Article

Moving toward stronger advising practices: How Black males' experiences at HPWIs advance a more caring and wholeness-promoting framework for graduate advising

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Abstract

Background: Graduate education provides students with specialized skills needed to advance science and discovery and prepares future educators and role models for future generations of learners. Given the importance of graduate education, the estimate that more than half of the students who begin it do not complete their degrees is troubling. Existing scholarship suggests that this substantial attrition from graduate school is in part due to inadequate advising. To address this concern, it is important to examine students' experiences with graduate advising.

Purpose: This article presents a new model—the Model of Wholeness in Graduate Advising (MWGA)—that characterizes a range of students' advising experiences. In so doing, it encourages faculty to move toward a more caring and wholeness-promoting framework in graduate advising.

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Research Design: To better understand the complexities of graduate advising and the various types of experiences—and relationships—that students have, desire, expect, and need to thrive both professionally and personally, this study included interviews with 42 Black male graduate students attending historically and predominantly White institutions (HPWIs). Thematic analysis revealed that students' advising experiences included aspects of "ethics of care" (or degrees of care: whole, partial, empty). Iterative analysis of data led to the creation of the practice-informing model: the Model of Wholeness in Graduate Advising (MWGA).

Findings: Although some students described experiencing positive interactions and teachable moments with their advisors, others painted pictures of demoralizing encounters and public shaming practices. Still others described advising experiences they did not have but would want. Accounting for this range, the MWGA denotes an upwardly moving relationship between degrees of care (i.e., empty, partial, whole) and students' perceptions of their advising experiences and relationships (i.e., weak, basic, strong) in part shaped by students' expectations for their advising experiences and relationships, and their lived experiences.

Conclusions and Recommendations: The findings from this study, represented in the MWGA, illustrate theoretical linkages between students' expectations of advising, the levels of their advising experiences and relationships, and degrees of care demonstrated by their advisors. Most notably, more elements of care tend to result in better lived advising experiences and relationships. For current and future faculty, moving toward a more caring and wholeness-promoting framework might start with recognizing the needs of students as whole people. Creating more caring advising experiences and developing more caring relationships may better assist students in progressing through degree completion, and doing so more fully whole.

Graduate education provides students with specialized skills needed to advance science and discovery and prepares educators and role models for future generations of learners. Given the importance of graduate education, the estimate that more than half of the students who start graduate education do not complete their degrees is concerning (Nettles & Millet, 2006). When graduate students do not complete their degrees, or leave their field of study, their unique intellectual contributions to examining society's most difficult problems may be lost. Equally concerning, not completing one's degree could impact an individual's earning potential over a lifetime (Hout, 2012; Long, 2010) and have negative effects on one's mental health (McGee & Stovall, 2015; McGee et al., 2019). Students' departures are likely related to a host of concerns (e.g., finances, family obligations, evolving goals); however, it is clear that faculty advisors play pivotal roles in students' academic journeys.

Earlier scholarship provided information on the extent to which advising impacts students' graduate experiences (Austin, 2002; Austin & McDaniels, 2006; Barnes & Austin, 2009; Burt et al., 2019, 2020; Felder & Barker, 2013; Gasman et al., 2008; Golde, 2005; Lovitts, 2001; McCallum, 2020). For instance, Barnes et al.'s (2010) content analysis of open-ended survey responses from all doctoral students at one institution provided detailed accounts of students' advising experiences based on their perceptions of particular advisor attributes (e.g., caring vs. uninterested). Calls for more care include encouraging and supporting students to be wholly themselves, which acknowledges students' lives within and outside of the academy.

More knowledge about how different students experience advising at the graduate level is needed. This study centers on 42 Black male graduate students attending four historically and predominantly White institutions (HPWIs). It presents a new model—the Model of Wholeness in Graduate Advising (MWGA)—which characterizes a range of their advising experiences. In so doing, it offers insights into the complexity of graduate advising and the various types of experiences and relationships that graduate students desire, expect, and need to thrive both professionally and personally. Through this article, we encourage faculty to move toward a more caring and wholeness-promoting framework in graduate advising. We conclude by discussing implications for research and theory, and professional practice.

The Goals of Academic Advising and Caring Relationships

Research on academic advising in graduate education is limited, especially in contrast to research on advising at the undergraduate level. There are distinct differences in advising at the undergraduate and graduate levels. For instance, a 2020 report on academic advising indicates that 57% of undergraduates are advised by a primary advisor (usually a staff member whose exclusive role is advising students) (Troxel & Kyei-Blankson, 2020). Conversely, faculty tend to serve as the primary advisor for students at the graduate level (Barnes & Austin, 2009). In addition, whereas existing research suggests that student success at the undergraduate level requires acclimation to campus, sense of belonging to campus, and academic performance (Pascarella & Terenzini, 2005), some have argued that at the graduate level, retention and progress toward degree completion are mostly influenced by one's advisor (Lee, 2008; Nettles & Millett, 2006; Tinto, 1993).

Graduate Advising

Several characteristics distinguish graduate advising. For instance, the personal issues that graduate students must balance tend to differ from those of traditionally aged undergraduate students. As older students, some graduate students have responsibilities to partners or spouses, children, or relatives for whom they provide care, and they may work full-time or hold graduate internships, fellowships, or assistantships that require additional time away from family and coursework (Appel & Dahlgren, 2003;

Leonard et al., 2005). Fulfilling the requirements and expectations of graduate education (Bloom et al., 2007) requires assistance from advisors to negotiate and navigate professional experiences and personal needs in ways that may not be as germane at the undergraduate level.

Graduate-level advisors are typically faculty members who teach in an advisee's graduate program, have deep knowledge of the program and field of study, and are committed to ensuring their advisee's success (Antony & Taylor, 2001; Barnes & Austin, 2009). Graduate advisors are often responsible for socializing their students into the department and field (Lee, 2008; Weidman & Stein, 2003). To do so, they are expected to provide opportunities for advisees to attend conferences, participate in research projects, publish, and become part of the disciplinary community (Burt, 2019; Saddler & Creamer, 2009). These socializing experiences specific to graduate education (Barnes, 2010; Burt et al., 2017; Crede & Borrego, 2012) assist students in learning the expectations of their field, provide them with research exposure, and offer preparation for postgraduate careers.

