g., advising, supervision) as well as informal coaching or collaboration. While faculty relationships are important in masters and professional degree programs, such advising differs from doctoral degree programs that largely prepare students for academic careers (Okahana et al., 2019; Weidman et al., 2001). As such, we explicitly examine doctoral mentorship as these relationships are particularly subject to a potential power imbalance due to the shared field that both mentor and mentees inhabit. A substantial volume of research, as presented in the following section, has focused on advising outcomes, perceptions, and experiences of mentorship, and even critiques of existing systems. However, these studies have explored this issue through the lens of traditional hierarchical advising structures rather than a power-conscious framework (Linder, 2018). Here, we define the power-conscious framework and review the literature on mentorship, advising, and graduate socialization to illuminate opportunities for doctoral student success. We close by suggesting that a new formulation of doctoral advising is needed—one that explicitly engages with power.

LITERATURE REVIEW

Faculty mentorship can be one of the most important relationships for graduate students (Sweitzer, 2009). In this section, we review three bodies of literature to situate doctoral mentorship. The first, doctoral socialization, encompasses the broader experience whereby doctoral students experience higher education and of which mentorship is one facet. The second, advising relationships, exemplifies the most common facet of doctoral mentorship as the formal relationship between a student and their direct academic supervisor through coursework and dissertation. Finally, we examine how graduate mentorship varies across identity.

DOCTORAL SOCIALIZATION

Doctoral socialization is the process through which students gain the knowledge, skills, and values of their discipline (Weidman et al., 2001; Weidman & DeAngelo, 2020). In this process, "departments and their representatives, most notably faculty, impact knowledge and skills about the academic discipline and profession to students" (Portnoi et al., 2015, p. 5). Such socialization efforts can be either formal or informal (Portnoi et al., 2015; Weidman et al., 2001) and spans the duration of doctoral education (Golde, 2005). While much of the research cited here focuses on the U.S. context for doctoral advising, socialization occurs in some way across all doctoral programs, regardless of country.

In their widely cited model of graduate student socialization, Weidman and colleagues (2001) described four stages that occur across the doctoral journey: (a) an anticipatory stage when "an individual becomes aware of the behavioral, attitudinal, and cognitive expectations held for a role incumbent" (p. 12); (b) a formal stage role when expectations held by novices remain idealized, but the novice receives formal instruction; (c) an informal stage wherein the novice learns of informal role expectations, and; (d) a personal stage when the novice forms and internalizes a professional identity and creates congruency between their past and professional images. These stages enhance the

knowledge acquisition of doctoral students and serve to impart expectations regarding the roles of students and future scholars. It is through socialization that emerging scholars come to understand the function and purpose of academic work. For example, a UK-based study found that doctoral students' mental maps about the process of achieving a Ph.D. changes over time to resemble their supervisors' mental maps (Kandiko & Kinchin, 2013). Socialization is a powerful force in creating and maintaining expectations about academic work.

Doctoral socialization occurs across five levels of culture within doctoral education: overall graduate education, institutional culture, disciplinary culture, departmental culture, and individual culture (Gardner, 2007). Each level has an important and unique impact on graduate student experiences. Institutional culture can have a huge impact on the careers that students are prepared for and their experiences in their program (Gardner, 2010b). Institutional culture includes degree of incorporation of diversity and quality of professional development, as well as broader academic and national cultures. Twale and colleagues (2016) expanded this model to better support African-American graduate students by advocating for the importance of race and sociocultural context in graduate student development. Changing institutional cultures can also change the doctoral socialization and advising experience. For example, Krauss & Ismail (2010) found that changing institutional culture at a Malaysian university changed the way that students managed and learned from their advising relationships.

Disciplinary culture can also impact the structure and nature of doctoral socialization. For example, socialization in STEM fields can emphasize individualism and competition, whereas other fields might be more collaborative (Davis & Finelli, 2007; Gardner, 2008a; Sallee, 2011). Socialization can occur with faculty mentors as well as peers. Faculty mentors are crucial at all stages of graduate socialization (Gardner, 2010a; Ramirez, 2017). Researchers have also found that peer mentors can provide a sense of community, perspective, and introduction to resources (Holley & Caldwell, 2012; Portnoi et al., 2015). Formalized mechanisms to support peer socialization include cohort models where students take classes and pass landmarks together (Bagakas et al., 2015) or involvement in student organizations (Gardner & Barnes, 2007).

