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Colorblind Mentoring? Exploring White Faculty Mentoring of Students of Color

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In this critical multisite case study we examined the concept of colorblind mentoring. Using Bonilla-Silva's Colorblind Racism Frames, we sought to understand White faculty members' perspectives on their mentoring of Students of Color. The findings revealed that White faculty members often engage with students from a "colorblind perspective." Their use of race-neutral, colorblind language (avoiding racial terms but implying them) allowed White faculty members to describe their students as academically inferior, less prepared, and less interested in pursuing research and graduate studies while potentially ignoring structural causes. Faculty perceptions of students may influence the way Students of Color perceive their academic abilities and potential to achieve success in STEM disciplines and in graduate education.

Keywords: colorblind racism, mentoring, Students of Color

Faculty mentoring has been evidenced to be critically important for students' success in graduate programs (Gardner, 2007; Herzig, 2006; Sallee, 2011). Mentoring experiences are perhaps even more crucial for Students of Color,¹ many of whom are the first in their families to attend graduate programs, and who are underrepresented in their programs (Herzig, 2006; Milner, Husband, & Jackson, 2002; Patton & Harper, 2003; Winkle-Wagner, Johnson, Morelon-Quainoo, & Santiago, 2010). While there is some research

suggesting that mentoring should be culturally sensitive, meaning mentors should be cognizant of students' racial/ethnic backgrounds during their interactions (Hinton, Grim, & Howard-Hamilton, 2009; Milner et al., 2002), there is little research examining the ways that faculty reflect on their mentoring approaches. In particular, there is an absence of scholarship that chronicles faculty perspectives on mentoring experiences related to how students' racial/ethnic backgrounds might influence mentoring practices. The necessity of this analysis is amplified given that many of the faculty mentors are likely to identify racially as White, particularly in the science, technology, engineering, and mathematics (STEM) disciplines. More research is needed on how White faculty members view their interactions with Students of Color in an effort to create interventions that might help students have better mentoring experiences. This project offers in-

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¹ Terms such as "White" or "Black" are often capitalized. For similar reasons, we choose to capitalize terms like "Students of Color, People of Color" in our writing to reaffirm the voice, experience, and history of exclusion of students and faculty who are represented by these phrases.

sight into White faculty members' perspectives, suggesting that while White faculty may attempt to treat the Students of Color with whom they work the same as White students, these faculty also implied that Students of Color are "less prepared" and in need of being "brought up to speed." The findings indicate that a faculty member's mentoring approaches could disrupt or reproduce race/class/gender inequities in graduate education.

Review of the Literature

The role of faculty in creating opportunity and success for underrepresented doctoral students cannot be underscored enough. Relationships with faculty members are critical in the socialization process for graduate school as students interact with and model faculty (Gardner, 2007; Sallee, 2011). These relationships are particularly crucial for Students of Color (Herzig, 2006; Milner et al., 2002; Patton & Harper, 2003; Winkle-Wagner et al., 2010). Student-faculty relationships can help reframe negative institutional messages around race and gender (i.e., that Students of Color are inferior to White students), particularly in predominantly White institutions (PWIs) (Hinton et al., 2009). There is some evidence that Students of Color may not have access to the same level of socialization with faculty mentors as their White peers. Students of Color, particularly Black students, often receive less support in the form of opportunities to engage with faculty, and graduate assistantships which offer funding and formal socialization into teaching and research (Howard-Hamilton, Morelon-Quainoo, Johnson, Winkle-Wagner, & Santiago, 2009; Nettles, 1990; Noy & Ray, 2012). In the historically Black college and university (HBCU) context, research finds that faculty members create and maintain a supportive and welcoming environment for Black students (Hirt, Strayhorn, Amelink, & Bennett, 2006).

Social support (including academic mentoring) for Students of Color is a strong predictor of academic persistence (Gloria, Castellanos, Lopez, & Rosales, 2005). It is not always possible for Students of Color to find a faculty mentor of the same racial/ethnic background. Research on mentoring maintains that it is necessary that faculty mentoring is culturally sensitive and appropriate, meaning that it must

deliberately attempt to offer a counterspace (i.e., a safe and inclusive space for students to turn to faculty for guidance and advising) or alternatives to negative images or perspectives of racially underrepresented students (i.e., encouragement that the student can succeed) (Brown, Davis, & McClendon, 1999; Hinton et al., 2009; Milner et al., 2002). Several studies on mentoring and cross-cultural mentoring provide meaningful insights.

Mentoring

Mentoring has been defined in multiple ways: as a specific set of activities conducted by the mentor (Crisp & Cruz, 2009), a process (Davidson & Foster-Johnson, 2001; Tillman, 2001), or as a discipline-specific set of activities (Kram, 1985; Merriweather & Morgan, 2013; Tillman, 2001). Although there is not an agreed-upon definition, Tillman (2001) offers what could be considered a comprehensive definition of the mentoring experience:

... a process within a contextual setting; a relationship between a more experienced individual; a means for professional networking, counseling, guiding, instructing, modeling, and sponsoring; a developmental mechanism (personal, professional and psychological); a socialization and reciprocal relationship; and an opportunity for identity transformation for both the mentor and the protégé. (p. 296)

Mentoring can be either formal or informal. Formal mentoring takes place when the mentoring relationship is fostered through an authorized mentoring program (Tillman, 2001); informal mentoring develops organically. Mentors perform a variety of functions, both informally and formally, such as helping to socialize students to a particular discipline, serving as role models, and offering research or career support (Kram, 1985; Merriweather & Morgan, 2013; Tillman, 2001). Both informal and formal mentors can assist with the protégé's socialization to a particular field or discipline (Kram, 1985; Tillman, 2001).

Mentoring can provide psychosocial support to help protégés develop. The psychosocial functions, which include role modeling and acceptance, "enhance a sense of competence, clarity of identity, and effectiveness in a professional role" (Kram, 1985, p. 22). Informal mentoring is focused on psychosocial development, and this typically occurs for an extended

period as the mentor and protégé develop a long-term and trusting relationship (Davidson & Foster-Johnson, 2001).