Advisors' functions are not consistent across graduate education. In some doctoral programs, students are assigned an advisor upon admission and matriculation into the program, even if the assigned advisor is temporary, whereas in others, they may be expected to interact with faculty to determine a mutual fit (Nettles & Millett, 2006). Some advisors' function is to assist students with their transitions into the graduate program, through coursework and the qualifying exam (Gardner, 2009; Tinto, 1993), which may require students to then identify a different dissertation chair. However, in some fields (e.g., science, technology, engineering, and mathematics [STEM]), a faculty member may perform several simultaneous roles related to advising. Specifically, a student's academic advisor may also serve as their supervisor for their research experiences (Crede & Borrego, 2012; Pearson & Brew, 2002). The student may be funded through the faculty member's financial resources (e.g., grants, contracts, start-up funding); in these cases, students may be expected to stay with an advisor from matriculation through degree completion because the advisor has financially supported them (Nettles & Millett, 2006). Additionally, a student's dissertation research may be directly connected to the work done within their advisor's research lab (Burt, 2019; Crede & Borrego, 2012). These often overlapping functions of a graduate advisor in part illustrate the compounding roles, responsibilities, and embedded power dynamics characteristic of graduate advising.

Although existing research describes the various ways that advisors can assist students in meeting their personal and professional goals, evidence also shows that advising experiences are not all positive or healthy for students (McGee et al., 2019). Several studies include descriptions of advisors demeaning students' academic abilities (Burt et al., 2019; Gildersleeve et al., 2011), and microaggressing against students based on racist, gendered, and other marginalized identity-based stereotypes (Felder & Barker, 2013). Just as positive advising experiences can help students to self-author their academic journeys and personal and professional identities (Baxter Magolda, 2003; Burt, 2020), negative ones can diminish students' motivation (Burt et al., 2020;

Perez et al., 2019), contribute to dropout from school (Golde, 2005), and have lasting psychological and health-related impacts (McGee & Stovall, 2015). As reported in Burt et al. (2019), it is possible that some advisors—likely performing advising practices they learned as graduate students—unknowingly perpetuate damaging advising. This highlights the necessity of gaining better understandings of graduate advising practices and their effects on student outcomes.

Graduate students want caring, trusting, supportive relationships with their advisors (Barnes & Austin, 2009; Williams et al., 2018). However, more information is needed regarding how advisors can better integrate caring practices into graduate advising.

Caring Relationships

To make sense of how graduate advisors demonstrate care (or not), we draw on Noddings's (1984, 1992) ethics of care framework. Although conceptualizations of care have primarily been utilized in studies focused on teacher–student relationships in K–12 settings (e.g., McKinney De Royston et al., 2017), some scholars have explored care within the context of higher education (e.g., curriculum, pedagogical practices, teacher–student interactions) (Brooms, 2019; Dalton & Crosby, 2013; Guiffrida, 2005; Lucey & White, 2017; McCallum, 2020; McLure & Sinkinson, 2020). Noddings's ethics of care framework establishes that within relationships, there are sets of actors: the "one caring" and the one being "cared for." Noddings argues that for a relationship to be "caring," the one caring and the cared for both give and receive care and support. The one caring feels an obligation to care for the cared for person, and the cared for person should be receptive to care. Such unconditional support, according to Noddings, contributes in part to students' success.

Noddings (1984) identifies three characteristics that must be present in the "one caring" to have an ethic of care. First, *engrossment in the cared for* occurs when the one caring recognizes and accepts the cared for's feelings and relevant experiences. This characteristic acknowledges that each student is different, brings their own set of strengths and challenges, and requires unique care and attention. Second, *commitment to the cared for* involves making it clear to the cared for that nothing takes precedence over helping them achieve their goals. This can include communicating and demonstrating to students their importance. Finally, *a motivational shift from focusing on oneself to focusing on the cared for* occurs when the one caring begins to look at problems from the perspective of the cared for. This final characteristic is yet another demonstration that the one caring prioritizes the student over their own ambitions and motivations. Taken together, Noddings's framework asserts that these characteristics allow the cared for to feel included, accepted, and valued. Further, this framework places some responsibility for a student's success on the one caring, rather than expecting students to bear the complete onus of their own success.

Because the existing literature on advising in graduate education is limited, more knowledge is needed about how advising influences students' educational experiences,

including but not limited to how graduate advising challenges and supports students' academic and career trajectories. Drawing on Noddings's (1984, 1992) conceptualizations of care, in this study the "one caring" is an academic advisor and the one "cared for" is the graduate student. We examine the following research questions:

- How do students in graduate programs describe their graduate advising experiences and relationships?
- What are the relationships between care and graduate advising?

Methods

Guided by a social constructivist paradigm, which acknowledges the presence of multiple realities and multiple truths (Creswell, 2012), this study explored graduate students' advising relationships and experiences though exploratory basic qualitative inquiry, which is a methodological technique used to better understand individuals' lived experiences and interpretations of their worlds (Merriam & Tisdell, 2016). All 42 participants were Black, male, and in various engineering specializations. The participants attended four HPWIs between 2008 and 2018. The four institutions were selected because of their national rankings and reputations as leaders in graduating students in engineering (Diverse: Issues in Higher Education, 2018; Yoder, 2018). Participants' year in graduate school at the time of data collection varied: seven were first-year graduate students, 16 were advanced doctoral students in their fourth year or beyond, and the remainder were in their second or third year of graduate study. Participants' postgraduate career plans also varied. The majority (35) had only one advisor (i.e., they had not switched advisors by the time the data were collected); 5 had multiple advising experiences because they switched advisors; and 2 had multiple advising experiences because they were co-advised. See participant profiles in Table 1.

