ABSTRACT

THOMAS-WINFIELD, MICHELLE ARIANNA. The Mentoring Experiences of Black STEM Professionals: Learning the Unwritten Rules of a Racialized Game. (Under the direction of Dr. Michael Schwalbe).

Previous literature suggests that mentors play an important role in professionals’ career development. Mentors are responsible for teaching professionals about organizational norms and features, and serve as gatekeepers to their career mobility. Black professionals navigating corporate America must learn how to vie for positions in competitive environments, while also engaging in behaviors that accompany working in predominantly white spaces (e.g., emotion work, crafting an acceptable identity). Despite many organizational barriers, mentors have been identified as a key contributing factor to people of color’s professional development and socialization. Using sixteen in-depth interviews, I examine the mentoring experiences of Black STEM professionals, focusing on how mentors have aided in their professional and career development. I find that the advice Black professionals receive from their mentors is often racialized, inflected by a “racial frame” that makes the unwritten rules of getting ahead in corporate America visible. More so, Black professionals engage in racial framing when making sense of their own workplace experiences, suggesting that Black professionals can learn the unwritten rules on their own. In other words, Black mentors support Black STEM professionals’ professional socialization by teaching them that getting ahead in corporate America is a racialized game that entails different rules for whites and Blacks. This study contributes to the literature an understanding of how racial framing serves as a cognitive device (or lens) that brings to light matters that can harm Black professionals’ chances at climbing the corporate ladder.
The Mentoring Experiences of Black STEM Professionals: Learning the Unwritten Rules of a Racialized Game

by
Arianna Michelle Thomas-Winfield

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APPROVED BY:

Dr. Michael Schwalbe
Committee Chair

Dr. Kimberly Ebert

Dr. Martha Crowley
DEDICATION

This research is dedicated to Black professionals, and all professionals of color, who have found themselves navigating the complex environments of corporate America.
BIOGRAPHY

Arianna was born in Philadelphia, PA and raised in the sunshine state. In 2013, she earned her Bachelor of Arts in Sociology and Psychology (summa cum laude) from the University of North Florida in Jacksonville, FL. Since the fall of 2014, she has been a graduate student in sociology at North Carolina State University. Her current research interests include: inequality (race, class, and gender), social psychology, queer studies, the reproduction of inequality, and qualitative methods.
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INTRODUCTION

The “leaky pipeline” is a phrase commonly used to refer to the loss of women and minority group members from STEM (science, technology, engineering, mathematics) careers (Resmini 2016; Blickenstaff 2005). While some researchers report that there is a shortage in STEM workers, others argue that there is a shortage in STEM workers depending on who is being talked about (e.g., women and minorities) (Carnevale, Smith, and Melton 2011). The debate about whether or not STEM workers are undersupplied or oversupplied can be resolved by the fact that large numbers of people with STEM skills or degrees are diverted away from STEM careers during college and later in their careers (Carnevale et al. 2011). Women, for example, are less likely than men to be found in STEM jobs or fields of study. Scholars suggest that a number of factors are responsible for the diversion of women from STEM, including: classroom climate, stereotypes, gender bias, discrimination, the lack of female STEM role models in postsecondary institutions, and the climate of science and engineering departments in postsecondary institutions (Hill, Corbett, and Rose 2010).

Furthermore, Black Americans are significantly behind their white counterparts in STEM jobs and fields of study. In 2016, Black men and women were underrepresented in computer science and engineering programs and jobs, relative to their share of the population (Bui and Miller 2016). Researchers and advocates argue that the low rate of Blacks in STEM, especially in college, is due to a lack of mentors, lack of peer support, discrimination, and unwelcoming classroom climates (Sasso 2008). The concept of the leaky pipeline can also be applied to race, as the pipeline “leaks” individuals of color, as well as women, at various stages in colleges and universities, and in the workplace. In understanding why the leaky pipeline phenomenon is happening, scholars and educators can better address and prevent the diversion of women and
minorities from STEM careers. Furthermore, by investigating the measures or processes by which women and minorities exit STEM fields, researchers can better propose strategies for maintaining such groups within the pipeline.

Though there is evidence to suggest that Black Americans are choosing to leave STEM majors and careers for a number of reasons (Beasley 2011), research suggests that having positive relationships with mentors can lead to the success of Blacks in STEM fields. According to previous literature on the impact of race on developmental relationships within institutions of work, race—a master category of social organization where social structure and cultural representation meet (Omi and Winant 2014)—can limit people’s access to mentors and thereby reduce their chances of achieving upward mobility (Blake-Beard, Murrell, and Thomas 2006).