Mentoring has been evidenced to be critical to the successful completion of graduate education (Davidson & Foster-Johnson, 2001). Thus, it is imperative that students from all racial/ethnic backgrounds benefit from positive mentoring. However, research has shown how specific factors such as race and gender influence the mentoring relationship (Griffin & Reddick, 2011), illustrating the importance of cross-cultural mentoring.

Cross-Cultural Mentoring

Cross-cultural mentoring occurs when individuals with different racial/ethnic identities establish a mentoring relationship (Merriweather & Morgan, 2013), and it can be a delicate dance for both parties, making the relationship difficult to sustain (Johnson-Bailey & Cervero, 2004). To ensure the mentoring relationship is mutually beneficial, Johnson-Bailey and Cervero (2004) stress the importance of continuous and honest dialogue about race and racism, which requires the mentor and protégée to develop a trusting relationship.

A lack of trust is often a significant barrier in cross-cultural mentoring relationships; in part, because of social scripts where people are in unequal positions and sometimes act out their socialized roles, making it difficult to equalize relationships (Johnson-Bailey & Cervero, 2004). Unequal power positions make trust an even more crucial component of cross-racial mentoring. Because of “socially inscribed histories” (Merriweather & Morgan, 2013, p. 3) cross-racial mentorships must work harder to overcome trust-related issues, meaning that those in the relationship must contend with historical and contemporary racial interactions. Trust can be attained through meaningful efforts and not being dismissive of differential experiences (Merriweather & Morgan, 2013). Unfortunately, trust might be breached by colorblindness (a failed attempt to avoid critical discussions about race).

Colorblindness is the belief that race should not and does not matter (Worthington, Navarro, Loewy, & Hart, 2008). Johnson-Bailey and Cervero (2004) claim that without an understanding of how race and racism affect the men-

toring relationship, White faculty members are likely to engage in “colorblind mentoring” (p. 17), where they attempt to treat all students the same regardless of students’ backgrounds, which can be detrimental to the protégé’s development because the student may need different mentoring based on his or her background. In other words, even if a faculty member is attempting to treat students equitably, by ignoring students’ backgrounds, this could make it difficult for students to feel as if who they are matters in that setting. In addition, as we discuss in more detail below, when race is altogether avoided (defined as protective hesitation) (Johnson-Bailey & Cervero, 2004; Thomas, 2001), the protégé is unlikely to receive the psychosocial support (Kram, 1985) essential to the mentoring relationship. The concept of colorblind mentoring is understudied, and to better comprehend this issue, additional work is needed to understand White faculty members’ perceptions of their mentoring relationships with Students of Color, particularly in the STEM field.

Mentoring in STEM

Research on mentoring Students of Color in STEM fields appears to be inconclusive. Some scholars suggest that Students of Color in STEM report that having a mentor with the same racial identity is important, indicating that they receive more help than students matched with a mentor from a different race (Blake-Beard, Bayne, Crosby, & Muller, 2011). Other research finds that the racial background of the mentor is less important (Thiry & Laursen, 2011). Several studies present mixed results (Fries-Britt, Younger, & Hall, 2010; MacLachlan, 2006; Ong, Wright, Espinosa, & Orfield, 2011). For instance, there is evidence of some Students of Color reporting positive interactions with White faculty members who are committed to fostering academic success, and believe in students’ abilities (Fries-Britt et al. 2010; Griffin, Perez, Holmes & Mayo, 2010). Other findings revealed that students also report negative experiences; including faculty members failing to acknowledge students contributions in the classroom or placing assumptions on students’ academic ability based on their backgrounds (Fries-Britt et al., 2010; MacLachlan, 2006). A synthesis of the literature on women of color in STEM found that when

mentoring relationships occurred they were often beneficial; however, these relationships were rare (Ong et al., 2011). Taken together, there is quite a bit of evidence of faculty members suggesting that the student change majors, implying that Students of Color are not serious about STEM careers, or being cold toward students (Fries-Britt et al., 2010; Griffin et al., 2010; MacLachlan, 2006; Ong et al., 2011).

In one mixed methods study, Black professors in STEM reflected on their experiences as students and asserted that despite benefiting from positive mentoring relationships with White faculty, they perceived that many of the White faculty across their discipline had lower expectations of them (Griffin et al., 2010). A qualitative longitudinal study of People of Color who earned PhDs between 1980 and 1990 at the University of California found that Black PhDs were not trained in long-term development, particularly the type of development that would prepare them for a career as a faculty member (i.e., career training, grant writing, collaborating, presenting at conferences, publishing, teaching, and networking) (MacLachlan, 2006).

Studies that examine student–faculty relationships in STEM almost exclusively focus on the student perspective (Blake-Beard et al., 2011; Carlone & Johnson, 2007; Fries-Britt et al., 2010; MacLachlan, 2006) largely excluding faculty members’ interpretations of these relationships. An exploration of faculty members’ experiences mentoring Students of Color could reveal insights into faculty intentions and issues with mentoring diverse students.

Theoretical Frameworks

The larger study is grounded in Bourdieu’s (1979/1984) social reproduction theory, which examines how inequalities are perpetuated across generations. While social reproduction theory guided our questions in the interviews and our larger analysis (McCoy & Winkle-Wagner, in press; Winkle-Wagner & McCoy, in press), for this phase of the study, we applied Bonilla-Silva’s (2010) colorblind racism frames to enhance our analysis of the faculty participants’ narratives relative to their mentoring Students of Color. Bonilla-Silva’s framework connects well with the theoretical perspective in the larger study because it also employs a structural

approach. Bourdieu’s social reproduction theory was concerned with ways that the social stratification system was perpetuated across generations. Bonilla-Silva (2010) was interested in how racial ideologies can work to shape social structures. In using Bonilla-Silva’s concepts for this part of the analysis, we were able to contemplate how the data may or may not offer insight into colorblind ideologies, where faculty might be race neutral in their language (e.g., describing cultural capital necessary for success) but there may be tacit references to racial issues (e.g., minimizing some students’ prior experiences).

Bonilla-Silva (2010) developed the colorblind racism frames through a qualitative study of White people’s ideas about race. We used these frames to extend our analysis of the mentoring data to understand the ways in which faculty members reference race when discussing their mentoring practices. Based on our analysis of the data we found that race is often referenced in tacit or subtle ways.