Data Collection

The majority of participants were contacted through email lists provided by administrators; others were identified through snowball sampling (Merriam & Tisdell, 2016) by peers and other participants. Data were collected by the first author, who was the principal investigator (PI). In-person, one-on-one, semistructured interviews (Merriam & Tisdell, 2016) lasting 60–150 minutes followed the completion of an eight-item demographic form. Of the 42 participants, 15 participated in follow-up second interviews. The PI engaged in memoing throughout data collection to document possible answers to this study's research questions, possible linkages across participants, and connections to existing literature.

A standard semistructured interview protocol was used throughout data collection, allowing the PI to ask the same questions of participants across the 10-year data collection period and across institutions. Yielding patterns across participants despite institutional differences and the year a student was interviewed suggests that the

Table 1. Participant Profiles.

Pseudonym*	Class Level	Engineering Specialization	Had Multiple Advisors	Advising Experience(s) and Relationships (*Dominant; Secondary*)
Ali	2nd	Aerospace		Strong
Alphonso*	5th	Electrical		Weak
Ben	2nd	Mechanical		Basic
Braxton	2nd	Electrical		Basic
Chris*	5th	Chemical		Weak; Basic
Christian	3rd	Civil	Co-advised	Strong; Strong
Courtney*	2nd M	Civil		Basic
Daniel	1st	Industrial	X	Weak; Basic
Daryl	7th	Aerospace		Weak
David	1st	Design	Co-advised	Strong; Basic
Dean	1st	Electrical		Strong
Isaac*	4th	Agricultural	X	Weak; Basic
Jackson*	3rd	Mechanical		Basic
Jacob**	3rd	Chemical	X	Basic; Weak
Jaden*	2nd	Electrical		Strong
Jai*	5th	Mechanical		Basic
Jalen	1st	Mechanical		Strong; Basic
James*	4th	Biomedical	X	Weak; Basic
Jesse*	5th	Electrical		Strong; Weak
Joseph*	4th	Material		Weak; Weak
Kemani	2nd	Electrical		Basic
Kendall*	2nd M	Mechanical		Weak
Logan*	5th	Electrical	Co-advised	Strong; Basic
Lucas	2nd	Electrical		Basic; Weak
Marco	1st	Aerospace		Weak
Marcus*	3rd	Mechanical		Strong
Martin*	2nd M	Industrial		Weak
Micah*	3rd	Industrial		Basic
Norman	1st	Mechanical		Basic
Paul*	4th	Electrical		Strong
Quentin*	5th	Electrical		Strong
Ricky	4th	Electrical		Strong
Robert*	2nd M	Industrial		Strong
Samuel	5th	Civil		Strong
Shawn*	4th	Material		Strong
Terrence*	2nd	Material		Strong
Thomas	3rd	Mechanical		Weak
Titus*	2nd	Civil		Basic
Trai*	4th	Mechanical		Basic
Tristan	1st	Aerospace		Strong
Victor*	5th	Chemical		Basic
Xavier	4th	Computer		Weak

*Denotes that a student has graduated with his intended degree since data collection.
**Denotes that a student departed from the doctoral program and graduated with a master's degree since data collection.
Class level refers to the student's year in graduate school.
M = Master's student

protocol as a research instrument withstands variations in time and context. Although participants were asked about their broader graduate school experiences (e.g., challenges, victories, sources of support), most germane to this study were questions related to their graduate advising experiences and relationships. Examples include: "What were your expectations of [institution] prior to enrolling?", "What is your relationship like with your advisor?", and "In what ways, if any, does your advisor fall short of your expectations?" Interviews were audio recorded and transcribed verbatim using professional transcription services.

Data Analysis

Data were thematically analyzed by the principal investigator (PI) and three additional researchers (Braun & Clarke, 2006; Fereday & Muir-Cochrane, 2006). The PI started by reading participants' transcripts to gain a foundational understanding of their experiences as graduate students. Three additional researchers read and selectively coded the transcripts, specifically focusing on how students characterized their advising experiences.

During this round of analysis, patterns emerged across participants. Specifically, although some described positive interactions and teachable moments with their advisors, others painted pictures of demoralizing encounters and public shaming practices. To further investigate, we revisited the transcript data and audio files, then discussed them as a research team. This round of analysis led us to classify students' advising experiences into three levels: strong, basic, and weak.

Students at times described advising experiences they did not have but would want. Rooted in many descriptions was what we interpreted to be an aspect of "care" (or degrees of care: whole, partial, empty). Thus, as a final step in our analysis, we considered how our patterns and themes aligned with literature related to "ethics of care" (Noddings, 1984, 1992). This led us to create a practice-informing model, the Model of Wholeness in Graduate Advising, described in the Findings section.

As a research team, we regularly held peer review discussions (Merriam & Tisdell, 2016) that included conversations about where our interpretations were aligned; when they differed, we discussed possible explanations. Some of our differing interpretations of the data related in part to differences in our positionalities and worldviews, and to our varying potential biases (Garcia & Johnston-Guerrero, 2016; Milner, 2007; Peshkin, 1988; Yao & Vital, 2018). For instance, the PI, who is a Black man and a faculty member in the social sciences, collected the data and conducted the first round of analysis. The second author, a Black woman, is also a faculty member in the social sciences. The third, fourth, fifth, and sixth authors, two Black men and two White women, respectively, were graduate students at the time of data analysis. As researchers with advanced levels of education, we have varied experiences with graduate advising. Our frequent exercises reminded us that the participants may have had advising experiences that differed from our own.

Limitations

This study has several limitations. Notably, its sample is not representative of all students, advising styles, or faculty–student interactions. With that in mind, the following should be considered. First, although this study's participants are Black, male, and in engineering, the analysis was not exclusively focused on the effects of students' social identities and field of study in their graduate advising experiences. We were cautious to document how students' advising experiences may have been raced, gendered, and specific to the engineering context. However, we attempted to highlight advising experiences that might be more universally shared across gender, race, and fields of study. Second, the participants attend research-intensive institutions. Thus, they may receive advising that emphasizes learning and research production within the engineering laboratory (e.g., conference presentations, publications, product discoveries). Students attending other types of institutions might describe different experiences. Similarly, advising experiences could be related to the kinds of faculty who are typically hired at the institutions our participants attend. Finally, we share data on how students described their advising experiences at up to three points in time. Students' experiences may have changed after our interviews. Students' needs also vary in part based on class level; their current stage may have shaped the advising they described. We try to account for these variations in our findings and recommendations.