During the socialization process, students may experience challenges related to ambiguity, lack of balance with external demands, the transition to independent scholarship, development across multiple levels, and finding faculty, peer, and financial support (Gardner, 2007). Many students struggle to make the transition to independent researchers for reasons that include personality, self-esteem and self-confidence, motivation, and environment (Lovitts, 2008). Common reasons for attrition in the U.S. include unclear expectations between students and departments, mismatches between advisors and students, perceptions of a poor job market, and structural isolation of the students (Golde, 2005). While it is reasonable to expect that doctoral students take agency of their socialization (Portnoi et al., 2015), such onus can reproduce inequity based on unequal access to resources and networks and differential expectations related to self-advocacy. When approached in a way that is mindful of power dynamics, mentorship can be a means to support students across their socialization process and to counter these challenges.

DOCTORAL ADVISING

One of the most fixed elements within U.S. doctoral socialization and mentorship is the student-advisor relationship. Advisors provide crucial support to students in navigating the doctoral process and facilitate socialization into the academy (Portnoi et al., 2015). There are also different types of mentoring that individuals rely upon advisors to provide across their doctoral careers such as career and research training. Thus, in addition to serving in an advisor role, faculty often hold many different roles in a doctoral student's life that include principal investigator, mentor, advisor, teacher, and employer (Fulgence, 2019). A good advisor can open doors to success for an advisee; a bad advisor can stymie progress, limit possibilities, and even cause a student to depart altogether.

Advisor support can have numerous benefits for doctoral students, including stronger sense of belonging and academic self-concept (Curtin et al., 2013). Common criteria for pairing include similar interests, type of research, reputation, knowledge, and willingness to the advisee pairing (Golde & Dore, 2001). Having shared identities can also be important, particularly for members of minoritized groups (Holley & Caldwell, 2012). Problems, such as delayed completion, have arisen in cases when there is a poor fit (Maher et al., 2004). This poor fit is exasperated for students with distinctive needs, such as international students who face unique barriers adjusting to new social and academic cultures (Ku et al., 2008). Advising structures are also not set in stone; indeed, advising programs across the globe have been shifting as academic reforms have been set into place (Gruzdev et al., 2020; Kandiko & Kinchin, 2013; Krauss & Ismail, 2010; Shen et al., 2018). As traditional single-advisor/master-apprentice modes are giving way to more structured programs and joint supervision models, doctoral student satisfaction with supervising has changed as well. For example, Gruzdev and colleagues (2020) found that out of six supervision styles found in Russian universities, students were most satisfied with "superheroes" and mentors and least satisfied with advisors described as hands-off.

Despite the crucial role that doctoral advisors play, there is no formal structure in U.S. doctoral education to train faculty on how to be advisors. Indeed, faculty often heavily draw upon their own experiences as students to advise others (Fulgence, 2019). However, earning a doctoral degree "does not mean that [faculty] have the skill, or the will, to transfer that knowledge to students through mentoring, teaching, and socialization activities" (Williams et al., 2018, p. 273). Having an advisor as a graduate student is completely different than being an advisor. To supplement this lack of training, faculty rely on trial and error, institutional guidelines, and individual research (Fulgence, 2019; Rukundo, 2020). This is not unique to the U.S. For example, Rukundo (2020) found that Ugandan doctoral supervisors have three probably pathways to learning to be a doctoral supervisor: 1) on-the-job training and supervised experience; 2) formal training during their doctoral education; or 3) no training or apprenticeship combined with a reliance on trial and error.

Institutions can help or hinder the development of advisors. Some institutions offer professional development, resources, and infrastructure, and national organizations have emerged to offer mentorship to historically marginalized groups. Still, many institutions contribute to poor advising by devaluing such work. Depending on the institution, advising may be viewed as part of teaching or service and may or may not be rewarded or assessed in evaluations such as tenure and promotion. Amidst expectations of high research productivity and rigorous course loads, faculty in the U.S. and elsewhere may have limited time and capacity to engage as advisors (Fulgence, 2019; Krauss & Ismail, 2010).