Bonilla-Silva’s (2010) four colorblind racism frames include: (a) *Abstract Liberalism*: the use of ideas related to political liberalism (related to notions of meritocracy and individualism) such as individual opportunity or choice to explain racism (e.g., Students of Color “choose” not to do well in graduate school or they are “not working hard enough”); (b) *Naturalization*: an explanation of racial inequality as something that might occur naturally (e.g., it is normal to have very few Students of Color in STEM classes); (c) *Cultural Racism*: culturally based arguments that explain racial inequality as something that has to do with culture (e.g., Students of Color are “less prepared”); and (d) *Minimization of Racism*: an explanation that discrimination is no longer a factor affecting People of Color because things are better now than they were in the past (e.g., we do not need affirmative action anymore in graduate admissions).

Central to Bonilla-Silva’s (2010) theory is the premise that White people do not use the frames in isolation or “pure form” (p. 30), but in combination. Bonilla-Silva, taking a structural approach (that includes attention to structural and institutional racism), contends that colorblind racism has emerged as a “new powerful ideology” (p. 25) to defend contemporary racism. He argues the central component of any

dominant racial ideology is its frames or “*set paths for interpreting information*” (p. 26, emphasis the author’s). We used Bonilla-Silva’s colorblind racism framework to guide our analysis and interpretation of the mentors’ responses describing their relationships with Students of Color.

Method

The data for this project stems from a larger, critical qualitative multisite case study that sought to specifically explore graduate school preparation and aspirations in STEM disciplines at a predominantly White institution (PWI) and a historically Black university (HBCU). Here we examined White faculty members’ perceptions of their mentoring experiences in STEM disciplines, particularly their mentoring of Students of Color. The guiding question was: How do White faculty in STEM disciplines at Atlantic State University (ASU), a PWI, and Mid-Atlantic State University (MASU), an HBCU, describe their experiences in training/mentoring students, particularly Students of Color?

We employed a qualitative approach for the study because it is exploratory in nature. This research utilized a multisite case study approach (Flyvbjerg, 2006; Merriam, 2009). Consistent with case study methodology, the study was bounded by location (two institutions in the same mid-Atlantic state) and time (data collected within a set period of time, one academic year). We conducted the study at two institutions located in the mid-Atlantic region of the United States. ASU is a PWI land-grant institution with high research activity, approximately 22,000 students, and is the state’s flagship institution. ASU employs 909 tenure-line faculty including people who self-identify as: White (81%); Black/African American (4%); Hispanic/Latino (2%); Asian/Pacific Islander (12%); and Native American (<1%). MASU is a historically Black land-grant institution and is categorized as a comprehensive four-year institution, with approximately 3,800 students. MASU employs 178 tenure-line faculty including people who identify with the following groups: White (38%); Black/African American (35%); Hispanic/Latino (1%); Native American (2%); Asian/Pacific Islander (21%); and other (3%).

Participants and Data Collection

While the larger study includes faculty, undergraduate, and graduate students in STEM disciplines, based on the absence of faculty perspectives on mentoring Students of Color in the literature, we chose to focus specifically on faculty members’ mentoring perspectives in this analysis. Another reason that we did not include students’ perspectives on mentoring was that the faculty members and students might not have worked together (i.e., they were not mentoring dyads). Thus, faculty and student perspectives on mentoring would not necessarily be comparable because they may not be referencing the same disciplines, situations, or mentor/protégé relationship.

Twenty faculty members participated in the larger study, 10 at each institution. We collaborated with the ASU Research and Development Center for the data collection process. We employed purposeful chain sampling (Merriam, 2009), where faculty participants were recruited with multiple starting points for the chain (e.g., a participant was recruited from a particular department and then that participant helped to find others). Faculty members were recruited to the project by contacting the department chairs, who then sent e-mails to faculty in their respective departments, who in turn volunteered to participate in the project. We focused particularly on the eight White participants in this paper because our initial analysis of the data revealed that they often spoke of the Students of Color they engaged with in race-neutral (i.e., colorblind) language. Our decision to focus on this smaller subset of participants allowed us to delve deeply into explicit and subtle meanings within the participants’ statements. Finally, Bonilla-Silva (2010) emphasized the importance of revealing White people’s perspectives on race, racism, and interactions across racial lines to understand how racial inequities are perpetuated or can be disrupted.

The participants included five ASU faculty members and three MASU faculty members. Six participants identified as male and two identified as female. Participants’ faculty ranks included: five full professors, one associate professor, and two assistant professors. All MASU faculty participants in this analysis are assistant professors and the ASU faculty members are tenured. They range in age from 32–69 years

old. See Table 1 for participants' demographic data.

For the larger research project, data were collected via semistructured interviews, documents (e.g., brochures, websites, etc.), and demographic data forms (McCoy & Winkle-Wagner, in press; Winkle-Wagner & McCoy, in press; Marshall & Rossman, 2011; Merriam, 2009). For this paper, we present data from the semi-structured interviews (see the Appendix for the interview protocol). We trained a research team from the ASU Research and Development Center, which conducted the interviews. The interview team comprised individuals from different racial/ethnic backgrounds (seven White interviewers, one African American interviewer, and one Latino interviewer). However, all of the interviewers who conducted interviews with the White faculty members presented here identified as White. The interviews, focusing on faculty mentoring practices, occurred on each of the campuses and lasted approximately 45–90 minutes.

Data Analysis

After having a professional transcriber transcribe the interviews, we combined an inductive (emerging from the data) and deductive (checking existing categories with the data) process in our analysis (Merriam, 2009). We first coded a couple of transcripts individually, suggesting emergent, low-level codes

(2–5-word phrases, typically in the participants' language that were very explicit in the data). Then, as a research team, we discussed the emergent codes until we reached consensus on emergent categories and topics. After consensus was reached on possible emergent codes, we created a codebook. We coded the remaining transcripts with the codebook. For data that did not fit the existing codebook, we created new codes, discussed those codes as a team, and added those new codes to the larger codebook if relevant (i.e., if that code appeared more than once). We then compared the codes across the interviews, creating themes and subthemes (Marshall & Rossman, 2011). Based on this analysis, there was a large amount of data with a "mentoring code."