Findings

Based on interviews with 42 participants, our findings illustrate the ways in which students described the levels (and degrees) of care in their graduate advising experiences and relationships—rooted in part in their expectations for what advising in graduate education might be like and their perceptions of their lived experiences. Three themes emerged from the analysis: (1) strong advising practices are rooted in care and promote wholeness; (2) basic advising offers helpful assistance to students and partial care and wholeness; and (3) weak advising is empty of care and is harmful to students' academic progress, psychological well-being, and wholeness. See Table 2 for definitions and examples of these advising categories.

The 18 participants characterized as having "strong advising" described numerous examples of positive advising experiences, uplifting advising practices, and a caring advising relationship. The 20 participants characterized as having "basic advising" described advisors as aiding in their academic progress. The 16 participants characterized as having "weak advising" directly named their advisors (i.e., their behaviors, actions, and/or comments) as harming their progress. If a student did not discuss their advisor in terms of either extreme (i.e., strong, weak), we interpreted that to mean that their advising experiences were neither extraordinarily good nor bad. From our perspective, a lack of conversation regarding one's advisor implied, to an uncertain degree, that a student received the basic functions of advising. Thus, we also classified those experiences as "basic advising."

Table 2. Levels (and Degrees of Care) of Advising Experiences and Relationships.

Levels (and Degrees of Care) of Advising Experiences and Relationships and Definitions	Representative Quotations
Strong (Whole Care) Advising. Advisor facilitates positive experiences, uplifting practices, and a caring advising relationship. Advisor demonstrates an equal interest in a student's academic, social, career, and personal life.	"I can talk to him. We have lunch and during lunch time we're not talking about work, we are talking about life, we're talking about family, we're talking about culture. . .And outside or during the group meetings, he can sit there and drill you, but then you know it's not something personal and that he's doing this for your benefit as well as he wants your work to be the best work ever." *Quentin*
Basic (Partial Care) Advising. Advisor aids in student's academic progress. Advisor assists student in meeting compliance requirements needed to advance to graduation.	"I guess he does everything he's supposed to as an advisor in terms of getting us the technical stuff that we need for the most part. He signs our paperwork to get certain materials. . .when he finds the time." *Jacob*
Weak (Empty Care) Advising. Advisor's behaviors, actions, and/or comments are harmful to a student's sense of self, sense of belonging, and persistence toward degree completion.	"When I tried getting help to finish my degree, the advisor that I had, he didn't really pay me any attention." *Thomas*

    The total number of advising experiences (54) is greater than the total number of participants (42). The difference in numbers can be explained in multiple ways. Students who had multiple advisors and/or were co-advised had multiple advising experiences. In addition, some who had only one advisor may have had multiple advising experiences if they described inconsistent and/or evolving advising practices. Students' advising experience classifications are provided in Table 1. Where students had multiple advising experiences, the first classification denotes the dominant experiences they described; the other classification is secondary. For instance, if a student's experiences are listed as "basic," then "weak," this means that he described advising that met the basic functions of an advisor, with some harmful experiences as well.

    The ways students described their experiences and desires for improved advising relationships were not entirely discrete; there were some overlaps between strong and basic, and basic and weak. This suggests that advisors should not think of these three classifications as separate. Rather, the classifications and characteristic advising practices may be seen on a fluid continuum as perceived by students. The Model of Wholeness in Graduate Advising (see Figure 1) denotes an upwardly moving relationship between degrees of care (i.e., empty, partial, whole) and students' perceptions of
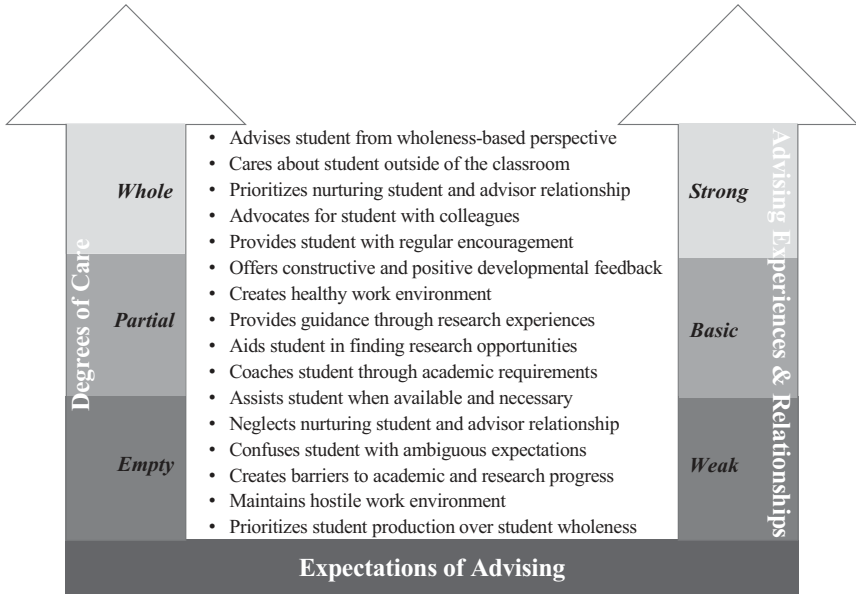
Figure 1. Model of Wholeness in Graduate Advising.

their advising experiences and relationships (i.e., weak, basic, strong) in part shaped by students' expectations for their advising experiences and relationships, and their lived experiences. More elements of care tend to result in better lived advising experiences and relationships.