Moreover, cultural competency is rarely an expectation of doctoral advisors. Fulgence (2019) developed a framework of the knowledge and skills needed by doctoral supervisors rooted in the existing empirical literature. These attributes included knowledge and expertise, research skills, management skills, digital fluency, knowledge of processes. Other research has centered on technical support, managerial support, and emotional support (Roberts et al., 2019). In none of these cases is an awareness of systems of power and oppression considered within the advising relationship. Thus, advisors may not only have little background in advising and mentoring but may lack the awareness of how minoritized individuals experience higher education and end up perpetuating systems of inequity.

EXPERIENCES BY IDENTITY

The omission of cultural competency in doctoral mentorship is particularly glaring as differences in mentorship by identity are common. Prior scholarship has also shown that social class, nationality, and age impact students' experiences (Xu, 2014). In particular, the impact of international status, race, and gender on doctoral education is well-documented by empirical literature. The result is that marginalized students both address the barriers of doctoral education but also navigate within sys-

tems of oppression that shape their overall experiences and opportunities. While many of these issues transcend national borders, here we focus explicitly on the U.S. in recognition that identity is directly framed by one's cultural and social context.

International students, who make up 30% of all U. S. doctoral recipients (National Science Foundation, 2018), have experienced similar struggles as domestic doctoral students but compounded by academic and foreign othering (Burt et al., 2017; Laufer & Gorup, 2018). For example, while funding is an issue for all doctoral students, international doctoral students have additional employment conditions posed by their visas, such as approved employment opportunities and hours per week. In programs like STEM, where student funding is largely tied directly to individual faculty grants, international students can be in a particularly precarious position financially if their advisor leaves (Le & Gardner, 2010). Likewise, post-graduation career planning can be challenging for all doctoral students, but international students face additional complications due to immigration policy and sponsorship requirements (Ugwu & Adamuti-Trache, 2017). However, there are also challenges that are unique to the international doctoral student experience. International students may be learning race in a U.S. context for the first time, and thus experiencing microaggressions and racism in a new environment (Burt et al., 2017). Moreover, international students are frequently commodified as revenue centers in higher education (Castiello-Gutiérrez & Li, 2020; Yao & Viggiano, 2019). The end result is a range of barriers that international doctoral students must navigate as they pursue their degrees.

Women in graduate programs have experienced both overt sexism (e.g., sexual harassment, stereotypes, discrimination) and microaggressions (e.g., objectification, jokes, assumptions of inferiority) (Barthelemy et al., 2016). The climate of graduate studies creates a context in which "gender is both avoided and revealed" (Erickson, 2012, p. 368). In other words, sexism routinely shapes graduate student experiences but is rarely properly attributed as such. The result is the creation of barriers for women alongside the reinforcement of masculine values like competition, hierarchy, and objectification of women (Sallee, 2011). Lower rates of hiring for women faculty further perpetuate academic patriarchy (Erickson, 2012; Gardner, 2008b). Women of color experience dual barriers to support as they navigate racism and sexism in doctoral education (Noy & Ray, 2012; Patterson-Stephens et al., 2017; Patton, 2009).

Students of color routinely report marginalized experiences related to faculty mentorship, professional involvement, environmental support, and satisfaction (Blockett et al., 2016; Gardner, 2008b). In addition to being treated as inferior (D. L. McCoy et al., 2015), doctoral students of color also experience racial microaggressions, which dehumanize them and cause them to doubt their own experiences (Gildersleeve et al., 2011). Obstacles that prevent the hiring and retention of faculty of color result in a dearth of mentors for students of color with shared backgrounds and experiences (Patton, 2009). This can place a heavy mentoring burden on faculty of color (Griffin & Reddick, 2011) that may be filled with higher expectations (Williams et al., 2018). Simultaneously, doctoral students of color experience racism by observing how white supremacy impacts the experiences of faculty of color and experiencing trickledown effects (Truong et al., 2016). As such, doctoral students of color not only experience direct racism but also the secondary effects of systemic racism that shape the career trajectories of mentors of color.