Next, we reduced the data to only quotes that linked to mentoring practices (putting all those quotes in a separate document). We then recoded the data to look for higher levels of inference within the data, reviewing each statement with prior and subsequent statements to reveal larger and deeper ideas within the data. We had numerous conversations as a team to peer review these higher inference codes (e.g., describing Students of Color as less prepared) (Carspecken, 1996). We then coded the data for a third time, comparing the low- and high-level codes with Bonilla-Silva's (2010) colorblind frames. Where rel-

Table 1
Faculty Participants

Pseudonym	Gender	Race	Institution	Department/Rank	Age
Thomas	Male	White	ASU	Chemistry Professor	69
Benjamin	Male	White	ASU	Chemistry Professor	58
Andrew	Male	White	ASU	Biology Associate Professor	50
William	Male	White	ASU	Biology Professor	56
Susan	Female	White	ASU	Biology Professor	46
John	Male	White	MASU	Chemistry Assistant Professor	32
Tracey	Female	White	MASU	Agriculture & Natural Resources Assistant Professor	36
Stephen	Male	White	MASU	Computer Science Associate Professor	44

evant, we placed another code to the side, indicating a relationship with this theory. Because there were not an equal number of faculty participants in both institutions, we did not attempt to make broad comparisons between institutional types in our analysis here.

Trustworthiness

To develop rigor and trustworthiness throughout the research process, we engaged in member checks, triangulation, peer debriefing, and negative case analysis (Carspecken, 1996; Marshall & Rossman, 2011; Merriam, 2009). For member checking, consistent with other qualitative methodologies (Carspecken; Marshall & Rossman; Merriam), we returned the interview transcripts to the participants to ensure their narratives were accurately represented. We triangulated the data by conducting multiple levels of analysis. We followed Carspecken's (1996) method for peer debriefing. First, as a team we analyzed the transcripts individually prior to offering feedback on the analysis. We created and tested the use of a codebook (Ryan & Bernard, 2000) to ensure the analysis was consistent across researchers. Second, we discussed the analysis, as well as any data not interpreted the same among the research team. We engaged in this form of analysis until the research team reached consensus on the findings. Finally, we conducted additional analysis of the discrepant data (negative case analysis), reexamining this data to better understand why it did not fit with the emergent themes.

Researchers' Positionality

There were multiple researcher positions to consider in this project. Because we worked with the ASU Research and Development office, there were numerous externally hired interviewers collecting the data. While we did not specifically analyze for the interviewer-participant relationship, it is likely that the racial background of the interviewers influenced the way in which the participants self-disclosed. Because all of the interviewers were White, the White faculty members may have discussed racial issues differently than they would have if the interviewers had been People of Color. All

three authors engaged in the data analysis process.

The first author identifies as a Black male, whose scholarship focuses on People's of Color experiences in higher education and typically utilizes critical theories (critical race, social reproduction) in his work. It was important to reflect on his own mentoring experiences (both as a mentee and a mentor), both positive and negative, during the data analysis phase. He needed to ensure that his experiences did not affect the authors' analysis and data interpretation. More specifically, he needed to not allow any negative mentoring experiences with White faculty members to affect how he engaged with the data.

The second author self-identifies as a White woman whose research agenda centers on issues of access and success in college for Students of Color. Her research is rooted in critical theory and she views research as part of the social change process. During the analysis process, she thought a lot about her own mentoring practices with Students of Color, and often reflected on her practice with both White students and Students of Color. As someone who is resistant to mentoring that ignores students' backgrounds, she had to work through potential biases in the data (e.g., she had to journal and discuss instances where she was frustrated with some of the participants' statements, so that she could look more deeply at what they were trying to say).

The third author identifies as a multiracial woman who, because of her fair complexion, is sometimes perceived to be White. Her research focuses on access to and experiences in higher education for Students of Color, and first-generation college students. Her research is primarily grounded in social reproduction theory. On several occasions during the data analysis process, she reflected on her own mentoring experiences (as a mentee), which were largely positive (and often contrary to the experiences of the students who participated in the larger study) and occurred with individuals from various racial and ethnic backgrounds. She was conscious of the varied mentoring experiences described in this study, and worked through biases in the data (e.g., instances where she had an emotional reaction) through peer debriefing where she

discussed her perceptions of the data with coauthors and other scholars.

Findings: White Faculty Reflections on Their Mentoring of Students of Color

Many of the White faculty members in this study at ASU admitted they often had few opportunities to work with Students of Color. For faculty at MASU, the student population was more diverse but the White faculty still grappled with how to work well with Students of Color. Two themes emerged from the descriptions of their mentoring practices. First, faculty members related a desire to treat Students of Color the same as they treated White students, as a way to be unbiased toward underrepresented students. Second, White faculty at both institutions described the Students of Color they worked with as not being top students. In turn, the faculty described allowances they made for Students of Color with the assumption that they would not make these allowances for White students. White faculty then described their efforts to help Students of Color “get up to speed” in their academic abilities. After each theme, we offer analysis of the data using Bonilla-Silva’s (2010) colorblind racism framework.

“Treating Students of Color the Same When I Get the Chance”

Many faculty members, particularly at ASU, noted the disparity in the number of Students of Color with whom they have the opportunity to work. Some faculty at both institutions suggested that all students should be treated the same regardless of their racial/ethnic background. They frequently used language that implied they do not see race, and that their students’ racial identities have no effect on how students are treated. Tracey, a female assistant professor in agriculture at MASU asserted, “I’ve come from the West Coast. I don’t care if you are purple! I’m going to treat you the same way . . .” Tracey’s comment implies that because she is from the West Coast, she treats all students equitably, and that everything must be fair. It also seems to be important to her that she maintains her openness, as if she is trying to make a claim to her own identity as a person who is open-minded. Thomas, a male chemistry professor at ASU, shared that he is aware of

race but he still treats Students of Color the same as he treats students who identify as White:

I mean to the extent that I can even remember . . . I think I treated them just like anybody else in the lab. I mean I wasn’t, I mean certainly you’re aware of color, but you don’t, I don’t [think] that I’m biased. I mean [you] almost have to be a sociologist to come in and look and see (laughter) . . .

Similar to Tracey, it seems important to Thomas that he clearly stated his desire to treat Students of Color “like everybody else.” He goes as far as to say that he does not think he is biased, indicating that it is important for him to not be perceived in this way. But, Thomas appears to contradict himself in describing his mentoring, admitting that he hired two undergraduate Students of Color to work in his lab because of their racial identity.