Strong Advising Practices are Rooted in Care and Promote Wholeness

Advising experiences classified as strong included practices that proactively assisted students' academic development, aided in building a research toolkit for postgraduate careers, and aided in persistence toward degree completion. These practices supported students as whole beings. One way strong advising was displayed was through advocacy. Having an advisor who championed them was important to students' progress. Ali, a second-year doctoral student, described how his advisor helped him search for a research group:

> [E]ven. . .back when I first tried to be in her research group [and] she couldn't find room for me. . .she was out there sending emails to professors [saying], "You have this bright student looking to work under somebody and y'all keep telling him that your research group is full, when y'all only have like three [members]. . .Y'all need to do better.". . . [S]he's been very supportive.

Ali's advisor advocated for him by confirming his ability and critiquing the lack of support from her colleagues in order to leverage a research opportunity. This advocacy had implications for Ali's persistence because without a research group, he would not have been able to remain in graduate school.

Advocacy can also take the form of helping a student find funding. For many graduate students, funding can represent the most salient barrier to persistence (Nettle & Millett, 2006). David, a first-year doctoral student who is co-advised and whose dominant advising experience was classified as strong, described how his advisor "cared" by helping him get additional income:

> My advisor sent me a text and asked, "Do you have any videos of you speaking in public?. . .I want to get you signed up with a speaker's bureau because you already have a platform, you're already. . .doing some of these things, and I want you to start getting the experience, as well as put some money in your pocket while you're going through this PhD program because five grand ain't really enough to live on." [What stands out is] the fact that he even cared.

The advocacy David described epitomizes going above and beyond for a student. Rather than being content with the funding David had, his advisor encouraged him to leverage work he was already doing to gain additional income. Further, his concern about David's funding, relative to the city's cost of living, illustrates his caring for David not just as a student, but as a person.

As indicated above, strong advising appeared to stem from an interest in students' well-being. Trai, a fourth-year doctoral candidate, shared, "Even the very first day I walked into his office. . .I told him I'd come from graduating from undergrad and. . . did an internship in the summer. He [said], '. . .[Y]ou haven't. . .had a break, you need to just go this weekend.'" Trai expressed how shocked he was that his advisor encouraged him to take a break. Trai had just transitioned into graduate school. This act of care demonstrated by Trai's advisor appeared to validate Trai's presence and set the tone for their strong advising relationship. In contrast, other students described being made to feel that their only value as graduate students was in doing their advisors' work (more on this finding below).

The majority of participants were engaged in research with their advisors. To make steady progress in their programs, they had to simultaneously make steady progress in their research. Students classified as having strong advising experiences had advisors who provided feedback on their research progress. Terrence, a second-year doctoral student, conveyed how his advisor expressed care by encouraging and affirming him:

> Because I am a second year, he's like "Oh, like within this period you've been here, you've done a lot of work. . ." and he's. . .encouraging. "You've done good work and it's good that you know you got this. . ." So. . .the positive vibe that you get from your advisor that you are doing a good job. . ...encourages you to do more.

Terrence's quotation illustrates how his advisor's positive affirmations influenced how he felt about himself. Additionally, these affirmations gave Terrence information about his developmental standing at a pivotal point (before qualifying exams, dissertating stage). For students like Terrence, their advisor's feedback was not always glowing, yet it always appeared to be constructive and offered with great care. Terrence later shared that his advisor frequently pushed his thinking by inquiring, "[What if you] think about this in a different way?" This prompt demonstrates a developmental approach that Terrence welcomed, in contrast to an advisor bluntly telling a student that they are wrong (discussed below in the "weak advising" theme).

To progress in graduate school, students need regular support. For students classified as receiving strong advising, regular support was illustrated by an advisor's availability. Logan, a doctoral candidate who was co-advised by two faculty members and whose dominant experience was classified as strong, described his advisors' availability as a "catalyst" to finishing his program:

> Both of my advisors were open and available, even outside of our weekly meetings. If I popped in to either one of their offices at any random time, or sent them an email at any random time, even on weekends, then they made themselves available. . ..that. . .was definitely a catalyst for getting me out of school.

It is clear from Logan's quotation that his advisors' availability and accessibility were crucial to how he made sense of his own progress. Access to—and support from—one's advisor may be needed beyond a prescribed weekly meeting.

Basic Advising Offers Helpful Assistance to Students and Partial Wholeness

"Basic advising" described helpful and somewhat supportive practices that assisted students in making progress. One such practice is fostering independence in navigating the research process. Jalen, a first-year doctoral student whose secondary advising experience was classified as basic, said of his advisor: "He's just hands-off. But having that kind of relationship allows you to be independent and more creative so you can come up with ideas." Other students classified as having basic advising also explained that they had an indiscernible independence in the research experience; that is, although independence was often favorably mentioned, those with basic advising also tended to acknowledge that their advisors provided research guidance. These advisors were described as providing more regular developmental feedback, which also gave students the feeling of independence. Yet, in strong advising, students' ever-present advisors also frequently provided affirmation, encouragement, and constructive corrections, making students feel like they could do the work, make mistakes, yet still make progress.

Unlike strong advising that addressed the needs of the whole student on a frequent basis, basic advising primarily assisted students in their academic efforts and only

minimally attended to students' whole self. Lucas, a second-year doctoral student whose dominant advising experience was classified as basic, commented on accessing his advisor: "My advisor, when I can find him, makes sure he's very helpful in not only trying to get research done, but does on occasion give good personal life advice, and is concerned about our well-being, which is nice." Similar to those who have strong advising, Lucas notes that his advisor is helpful with regard to his research and cares about his well-being. In fact, in contrast to Jalen, Lucas describes a more hands-on (i.e., very helpful) advisor. Yet, emblematic of the basic advising designation is the caveat, "when I can find him." This indicates that although Lucas receives some helpful advising that also makes him feel cared for and whole, this is inconsistently provided. Lucas's experience is representative of how others classified as having basic advising described their sometimes outstanding, sometimes mediocre graduate advising. In contrast, a strong advisor would be consistently easy to locate and accessible.

Although Lucas mentioned a personal connection with his advisor, not everyone had advisors who shared aspects of their personal life. Jesse, a doctoral candidate whose dominant advising experience was classified as basic, described a typical experience:

> One thing I would have liked to see more of is maybe outside of research, just some basic professional development. . .right now, my relationship with my advisor is very professional in the sense of he's my boss. I report to him for work. But I would have liked to have had more outside-of-work interaction to get to know him as a person.