PROPOSING A POWER-CONSCIOUS MODEL OF DOCTORAL MENTORSHIP

One solution to address the obstacles facing doctoral students is to more systemically engage with the power dynamics that lead to such inequity across mentorship. In this section, we describe Linder's (2018) power-conscious framework and consider its potential to engage in liberatory reconceptualizations of mentorship. Informed by frameworks of critical consciousness (Freire, 2000; hooks, 1994) and intersectionality (Crenshaw, 1989, 1991; Shields, 2008), Linder (2018) described a power-conscious framework as one that "requires that scholars, activists, and educators maintain awareness of

power in addressing issues of oppression" (p. 19). By targeting both the symptoms and roots of oppression, a power-conscious approach advocates for a shift away from prior precedents to build new, equitable structures of higher education practice. In mentorship, power-conscious structures (re)examine how power is concentrated amongst certain individuals and institutions and used to uphold hegemonic norms.

The power-conscious framework has seen relatively little application in higher education research; after Linder's (2018) initial development of the framework regarding sexual violence policy, Linder and colleagues (2020) also used it to discuss supporting student activism. While we argue that this framework can be adapted to guide doctoral mentorship, we also acknowledge the ways that a power-conscious framework builds on previous scholarship that has critiqued doctoral mentorship and advising practices. While some scholars have viewed mentoring as an oppressive practice that reproduces inequalities (e.g., Colley, 2002), others have proposed revisions such as team models of advising (e.g., Robertson, 2017) or use of human-centered frameworks (e.g., Mullen, 2009). Still others propose more socially just models, often based on feminist thought and theory (e.g., Benishek et al., 2004; Moss et al., 1999). While these models include considerations about power dynamics, few provide the tools and focus on action and activism offered by a power-conscious framework. Additionally, we acknowledge that Linder's (2018) work is grounded in a U.S. perspective; however, power imbalances in interpersonal and professional relationships are not a uniquely American phenomenon. It is our hope that advisors and mentors in multiple contexts will apply this framework to their individual and institutional practices.

As one may surmise by its title, power is at the core of this framework, acknowledging that solutions that reinforce or mimic current power structures cannot remedy social issues (Linder, 2018). This framework "requires that people not only address the symptoms of oppression but also the causes of oppression" (Linder, 2018, p. 20). Addressing the causes of oppression in higher education means paying attention to the structures and currents of power and finding ways to dismantle, reshape, and redirect them. A power-conscious framework requires that individuals acknowledge and understand their entanglement with systems such as racism, sexism, ableism, homophobia, and transphobia and to work to undo the subsequent harm inflicted (Linder, 2018).

Linder (2018) noted that the power-conscious framework rests on three foundations and assumptions: 1) power is omnipresent, 2) power is inextricably linked to identity, and 3) identity is socially constructed. There is nothing outside of power—all interactions, relationships, and actions, either by individuals or institutions, are implicated in power. Similarly, identities are constituted and given social meaning through the functions of power/knowledge (Foucault, 1978, 1995; Linder, 2018). Therefore, identities are both socially constructed and deeply impacted by power structures. While the meaning of identities might change in different contexts, that meaning is still constructed in social interactions with others and according to the rules that power relations have established. These foundations help maintain a historically contextualized view of the issue at hand that takes into account systems of power and oppression—in other words, as Linder (2018) wrote, "history matters" (p. 23).

In addition to the three foundations, the framework has six tenets for scholars, activists, and practitioners to consider. In the sections that follow, we describe each tenet and outline a potential model of power-conscious doctoral mentorship. We also include potential questions that current or future mentors might consider as they seek to understand the role of power in their mentorship roles. In doing so, we argue that a power-conscious model of mentorship is necessary to understand the current limitations within doctoral mentorship specifically and graduate socialization broadly and to advocate for new equitable systems to support student success.