John, a 32 year-old male assistant professor of chemistry at MASU also claimed to treat his graduate students the same regardless of their racial identities. “I try to treat everyone the same. I mean there are some things you have to be cognizant about; but not anything in particular that was different.” Yet, John still perceived that his racial identity was a barrier:

I think there is a difference in how I am perceived as a White male [on a] predominantly African American campus. So, sometimes I think that places barriers; but I hope that the way I treat everyone is pretty much the same.

John reiterated his desire to treat students the same, regardless of their background. Rather than viewing himself as colorblind, Thomas described being “cognizant” of some differences between students based on their racial/ethnic background. He concluded, “I feel there is a perception of . . . because I am White I don’t have the students’ best interest at heart because I am not like them.” John implied that he wants to work well with students and highlights the tension in this for him, how to treat students equitably while also noticing race.

Benjamin, a 58 year-old male full professor at ASU, was adamant that he treated all of his graduate students the same. When asked if race might affect his relationship with students, he responded, “No I don’t think so.” He underscored the lack of Students of Color at the graduate level in his discipline, pointing out that the one Student of Color with whom he had

worked was actually an international student and not a U.S. Student of Color. Perhaps this was why he was not entirely clear about how race might influence his relationships with students.

Susan, a female biology professor at ASU, who mentored both graduate and undergraduate students, was unwavering in her claim that there was no difference in how she treated and perceived her students, based on their background.

Because the thing is, that in my mind, I see absolutely no difference from the blue-collar kid who went to some little teeny school in the [mid-Atlantic region] from a Student of Color who came to us from a little school in [the Midwest].

Susan underscored a desire to be equitable in her approach to not seeing difference.

Colorblind analysis. While the idea of “treating students the same” sounds reasonable at first glance, there can be implicit problems in this approach to mentoring. As evidenced below, one reason why White faculty might describe a desire to treat all students the same, regardless of their race or socioeconomic backgrounds (or other background characteristics), could be that the faculty members desire to be viewed as open-minded. Or, it is possible that White faculty strongly desire to not be viewed as racist and are therefore trying hard to view students the same irrespective of students’ race/ethnicity. However, by using a colorblind approach to mentoring, it is also possible that students may be disempowered from sharing their backgrounds and the assets that come with those backgrounds (Yosso, 2005²), during their STEM degree programs.

Tracey asserted that she did not care if students were “purple,” she would treat them the same. This is a classic colorblind approach (Bonilla-Silva, 2010), where White people attempt to demonstrate their equity-mindedness by ignoring phenotypic (skin color) differences that the eyes very likely see. While likely intended to be open-minded, a colorblind approach can actually work to erase students’ backgrounds, or this could imply that all students should assimilate to a Eurocentric way of thinking, behaving, and speaking (Winkle-Wagner, 2009). Susan described the importance of hard work for students, regardless of their background. But, in doing so, Susan underscores what Bonilla-Silva (2010) would refer to as an abstract liberalist

approach connected with the idea that everyone is the same and should work hard regardless of their multiple identities. John was seemingly attempting to push back on a colorblind approach, maintaining that he did notice differences. But, he still struggled with how students perceived him because of his Whiteness. He provides an example of the complexity of cross-racial mentoring. Ultimately, the participants underscored both the complexity, and some of their struggles with cross-racial mentoring. In addition to grappling with whether to treat all students the same irrespective of their backgrounds, many of the White faculty participants discussed the need to compensate for underrepresented students, as described in the next theme.

Making Concessions for Students of Color Because They Are “Not Top Students”

Despite professing a desire to treat all students the same, faculty offered tangible examples of how they treated the students differently because of their racial identities. Often these examples were couched in concessions that the faculty member had made for students they perceived to be less prepared. For example, Thomas openly acknowledged that he “relaxed” the criteria for hiring chemistry lab assistants at ASU who were undergraduate Students of Color:

I think that the issue often times for Students of Color at the university is that they’re in an extreme minority in any situation they’re in. They’re not in . . . I mean it may be an uncomfortable environment. I can think of two students I know that . . . both of them were not top students in the class. And I guess I was [in] a situation where if any Student of Color asked me to work in my lab, I would say, “Yes,” and I wouldn’t necessarily say that to every student.

Thomas maintains a desire to create opportunities for Students of Color and notes that these students might be uncomfortable in the predominantly White environment. Then he discusses how the Students of Color with whom he has worked have not been the “top students” in his classes. Yet he admits to still hiring these stu-

² Yosso (2005) developed the concept of Community Cultural Wealth to refer to the assets such as family background knowledge, language knowledge, aspirations, and resistance that students bring with them into educational contexts.

dents, as if he is making concessions for the students because of their racial background.

Faculty described not investing the same amount of time for Students of Color as they do for White students. Thomas recalled that he often did not engage in conversations about graduate school, nor did he seek to nurture the mentoring relationship with undergraduate Students of Color because they did not seem interested.

I don't think I was as close to them in terms of mentoring relationships. I think, I mean I have other connections that I'll talk about later I'm sure. But my sense is that those students weren't necessarily interested in going on to graduate education. And so . . . my role [is] that I usually see myself as a mentor and going beyond was less important . . . I mean often times I wasn't sure whether the student really was interested in research. I didn't feel that either of the students that I'm talking about, really intellectually got into the problem. Or continued the project beyond the semester . . . [they were] you know, satisfying a requirement.

Thomas admitted that he did not see some Students of Color as interested in pursuing graduate education, using a form of cultural racism to imply that Students of Color are less inclined to attend graduate school. This could be a coincidence that the particular undergraduate Students of Color with whom Thomas worked simply were not interested in attending graduate school. Or this could be evidence of some of the ways in which faculty may shape opportunities for students. For example, it is possible that the relationship with Students of Color shifted because Thomas did not view the students as graduate-school worthy. It is not clear at what point he decided that the students were not as engaged in research (whether it was at the beginning or after working with the students).