Jesse characterizes the relationship with his advisor as exclusively work-related. Although his comments suggest appreciation for receiving some helpful guidance, the professional development currently offered might not meet his full expectations. In addition, Jesse paints a picture of a very formal, top-down (i.e., employer/employee) relationship and expresses a desire for a relationship not exclusively focused on work. In this sense, although access may be thought of as synonymous with availability, accessibility can also be related to advisors' willingness to be open with students beyond formal research preparation. Students like Jesse, experiencing basic advising, may feel supported at times, yet still feel a limited connection to their advisor.

Stronger relationships with advisors can have positive implications for other aspects of students' advising experiences. Some felt more comfortable interacting and engaging with their advisors. Jackson, a doctoral student whose advising experience was classified as basic, shared, "I am comfortable enough around my adviser that I can say what's on my mind without fear of. . .your advisor thinking you're stupid. . .suggesting you go to another lab. . .[or] putting you on a worse project and punishing you in some way." Jackson alludes to a level of comfort where he can be open about concerns without fear of judgement or penalty. The need for comfort is a necessary, yet baseline, expectation, thus making it a basic advising practice. Similarly, Trai acknowledges comfort in communicating with his advisor: "I think by and large, I felt that he's understood me, and he's at least listened or at least respected [my complaints]. That's

what's made for a good experience." Trai confidently shares that his advising experience is good, in part because his advisor demonstrates a level of understanding, active listening, and respect for Trai, even when he is voicing disagreements. Jackson and Trai highlight the importance of a healthy working relationship with one's advisor. Without this, an advisee could face deleterious psychological and academic challenges (McGee & Stovall, 2015; McGee et al., 2019).

Importantly, both Jackson and Trai used qualifiers ("comfortable enough" and "by and large," respectively), which suggest relationships that are sufficient, but not outstanding as in a strong advising relationship, nor as bad as in a weak advising relationship that might be harmful.

Weak Advising is Empty of Care and is Harmful to Students' Academic Progress, Psychological Well-Being, and Wholeness

Based on students' descriptions, we surmised that experiences classified as "weak advising" were harmful. Daryl, a seventh-year doctoral candidate, mentioned, "Working with my advisor was difficult." Marco, a first-year doctoral student, said, "In my experience with [my field of study], that was like the worst advisor." Unlike strong and basic advising, weak advising neither consistently expressed wholeness nor was consistently helpful. Instead, weak advising tended to lack supportive practices and often presented barriers to students' academic progress and psychological well-being. Thomas, a third-year student whose dominant advising experience was classified as weak, said, "They're not providing any constructive criticism. It's just: this isn't good, your work is slow, this is sloppy.. . .But yet, you're not getting any. . .constructive feedback on how to improve." Thomas states that his advisor's practice includes frequent criticism of his work. It does not appear that Thomas is suggesting that criticism is bad or unwarranted, but that he would prefer more balance with positive feedback and affirmations. Although it might be assumed that all feedback is constructive, participants shared that constantly receiving negatively framed criticism could make them feel like dropping out. In this sense, where strong advising, and sometimes basic advising, are uplifting and encouraging, weak advising can be detrimental.

Most students classified as receiving weak advising described disparaging interactions with advisors. Jacob, a third-year doctoral student who had different experiences because he switched advisors, explained his transition into graduate school:

> [My views of my advisor] have nothing to do [with them] being rude. It has to do with, "You accepted me with the understanding that I came from this, but you still wanted me to perform. But now you're saying that you don't even think I can perform.". . .It became less about, "This is hard. Let's see what we can do," to, "I'm gonna prove you wrong, because I really don't appreciate the fact that you brought me into what's called a program. . .".

Jacob's words offer several insights into how some students may describe unhealthy interactions with an advisor. Jacob has a consistent record of academic excellence,

including an undergraduate grade point average of 3.6. Yet, he describes his doctoral advisor questioning his academic abilities. This finding is all too common; students feel they must prove that they are good enough to be in their graduate program (Burt et al., 2020; Fries-Britt, 2017; Fries-Britt & Griffin, 2007), which results in expending unhealthy levels of effort as well as isolation (Burt et al., 2018; McGee et al., 2019). Further, Jacob expresses disdain about being recruited to his doctoral institution (". . . the fact that you brought me") without the programmatic and advising supports he was accustomed to having. Jacob's advising experience was less of a partnership with his advisor and more of a solitary mission to prove that he could make progress.

Although some students described their weak advising experiences as including negative communicative practices and interactions with advisors, others shared that their advisors were inaccessible. Lucas, a second-year doctoral student whose secondary advising experience was classified as weak, said interactions with his advisor resulted in confusion, a different kind of weak communicative practice: "I just remember. . .being told to do something, or instructed to do something that was. . .vague. And then trying to get some follow-up explanation and that email would go unanswered." For Lucas, receiving vague instructions led to experimenting with the research on his own, similar to the isolation described by Jacob. Not only can uncertainty in one's research be frustrating and a source of stress, it can also result in delayed progress toward degree completion. Thus, for Lucas and others who said their advisors were confusing about what they expected and unavailable and/or unresponsive to clarify their expectations, the weak advising they experienced strained their well-being and progress.

Thomas also shared how his advisor was absent during a critical stage (approaching candidacy) of his doctoral process: "When I tried getting help to finish my degree—my research—the advisor that I had, he didn't really pay me any attention." Although a similar finding about advisor accessibility was offered in the basic advising theme above, Thomas's experience appears to be slightly different. Specifically, Thomas is not referring to the inaccessibility of his advisor when working on his advisor's work. Thomas's emphasis on "my research" suggests that when it was time to focus on his own research—needed to graduate—his advisor was not accessible.

Participants classified as having basic advising, who also indicated that they had somewhat hands-off or distant advisors, described their advising experiences as facilitating their scholarly independence. In contrast, Lucas and other students with weak advising explained how their lack of attention from advisors made them feel isolated and stunted their professional growth.