TENET #1: CRITICAL CONSCIOUSNESS & SELF-AWARENESS

First, this framework requires individuals to "engage in critical consciousness and self-awareness" (Linder, 2018, p. 25). An individual must examine their social identities and how they show up, move through, and can potentially control academic spaces. This tenet emphasizes self-reflection to work through the damage done by systems of oppression.

Power-conscious doctoral mentorship begins with mentors engaging in critical self-examination. Mentors must examine their own social identities, social locations, and the impact they have on those around them. While this examination would necessarily involve reflection about race, gender, socio-economic background, sexual orientation, and other social identities, it could also include reflecting on one's preparation, experiences in the academy, personal and professional networks. Mentors must acknowledge both the ways that privilege and oppression have played roles in their lives as well as the ways that their position as an advisor or mentor holds inherent power over others, most particularly students.

To engage with this tenant, mentors might ask themselves:

- How many of my colleagues and students look like me or have similar backgrounds?
- What messages did I learn from my mentors about meritocracy, privilege, and the way I fit in in academic spaces? How did I learn them?
- What assumptions am I making about my students?
- What privileges do I have that may have helped me get to the place I am?

TENET #2: HISTORY & CONTEXT

The second tenet refers back to the historicity mentioned above: "consider history and context when examining issues of oppression" (Linder, 2018, p. 27). Issues of oppression are neither new nor the same across all contexts; a power-conscious approach takes these factors into account. This consideration can also include both larger histories—e.g., of nations or states—as well as institutional and local histories, which intimately impact institutional contexts.

As part of a power-conscious approach to doctoral mentorship, faculty members should critically consider the history and context of mentoring and understand who the status quo benefits. For example, doctoral education and associated mentoring in the U.S. are inextricably entwined with higher education's history of settler-colonialism, racism, white supremacy, and heterosexism (Paperson, 2017; Karabel, 2006; Wilder, 2013). American doctoral education, like higher education broadly, is built on systems that prioritize white, male, middle-class students, and center values such as competition and hierarchy (Ramirez, 2017; Sallee, 2011). Thus, traditional advising relationships may inherently reflect a power imbalance, dynamics exacerbated by the historical and cultural forms of oppression (e.g., racism, sexism) that frame U.S. culture. It is also crucial for mentors to understand local and institutional histories of power and oppression. These histories have tangible impacts on students and inform institutional policies, procedures, and memories.

To engage with this tenant, mentors might ask themselves:

- What did I learn about racism and white supremacy in my country? In higher education specifically?
- What do I know about the founders, mission, and history of my institution?
- Who lived on this land before the institution began? What happened to them?
- What racist or oppressive incidents have happened at my institution? How have they shaped our policies and procedures?

TENET #3: CHANGE BEHAVIORS

Tenet #3 encourages individuals to change their behaviors based on the first two tenets—namely, after reflecting on one's social location and identities, context, and history, an individual must next "engage in behaviors that reflect this awareness" (Linder, 2018, p. 28). Linder (2018) invoked the concept of praxis (Freire, 1970, 2000; hooks, 1994) to describe this iterative cycle of reflection and action to make individual changes in an oppressive system. Resultantly, mentors would take active steps to change their practice to be less invested in the status quo and other oppressive realities. It is important to note that these actions may not be blanket changes that would apply to every student in the same way. Rather, advisors' reflections should include not only their own identities but also those of their students. Different students occupy and navigate the academy in different ways according to their social locations and privileges. Power-conscious doctoral advising must advocate for different students differently, according to their needs, to subvert inequitable practices.

To engage with this tenant, mentors might ask themselves:

- What is my "business-as-usual" way of advising? What is its impact on my students?
- Do I assume that all students have the same needs? How can I learn more about what different students might need?
- How can I adapt my advising style to account for students' various needs?
- How can I be a better advocate for students?

TENET #4: CALL ATTENTION

The fourth tenet broadens the framework's focus from the individual to calling for systemic-level change, specifically by "call[ing] attention to how systems disproportionately favor people with dominant identities and to name power as it relates to systems of oppression" (Linder, 2018, p. 29). This tenet highlights the ways individuals may be invested in oppressive systems and calls for the development of strategies to divest from those same systems.