Several of the participants attributed Students' of Color lack of success to an absence of educational rigor. They claimed the education (both K–12 and undergraduate) students received “prior to coming to them” was not academically challenging. William, a biology professor at ASU, shared how he often had to bring Students of Color “up to speed” because they lacked the foundational knowledge to succeed in STEM disciplines. “I don't know whether it was that they were trained; but, there was a degree where we have to bring *them* (emphasis his) up to speed on some core knowledge.” He continued:

Now it may be the individuals. I don't know; but, there [have] been students. There's been other students that haven't had that problem but for the most part we've had some difficulties with the core knowledge and the base knowledge.

When asked which students he was referring to, William responded, “most of our African Americans.” While William maintained that it might not be all of the African American students, his reflection suggests that the Students of Color, particularly African American students, were academically underprepared.

When asked which undergraduate students struggle the most, Tracey responded, “It really sucks to say this, I hate saying this, but every time I get African American students in my class, they have the lowest scores.” Tracey maintains that African American students are typically less prepared.

While some professors implied that nearly all Students of Color were less academically prepared or successful, suggesting this was the fault of individual students, other faculty seemed to see structural disparities as part of the reason for the lack of preparation. Susan, from ASU, spoke of one graduate Student of Color in particular. She declared, “His only real challenge was that his background wasn't as strong as I would have liked.” She continued:

I mean he had one of these over-the-top amazing stories like the fact that he got to anywhere with all the challenges he's had is just like “My God!” But when he started grad school, his overall preparation was poor and I think it was because of the weakness of the schools he came from.

Susan seemed to recognize the structural disparities in education, highlighting the way in which this particular student had been poorly served in K–12 education. She later shared how she interacted with this student and others:

I'm just thinking back a couple of times where I just came down on him so hard and he sucked it up . . . but one thing about the students who get as far as us I mean we haven't had too much of a problem. I mean we have a decent number of diverse students but if they make it to grad school some of this cultural conflict is gone already. If they're going to come to graduate school they have already decided to assimilate into the main culture so that the cultural disconnect isn't there as much.

Susan used the term *assimilate* to describe her view of what Students of Color needed to do to be successful in graduate programs and in

their field/discipline. This is also a claim to how she expected students to adjust to the cultural and social norms in her department. While she initially did contemplate structural reasons why a student might come in differently prepared, she then lands on the need for students to be the same. Susan elaborates by stating the graduate students recruited to ASU recognize they cannot bring all of themselves to the institution:

I have been going to a lot of minority (sic) conferences and minority (sic) recruiting events in the past year and I've met some students where you could see where that cultural disconnect is. But we've not have had many, if any, matriculate here into our program.

She concluded:

It's not that they are not smart. It's that they didn't receive strong academic preparation and you see this with majority students as well as minority (sic) students. I think we all feel it more acutely with minority (sic) students just because if you bring somebody in you want them to succeed and it's a particularly high profile thing when a minority (sic) student doesn't succeed.

Susan points out some of the complexities of working with Students of Color from her experience as a faculty member. Then she raises the issue of it being "high profile" when Students of Color do not succeed, implying that much more attention is given to this than to White students' lack of success in their programs.

Colorblind analysis. The data about working with Students of Color suggests that oftentimes White faculty make concessions for students who they presume are not top students. While it did seem that the participants desired not to totalize their claims to all Students of Color, there are important cautionary notes that should be made when Students of Color are repeatedly referred to as academically underprepared and inferior. In particular, the White faculty did not discuss instances where Students of Color were prepared and academically superior to other students, and this omission begins to normalize the idea that White students are somehow more prepared and academically more suitable for STEM programs. Additionally, the data here indicates that for Students of Color to be successful in STEM programs they must assimilate. This is also a noteworthy claim because it suggests that students should not bring their backgrounds with them to campus (also see, Winkle-Wagner & McCoy, in press).

While Thomas initially raised concerns about how Students of Color might view him as a White man, he then claims that Students of Color are "not top students." Thomas naturalized (Bonilla-Silva, 2010) or normalized the idea that Students of Color might have lesser academic prowess. He then suggested that he is making concessions for academically inferior students. Perhaps unintentionally, Thomas presents Students of Color in a totalizing way, as if all Students of Color are academically underprepared, which aligns with the cultural racism frame (Bonilla-Silva, 2010) where groups of people are viewed in totalizing ways.

William infers that many Students of Color, particularly African American students, may be academically underprepared. In doing so, he might be trying to discuss his own experience but there is a danger that he may view all Students of Color as academically underprepared, and this could shape the way in which he engages with students. Tracey also aligns with William and Thomas' views, although she appears to have some anxiety in admitting it, expressing that she hated to say that African American students were academically underprepared.

Susan referred to students' "backgrounds" instead of their race/ethnicity, claiming that some students were less prepared academically. But, as she described the student, it was clear that this was a Student of Color. Employing Bonilla-Silva's framework, this is a way to naturalize that some students simply come from backgrounds that are less academically rigorous. She then goes on to explain how the Students of Color who were successful were able to "suck it up" and "assimilate." This connects with Bonilla-Silva's (2010) abstract liberalism frame where structural injustices (e.g., lacking primary and secondary education, poverty, etc.) are ignored in favor of hard work or a pulling yourself up by the proverbial bootstrap mentality. In doing this, the real and important structural inequities are ignored, a student who has been able to persevere is held up as the example, and all Students of Color are then expected to do the same regardless of any structural racism they might experience. Additionally, Susan claims that students should "assimilate" to the norms of the department and university. This is an important statement in how Students of Color are often expected to abandon their back-

grounds in order to be successful in higher education (also see Winkle-Wagner, 2009).

Discussion and Implications

As White faculty members reflected on their experiences mentoring Students of Color, it was apparent that they did not want to be perceived as biased or racist toward the Students of Color with whom they worked. The faculty members used colorblind language (Bonilla-Silva, 2010) to define their mentoring relationships with Students of Color. Some White faculty members kept referring to treating everyone the same. This seemingly race neutral, colorblind language may actually work to reinforce racial biases and stereotypes (Bonilla-Silva, 2010) because it disallowed the White faculty members from contemplating structural or institutional barriers that might influence Students' of Color experiences. For example, while outwardly stating a desire to not be perceived as racially biased, the White faculty members kept highlighting the Students' of Color lack of preparation, lack of commitment toward research, and low aspirations. While the faculty in this study may have been reporting their own experiences, previous research over the past few decades tells a different story where many Students of Color consistently report higher aspirations and commitment than do White students (Carter, 1999; Perna, 2000). Yet, the faculty members in this study discussed Students of Color in terms of how they as faculty members made allowances for "underprepared" Students of Color. Some White faculty members discussed letting "underprepared" students work in their lab because they identified as Students of Color. In so doing, the faculty members kept framing their mentoring relationships in culturally racist ways (Bonilla-Silva, 2010), meaning that they implicitly assumed that low aspirations and lack of academic preparation were normal characteristics of all or most Students of Color.