Students classified as having weak advising also described feeling used for their labor rather than treated as whole beings. Jacob said, "To have someone turn to you and ask you 'What's going on?' I'm thinking that they're interested. But really, [I'm] understanding that they're interested in a certain type of product from you. And that's about it." Most students classified as having weak advising, and some classified as having basic advising, described feeling like a commodity used to advance their advisor's research agenda. Jacob believed that his advisor's concern for him was

disingenuous. He also shared that his advisor suggested that he was not "cut out for this," referring to research and perhaps the graduate experience altogether. Taking these ideas together, Jacob did not feel it to be in his best interest to respond honestly to the inquiry about how he was doing. Weak advising that emphasized an advisor's research rather than a student's progress, research, or well-being felt dehumanizing and psychologically damaging. In contrast, advisors demonstrating strong advising practices prioritized students' wholeness and valued an authentic connection that allowed students to be honest about how they were doing, both academically and personally.

Discussion

The goals of this study were to gain a better understanding of how graduate students described their advising experiences and relationships, and the role that care played in them. Existing research highlights that relationships and experiences with advisors are necessary for progress in graduate school (Barnes & Austin, 2009; Burt et al., 2019; Griffin, 2012; Nettles & Millett, 2006). They assist students in navigating the academy and learning the expectations of and cultural associations with their field of study (Posselt et al., 2017; Twale et al., 2016).

Noddings's (1984, 1992) care framework was used to inform this study's findings. This conceptual framework offered insights into what care might look like when applied to graduate education. In addition, it provided clarity about the roles that those in power, in this case faculty advisors, play in establishing, encouraging, and modeling caring relationships. Intuitively, the better the advising experiences students have, the more positively they tend to describe their graduate education, connection to their field of study, and preparation for postgraduate careers (Barnes & Austin, 2009; Burt et al., 2019; Griffin, 2012; Nettles & Millett, 2006). However, the findings from this study, illustrated through the Model of Wholeness in Graduate Advising (MWGA), suggest a relationship between degrees of care and the efficacy of advising. Although Barnes et al. (2010) also asserted that care is necessary in graduate education, our findings extend existing research by providing theoretical linkages between students' expectations of advising, the levels of their advising experiences and relationships, and degrees of care demonstrated by their advisors. It is worth repeating that a graduate student could experience one practice from an advisor that is strong and another that is weak. The levels of advising experiences and relationships (i.e., strong, basic, weak) described in this article illuminate some of these nuances.

Although the majority of students in this study described how basic advising experiences and relationships met—but did not exceed—their expectations, and in some cases weak advising experiences served as barriers to persisting toward their degree, others described positive relationships where nurture and care undergirded their advisor's practices. Of note, 20 students were classified as having "basic advising" experiences and relationships. Although we defined basic advising as meeting the functions of the advising role, this category should not be a cause for celebration. Some students'

experiences were labeled as "basic" when they stopped wishing for more; that is, when students began reducing their expectations, they felt that their advisors were "good enough." Explained differently, some of these students were enacting resiliency strategies to persist (Fries-Britt & Griffin, 2007; McGee & Martin, 2011). Students with basic advising experiences and relationships, as well as those with weak ones, appeared to remain resolved to persist and not let basic or weak advising practices prevent them from completing their degrees. This finding further underscores the need to move toward a more caring and whole advising model.

Although this study includes only the perspectives of students, and not their advisors, there appeared to be patterns that distinguished advising experiences and relationships characterized as strong in care from those with less care (i.e., basic, weak). Specifically, it is possible that some students' advising experiences were strong in care because both the student and advisor broke down barriers and traditional (i.e., basic) practices of advising. These advisors appeared to implement an advising pedagogy toward wholeness. According to participants, these advisors seemed to "see them" as whole people (Fries-Britt et al., 2013; Fries-Britt & White-Lewis, 2020) with full lives and helped them with issues both within and outside the academy. These advisors knew about students' research interests and advocated for students' independent work, rather than solely pushing them to advance their own professorial research agendas. Advisors demonstrating strong care were also accessible and responsive to advisees' needs. Caring advising relationships and experiences made students feel more validated in their pursuit of graduate education and independent scholarship.

Next, we offer recommendations for future research and theory and implications for professional practice for advisors and for graduate advising policy reform (see Table 3).

Recommendations for Future Research and Theory on Caring and Wholeness in Advising

Our findings suggest that graduate students experience advising in many ways. Future research can provide more clarity about the differences. For instance, more advanced doctoral students were able to draw from a wide range of experiences over time. Although several students participated in two interviews, changes in advising experiences were not intentionally examined. Existing research shows that students learn and develop based on their advancement in graduate school (Baker & Pifer, 2011; Baker et al., 2013; Gardner, 2009); what a first-year student needs likely differs from what that student will need right before graduating. This cross-sectional study did not investigate students' experiences longitudinally. Future research should explore the evolution of students' advising expectations, experiences, and relationships over the span of their graduate education.

More theoretical specificity to our Model of Wholeness in Graduate Advising is also warranted. For instance, we learned that some participants with one advisor did not have a consistent experience (i.e., strong, basic, or weak), but rather had multiple

Table 3. Implications for Future Research and Theory and Professional Practice and Policy Reform.

Type of Implication	Recommendations
Research and Theory	• Investigate the evolution of students' advising experiences and needs using a longitudinal design. • Explore advising needs by field to inform professional practices and policies. • Study how advising experiences and relationships differ by social identities of students (e.g., Black, Latinx, middle-class, female). • Design research that investigates students' ideal advising experiences.
Practice and Policy	• Reform graduate policies and procedures that maintain basic and/or harmful (i.e., weak) advising experiences and relationships. • Create alternative funding structures for graduate students (e.g., funding from the graduate college/school) to mitigate binding students to mismatched advisors. • Develop professional development programs to expand faculty notions of advising. • Incorporate professional development opportunities to prepare future faculty to advise future students. • Encourage honest and safe two-way communication, where graduate students can express their advising needs and faculty can convey their expectations.

kinds. In addition, most who had multiple advisors had multiple experiences; when students switched advisors, they were likely seeking better experiences. Finally, we hypothesized that students may adjust their expectations of advisors based on past or current experiences. Overall, advising experiences can be dynamic over time. Therefore, a longitudinal study that tests—or extends and refines—our classifications would illuminate how students' needs vary over time and help improve one-size-fits-all approaches to graduate advising.