In U.S. and other models of doctoral education, there are many examples of hidden curriculum, knowledge that students are expected to have to be successful but are not explicitly taught (Calarco, 2020). The hidden curriculum serves to uphold long-standing norms in which individuals with privilege have a vested interest in their continuance. Privilege works in myriad ways here; it includes faculty members, who are themselves rewarded for successfully navigating such norms and systems, as well as students with already-privileged identities, such as white, middle-class men. For example, many faculty members might consider it a faux pas for doctoral students to bring children to class. Such unstated expectations are rooted in biased precedent that prioritizes men in heteronormative relationships with financial privilege, fewer caregiving duties, and more resources. Women, single parents, and working-class families may not have access to steady childcare, which may bar them from participation. Another example is the expectation to attend professional conferences, costly endeavors that rely on students having the time, money, and ability to travel, register, and be away for a period of time. Students with caretaking responsibilities, financial restrictions, and certain disabilities may find these spaces inaccessible. However, as conferences are often important ways to gain professional credentials through presentations, build a scholarly network, and access opportunities such as research collaborations, the differential ability to participate in reinforces oppressive systems.

By calling attention to these systems, mentors can begin to examine their engagement in upholding these norms and consider how to individually and systemically divest from them. While here we focus on individual action, the fact that many mentors often have roles in their academic field (e.g., professional association leadership, manuscript reviewers, grant reviewers) also implies that there are many levels of calling attention that must occur.

To engage with this tenant, mentors might ask themselves:

- What are my implicit and explicit expectations of doctoral students I work with? How and where did these come from?
- How can I make transparent the "hidden curriculum" related to success in our doctoral program?
- How do I react when colleagues or students call attention to oppressive systems or practices?
- In what ways can I create structures of accountability with my colleagues to collectively call attention to existing structures?

TENET #5: INTERROGATE POWER'S ROLE

The fifth tenet in the power-conscious framework emphasizes the need for the interrogation of power in individual interactions, policy development, and implementation of practice (Linder, 2018). Through this interrogation, one asks who is being centered or marginalized, or is included or excluded, and how power is developed, sustained, or distributed. Linder (2018) pointed out that this interrogative tenet is especially helpful in determining the ways that power still operates even amongst well-intentioned programs and individuals.

Tenet five logically follows tenet four: after calling attention to the ways that systems, hidden curricula, and individual expectations can benefit some doctoral students over others, it is necessary to continue to exhume the ways that those structures are instantiated in policy and practice. To continue the conference-going example from above, some doctoral programs (or even individual mentors) require students to present at a conference before they can progress in their degree program. Thus, a system that delivers benefits to some (those who can easily afford travel and childcare) and withholds it from others (those who cannot easily afford travel and childcare) is cemented in a policy without nuance or individual consideration. Interrogating the role of power means that doctoral mentors need to analyze and understand the ways that policies like this—and many others that structure doctoral education—marginalize and exclude students. This examination is not limited simply to policy and practice; doctoral mentors must also examine their interactions for the ways that power might be operating through them.

To engage with this tenant, mentors might ask themselves:

- Are policies and practices in my program applied to all students in the same way without nuance or individual consideration? If so, which are they and what are the effects?
- How are opportunities (e.g., funding, research, teaching) being distributed amongst students?
- Do I consider students' unique situations and needs when I interact with them?
- How can I speak out again mechanisms that benefit privileged students at the expense of others (e.g., GRE exam requirements)?

TENET #6: SOLIDARITY

The sixth and final tenet of the power-conscious framework is to be in solidarity with others who are working against oppression. Breaking down inequitable power structures and changing oppressive systems are not tasks done on one's own; they are achieved in the community and support of others. Here, this tenet means that mentors must find ways to be in community with graduate students and to center their needs. Such work could include supporting existing structures for graduate student governance across the institution, such as student government or union organizations, or advocating for graduate student representation in all levels of decision making. Individual programs and departments should examine the ways they solicit and include graduate student input and leadership. Doctoral mentors can also work together to examine the ways that power works in their mentoring relationships, to call attention to problematic systems, to interrogate policies and practices, and to create equitable change. Finally, it is important to remember that doctoral students are impacted by the

broader issues facing society. Thus, true solidarity cannot only focus on issues related to the academic experience but must examine how to be an ally and advocate across other systems of oppression that graduate students face (e.g., racism, classism, sexism).