White faculty descriptions of their mentoring of Students of Color remained complex in this data. In some ways, it seemed as if White faculty members were attempting to assert themselves as advocates for the Students of Color. For example, faculty members described a need to bring Students of Color "up to speed," which indicates that all Students of Color must be lacking in ability or preparation. Because the

faculty members in these departments were mostly White, this could frame the White faculty members as the only people who can help. Perhaps these White faculty mentors are reflecting larger historical trends.

Prior research maintains a long history of White paternalism (i.e., White people know what is best for People of Color), where White people have demonstrated similar attitudes toward People of Color (Jackman, 1994). While this is likely not the intention of the faculty members, there was evidence of paternalism inherent in this data on mentoring where faculty acted or assumed a condescending, paternalistic attitude toward Students of Color. Jackman (1994), in an analysis of race, class, and gender dynamics in the United States, maintained that paternalism was often directly linked with inequalities whereby people in historical positions of dominance (White, male, upper class) acted in condescending ways that may have appeared helpful to those in disadvantaged positions. This paternalism can often work to maintain power structures (Jackman, 1994). In this case, the paternalism and condescending attitudes of faculty may work to reinforce stereotypes of Students of Color as underprepared, unlikely to be graduate school worthy, and not worth their time. In turn, Students of Color may pick up on these subtle (or not so subtle in some cases) microaggressions, and begin to see themselves as lacking academic abilities when they may simply need better mentoring. Furthermore, White faculty members' descriptions of their mentoring relationships implied that the relationships are not mutually beneficial; while successful, long-term mentoring relationships are evidenced to be mutually beneficial to both the mentor and protégé (Tillman, 2001).

Consistent with Bonilla-Silva's (2010) framework, White faculty members used the four colorblind frames (Abstract Liberalism, Naturalization, Cultural Racism, and Minimization of Racism) in tandem. They may or may not have been aware that they were using this kind of language or framing. Examples of this include Susan's discussion of the graduate student whose "background wasn't as strong as I would have liked." This could be considered Abstract Liberalism because she fails to consider that his perceived "weaknesses" are a result of social and educational inequities resulting from institutional and state-sponsored

practices (Bonilla-Silva, 2010). She later speaks about Students of Color who “have already decided to assimilate into the main culture . . .” She implies students must leave their culture behind and conform to majoritarian culture. Her position could be considered a form of Cultural Racism. Her argument is culturally based and asserts there is an appropriate culture (i.e., White/Eurocentric) that all students must conform to for success in education.

Cultural Racism was often linked closely with Minimization. For example, while the faculty often referred to a lack of academic preparation in Students of Color, they often did not consider the structural inequities the students might have experienced in K–12 education (Fiel, 2013; Hardie & Tyson, 2013; Ogbu, 1994; Posey-Maddox, 2014) and in higher education (Mullen, 2010; Winkle-Wagner, 2009). Ignoring structural inequities often linked White faculty to the concept of Minimization where inequalities were minimized and passed off as flaws with the students’ respective cultures. Others combined aspects of Abstract Liberalism and Naturalization to define their relationships with Students of Color. Faculty members discussed providing Students of Color the opportunity to work in their research labs but noted the students were not interested in research beyond the current semester. One ASU faculty member, in particular, claimed the Students of Color he worked with were not interested in pursuing graduate education and that he did not discuss graduate school opportunities with them. The participants unknowingly used the four colorblind frames in combination to describe how they engaged with their protégés.

An implication of this study is related to the ways in which White faculty members working with Students of Color have the opportunity to encourage and nurture Students’ of Color aspirations for graduate and professional education. The faculty members in this study appeared to be blind to the possibility their students have the potential and/or desire to pursue or continue in graduate education. The ways in which they described their mentoring of Students of Color implies they are dismissive of particular identities Students’ of Color possess; in this case, their racial, ethnic, and cultural identities. In some ways this seems to suggest the White faculty in this study employ a “one size fits all” (Feagin, Vera, & Imani, 1996) approach to

mentoring. This is evident when the faculty member discussed the need for Students of Color to “assimilate” and their “disconnect” with the department’s culture. These comments suggest Students of Color will be unsuccessful unless they leave part of themselves “at the school house door.” White faculty should not only be aware of their students’ multiple and complex intersecting identities; but they must work to develop an understanding and appreciation of those identities and foster an environment that is conducive to success for all students (McCoy & Winkle-Wagner, in press; Winkle-Wagner & McCoy, in press). This could be accomplished by faculty participating in institutionally sponsored programs focused on culturally sensitive mentoring practices or even the faculty being mentored by others within the university community.

Future Research

There are several opportunities to extend this research. First, future research needs to further examine how White faculty use colorblind language to describe their mentoring of Students of Color. For example, this data indicated that many of the faculty really struggled with trying not to be racially biased, while they simultaneously made biased statements. Delving deeper into how particular words such as “academic preparation” or “background” can become racially coded would help to uncover biases and the potential for less than welcoming environments in higher education institutions. Second, a larger sample might allow for deeper analysis of White faculty members’ perceptions of their mentoring relationships with Students of Color to ascertain if there are disciplinary differences in how White faculty view mentoring relationships with Students of Color. Considering the professoriate is graying and is overwhelmingly comprised of older White faculty members, future research should consider faculty members’ tenure status (tenured or tenure-track) and age when researching how White faculty members mentor Students of Color.