Although this study's findings may be universal to all graduate students, existing scholarship suggests that student experiences differ by field of study (Burt, 2019; Burt et al., 2018). Exploring students' advising needs by field may provide knowledge that informs professional practices and policies within particular graduate programs and departments. Such research might reveal whether universal advising practices at the graduate level are useful and clarify the need for domain-specific research.

National statistics continue to show that historically underrepresented students of color (National Science Foundation, 2017) and women in some fields (Patterson-Stephens et al., 2017) remain at the margins in graduate education. Further, research highlights that these students continue to face negative experiences that threaten their persistence to degree completion (Burt et al., 2019; McGee & Martin, 2011). Given

this, it is possible that the ways in which students experience advising differ by their social identities. If students differently experience advising, yet advising practices and relationships are standardized, students may not receive the personalized touchpoints they need to help them thrive. Although we took into account students' race, ethnicity, and gender, we did not elaborate on them in this study. Considering existing research on graduate advising, we believe our findings should apply both to Black men and to a broader student population. Anticipating critiques of our choice to frame the model in general terms, rather than as one that is specific to Black men, we note the prevalence of social science research that does not assume its theories are applicable only to its particular racial and gendered sample (usually White men). We take the same approach here while simultaneously recognizing that the MWGA was developed based on the advising experiences of Black male graduate students in engineering programs. This important epistemological argument regards Black males' lived experiences as a valid basis for developing a theory that may be generalizable and that should be further tested among students from a wide range of demographic groups. Thus, future research that investigates how advising experiences and relationships differ by the social identities of students (and perhaps the identities of advisor–advisee pairs) may inform programmatic and department-level advising policies that can improve the experiences of marginalized students.

Our participants provided insights into the nature of strong, basic, and weak experiences with advisors; however, this study did not explore what the best advising experiences and relationships might be like. Research that investigates students' ideal experiences and relationships and offers new visions for graduate advising could provide clues to how to better support graduate students.

Recommendations for Advisors

Admittedly, it is challenging to offer universal recommendations for improving advising across a broad spectrum of disciplines. However, we offer some suggestions based on our findings. For those serving in advising roles, our findings revealed that students' needs for advising relationships and experiences are not monolithic. Although some wanted greater autonomy and room to make mistakes, almost all described wanting advisors who would not let them fail or be left entirely on their own.

Faculty should be aware that graduate students may not know what all of their advising needs are, particularly if they have not been advised well in the past, and that they may not feel comfortable communicating needs they are aware of. Faculty are encouraged to honestly communicate the kind of advisors they are and tell students if they are unable or unwilling to meet their expectations. The key is having an open two-way conversation grounded in civility and mutual care to encourage mutual vetting of the advising match. In addition, continuing these conversations is necessary as students' needs evolve during their graduate journey (Baker & Pifer, 2011; Baker et al., 2013; Gardner, 2009). Recalibration will help reduce assumptions that what students need stays the same from matriculation through graduation.

In addition, when providing strong advising that includes care and attention to students' wholeness, faculty need to not only recognize the overlaying systems and structures that make progress in graduate school challenging (e.g., community, institutional, and departmental cultures; sociopolitical influences on campus climate; admissions policies and programmatic curricula; faculty demonstrating racist, sexist, homophobic, xenophobic, etc. behavior) (Harper, 2012; Johnson-Bailey et al., 2009; McGee et al., 2019), but also actively engage in individual practices that build up students and dismantle systematic practices that burden them.

Recommendations for Graduate Advising Policy Reform

As described in the literature review, graduate students are assigned to advisors in different ways. In the model where students' admission is tied to securing an advisor who will fund them for the duration of their graduate experience (Nettles & Millett, 2006), some students feel beholden to their advisors. In this study, almost all (38 doctoral students) participants were funded through their advisors and/or engineering colleges. Reimagining where funding is located and/or is administered may help reduce power dynamics that tie students to unhealthy or mismatched advising situations. For example, administering funds at the departmental, college/school, or graduate college level could alleviate potential conflicts between advising, funding, and time-to-degree. Implementing this recommendation would require coordination between units' (e.g., program, department, school, college, institution) organizational structures and a commitment to organizational change to improve students' advising experiences.

Ongoing training for advisors would also assist in moving toward a more caring and whole framework. Courses on advising are not a standard part of the graduate curriculum. Without prior preparation, many faculty may default to advising their students in the ways in which they were advised. In fact, many report that they learned how to advise at the start of their faculty career, requiring professional development to improve (Tillman, 2018). This haphazard preparation contributes to inconsistent practices. Given the demands on faculty members (i.e., teaching, research, service), learning how to improve one's advising practices may not be a high priority for some. However, to improve graduate education, greater emphasis on developing strong advising practices is warranted. An ongoing professional development program might include elements from this study's findings to help expand faculty members' notions of what advising could look like. Professional development offerings should help faculty understand that because the needs of graduate students are diverse, a one-size-fits-all approach to advising may miss the mark in providing the care each student requires.

Conclusion

For those who advise graduate students, what does it mean to know what students need and not provide it? We are not suggesting that those who do not provide strong levels of care in advising do not care about their students. Yet, this may be the perception

students hold. Creating more caring and whole advising experiences might be challenging for faculty members with long-standing modes of advising. However, moving toward a more caring and whole framework is necessary for future generations, especially those who will become future faculty members.

Moving toward a more caring framework might start with recognizing students' wholeness. This may include, but is not limited to, recognizing students' social identities (e.g., Black, male, etc.) as well as conflicts and barriers students may encounter in graduate school due to stereotypes associated with those identities. Understanding students' lived experiences will assist with creating more caring advising experiences, and developing more caring relationships may better assist students in progressing through degree completion and doing so more fully whole.

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