To engage with this tenant, mentors might ask themselves:

- How are the voices of doctoral students integrated into my department, my institution, and my field?
- What structures exist for graduate student leadership on campus (e.g., student senate, unions)? How can I support their efforts?
- How am I an advocate and ally for marginalized people?

CONCLUSION

Doctoral education in the United States is full of challenges that—left unaddressed—can result in mental health concerns, ineffective career preparation, and high rates of attrition (Denecke et al., 2017; Evans et al., 2018; Zhou & Okahana, 2019). Developing and sustaining strong mentors may be one way of addressing these challenges (O'Meara et al., 2017; Portnoi et al., 2015). Here, we posit that applying the power-conscious framework that Linder (2018) developed to doctoral mentorship can facilitate a more equitable and just graduate experience.

In practice, the questions posed in this paper are ripe for engagement. Most faculty complete annual reviews of their performance, with larger reviews after the third year and at subsequent promotion milestones (e.g., tenure). One implication of this work might be to include these questions as part of a section about faculty performance related to mentorship. Such an exercise would directly push faculty to engage with the first tenet of critical consciousness and self-awareness (Linder, 2018), while providing a space to reflect and outline action steps regarding all tenets. Moreover, the practice would facilitate self-assessment and departmental assessments of doctoral programs (Fulgence, 2019; Roberts et al., 2019).

At an institutional level, colleges and universities could sponsor professional learning communities (PLCs), collaborative groups comprised of leadership team members and faculty who use shared vision to enhance student learning (Hilliard, 2012). In this case, PLCs of stakeholders such as faculty from different department, staff in key offices, and leadership from graduate education could gather to consider the power conscious ideas outlined and work to develop a vision around implementation at their institution. For example, one possible outcome could be to rethink the traditional advisor-student dyad that may not be able to fully address the diverse experiences of any one student (Shen et al., 2018; Williams et al., 2018). Students already rely on self-generated networks of support that include a patchwork of other faculty members as well as same-level and advanced peers (Williams et al., 2018). Rather than thinking of hierarchical mentoring relationships such as advising or teaching that rely on one individual, a power-conscious approach might involve considering the role of community to illuminate problematic norms, provide accountability for continued engagement, and work towards collective action. Restructuring advisor-advisee mentorship dyads would also provide recognition for the many other mentors, such as other faculty, peers, postdoctoral scholars, lab managers, and staff members, that provide crucial support to doctoral students.

Moreover, research is needed to understand the process of implementing the power-conscious framework in doctoral mentorship and its overall effectiveness. Such research must be conducted in such a way as to recognize the nuance within the doctoral experience. For example, while some research has examined how disciplinary context shapes student experience (e.g., Gardner, 2007; 2008a/b), there is also a need for further examination across fields. STEM fields tend to emphasize individualism and competition (Davis & Finelli, 2007; Gardner, 2008a/b; Sallee, 2011) and researchers have found that marginalization, microaggressions, and overt harassment experienced by people of color and women from mentors are particularly salient in STEM contexts (Gardner, 2008b; Gil-

dersleeve et al., 2011; Noy & Ray, 2012). Future studies could compare how power-conscious mentorship manifests across departmental disciplines through case studies or narrative inquiry. Moreover, the power conscious framework naturally aligns itself to participatory action research in which communities (such as the aforementioned PLCs) engaged in shared examination of a common research question.

Postsecondary institutions bear the responsibility of addressing the structural inequities that often create opportunities gaps (Pendakur, 2016). Too often, however, the onus is placed on students to navigate inequities and gaps rather than on institutions and their stakeholders to close them (McNair et al., 2016). By centering Linder's (2018) power conscious framework within doctoral mentorship specifically and doctoral socialization overall, institutions can not only better understand the dynamics that influence broader issues of equity and persistence but empower institutions and their various stakeholders to create equitable change.

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