Third, future research should comparatively analyze White faculty members mentoring of Students of Color at PWIs and HBCUs. A larger sample might allow for greater analysis

of White faculty members mentoring of Students of Color based on these institution types. HBCUs graduate a large percentage of Blacks with advanced degrees in STEM (Perna et al., 2009) and are known for their warm and welcoming environments for Black students (Hirt et al., 2006). Findings from this study indicate the need to further examine the mentoring relationships present in HBCUs and how White faculty members mentoring of Students of Color affect the pipeline preparing and graduating Students of Color with STEM field degrees. Finally, additional research should be conducted on mentoring students with historically underrepresented identities. It would be useful to compare the mentoring practices of White faculty with the mentoring practices of faculty of color in terms of how they engage with Students of Color. We do not believe there is a singular method for mentoring students with historically underrepresented identities (in the case of this study, racial identities); however, future research should consider the ways faculty engage and mentor students based on students' multiple intersecting identities, such as race, gender, class, religion, and so forth. In particular, studies that present data from the perspectives of the students being mentored would be useful to compare to faculty perspectives like the ones presented here.

Conclusion

Faculty mentoring may be one of the most important factors in students' successful enrollment in and persistence through graduate and professional programs (Davidson & Foster-Johnson, 2001; Merriweather & Morgan, 2013; Tillman, 2001). For Students of Color, these mentoring relationships can help them to counter racial hostility and to find a place to belong in disciplines where there are few people who look like them (Griffin & Reddick, 2011; Hinton et al., 2009). Alternatively, faculty mentoring can actually work to reinforce racial inequities. The findings of this analysis suggest that White faculty members in the STEM disciplines may not have many opportunities to work closely with Students of Color. However, when they did mentor Students of Color, they attempted to be colorblind, treating students the same. Even while White faculty claimed to treat

Students of Color in the same way that they treated White students, they still asserted that Students of Color were academically underprepared. In STEM disciplines where there are few Students of Color, it is concerning that faculty view these students as unprepared for graduate and professional programs. There is a serious risk that in being colorblind, these White faculty members may actually be closing the doors of their disciplines to Students of Color. Whereas, if White faculty were made aware of these issues, there is potential for beginning to open the door, to grow their mentoring practices in a way that could reshape their own practices and their disciplines.

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(Appendix follows)

Appendix

Faculty Interview Protocol

Experiences With Teaching and Mentoring in STEM Disciplines

1. What do you think is necessary to be successful as a scholar in your discipline?

- a. What skills or knowledge does a person need to have?
- b. How can one gain those skills or knowledge?
- c. Is there a “typical scholar” in your discipline? If so, describe the “typical scholar.”

2. Now, we will discuss your work with students. Can you think of a student that you helped to prepare for graduate education in your discipline? This can be *any* student with whom you have worked.

- a. How did you work with this student to help him/her prepare?
- b. How did the student choose the institution?
- c. Where is the student now if you know? What is she/he doing?

3. Can you think of a time when you felt really proud about the way you mentored a student? This can be *any* student with whom you have worked during your times as a faculty member.

- a. Describe this experience.
 - i. What do you think made this relationship so special?
 - ii. What made you feel proud about the way you mentored the student?
 - iii. Is this a typical interaction with students or something that only comes along once in a great while?
- b. Was this student from an underrepresented group?
 - i. If so, did this change the interaction?
 - ii. If not, do you think the mentoring relationship would have changed had the student been from an underrepresented group?

4. Have you worked with a student on a research project at the undergraduate or graduate levels? Again, this can be *any* student.

- a. If so, can you describe one of the times that you had a student conducting research with you?
 - i. What made you proud, if anything?
 1. What did the student do?
 2. How did you work with the student to help her/him learn the research process?
 - ii. Were there things you wished had gone better in this process of working together?
 - iii. Was the student an undergraduate or a graduate student?
 1. *If a graduate student:*
 - a. How might this interaction have changed if the student had been an undergraduate student?
 2. *If an undergraduate student:*
 - a. How might this interaction have changed if the student had been a graduate student?
 - iv. Was the student from an underrepresented group?
 1. If so, were there challenges to working with that student?
 2. If not, would your interaction with the student have changed at all if the student had been from an underrepresented group?

5. Can you describe a time when you have worked with a Student of Color?

- a. How did this interaction compare to the other interactions you typically have with students?
- b. Was there anything that was particularly easy or difficult about this relationship?
- c. Was there anything in particular that you did to support the student?
 - i. Was this different than what you would normally do with students?
 - ii. OR, was this very similar to what you normally do with students?

(Appendix continues)

Perceptions of Department and the Institution

6. How would you describe the university's commitment to diversity?

- a. Are student and faculty diversity treated differently at the university level?
- b. What diversity initiatives are you aware of on campus if any?
 - i. If there are no initiatives that you know of, what might you suggest?
- c. Do you have suggestions for ways that Students of Color could be recruited to the university? If so, please describe these.
- d. Do you have suggestions for ways that Students of Color could be supported so that they finish their degree programs once they get here?

7. *If question 6 does not work well, ask. In what ways does the university create an inclusive environment for underrepresented students? (This question is for ASU participants only.)*

8. What is your college and/or department doing related to diversity?

- a. How do diversity efforts in your department and/or college relate to those larger campus initiatives?
- b. How do you think that your department or college compares to other departments on campus?
- c. Does diversity of students or faculty come up in faculty meetings?
- d. Do you have suggestions for ways that the recruitment of Students of Color could be better supported by the college or department?
- e. Once students are enrolled, are there ways that Students of Color could be better supported so that they finish their degree programs?

9. Please describe a student who excelled in their degree program. This can be *any* student.

- i. What did the student do to be so successful?

ii. What role did the department play?

iii. What role did faculty members play in the student's success?

iv. Did the university play a role? If so, in what ways?

v. Was this student from an underrepresented group?

10. Where is that student now, if you know? Please describe a student who had a particularly difficult time making it through their degree program or who even left their degree program. Again, this can be *any* student.

i. What made this so difficult for the student?

ii. What could the student have done differently?

iii. Are there ways the institution or department could have been more helpful to the student?

iv. Are there ways that the faculty could have supported the student better?

v. Was this student from an underrepresented group?

11. Do you know of anything your particular discipline is doing on the national level to foster more diversity in doctoral programs?

a. If there isn't anything that you know of, do you have suggestions for ways that diversity could be increased in your discipline?

i. OR, if this just does not seem to be an issue for your discipline, how do you think this compares to other disciplines?

1. Why might your discipline be handling diversity efforts so well?

12. Is there anything else that you would like to share?

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