Furthermore, people of color are likely to benefit from relationships with same-race mentors, or mentors of color. For example, positive mentoring experiences between African, Latino and Native American students and adequate mentors of color can provide such students with intellectual (i.e., academic) and psychosocial support (Ortiz-Walters and Gibson 2005).

While previous literature establishes mentoring as a key factor in retaining Blacks in STEM fields, and assisting in people of color’s advancement within the workplace, such literature inadequately addresses the process of professional socialization that takes place between professionals of color and their mentors. That is, what lacks examination is how mentors aid in the intellectual and career development of people of color. In this study, I aim to investigate the process of professional socialization among Black professionals and their mentors. I examine the mentoring experiences of Black STEM professionals, paying particular attention to how Black mentors assist them in their professional socialization and development in corporate organizations. I identify and evaluate the racialized advice that is transmitted between
Black STEM professionals and their mentors. I find that Black mentors support Black STEM professionals’ professional socialization by teaching them that getting ahead in corporate America is a racialized game that entails different rules for whites and Blacks.

Because there is a different set of organizational rules that Blacks need to adhere to in order to be successful in corporate settings, mentors aid in their professional socialization by helping them understand the racial politics and procedures of white organizational settings, which are key to their ability to “get ahead” (i.e., to achieve upward mobility). My study contributes to the literature a better understanding of the role that mentors play in the lives of Black professionals. Black Mentors play a critical role in how Blacks learn how to present themselves in white spaces, understand the politics of corporate environments, and adopt strategies for getting ahead in such environments. My study offers general insight into the factors that may contribute to the removal of Black Americans from the pipeline, and more so, how they can be kept in. More importantly, this study also suggests that the measures that Black STEM professionals have to go to in order to maintain a STEM career can ultimately reproduce inequalities.

**LITERATURE REVIEW**

In this study, I examine the mentoring experiences of Black STEM professionals, focusing on how mentors have aided in their professional and career development. In this section, I review literature on the important role that mentors play in the professional socialization of workers, and in the upward mobility of workers within organizations. Secondly, I discuss the complex work environments of corporate America, and the plight of professionals of color who work in predominantly white work spaces. Next, I evaluate research on the concepts
of “rules” and framing. Finally, I explain the significance of studying Black STEM professionals in particular.

**Mentoring and Organizations**

Mentoring is defined as an interpersonal exchange between experienced (i.e., senior) organizational members and less experienced (i.e., junior) organizational members in which experienced members help young professionals develop technical, interpersonal, and political skills (Ghosh and Reio Jr. 2013; Ostroff and Kozlowski 1993; Scandura 1992), providing them with support, direction, and feedback regarding their career and personal development (Kram 1983; Dalton, Thompson, and Pierce 1977). Scholars suggest that the socialization process of organizational members (i.e., the process by which members of organizations learn about the features of their organizational settings) involves their interactions with mentors, supervisors, and peers (Baranik, Roling, and Eby 2010; Dalton et al. 1977). Mentors, in particular, play an important role in the career development process of professionals, especially contributing to the socialization experiences of newcomers within an organization. Professionals with mentors learn more about organizational issues and practices compared to non-mentored newcomers within organizational settings (Ostroff and Kozlowski 1993). Not only are mentors important for professional career development, they also useful for professionals’ career mobility (Scandura 1992).

Given the vocational and psycho-social support mentors provide their protégés within organizational settings, scholars have been particularly interested in how people of color experience mentoring. While mentoring is a powerful tool that can assist people of color in advancing through the ranks within organizations (Blake-Beard et al. 2006; McGuire 1999), people of color face particular challenges when it comes to establishing mentoring relationships.
Often times, people of color do not have access to mentors of the same-race within their organization (Murrell, Blake-Beard, Porter, and Perkins-Williams, 2008). Furthermore, people of color have a difficult time forming mentoring relationships within organizations because white males tend to occupy positions of power and status (Lancaster 1997). To find same-race mentors, people of color have to search across levels and positions within their organization, or seek such relationships outside of their own organization (Thomas 1990). More importantly, if people of color do succeed in finding mentors within the workplace, they often have to overcome critical barriers within the relationship, including race, gender, job level, and organizational culture (Blake-Beard et al. 2006).

Because mentors play an important part in teaching professionals about the features of organizational settings (i.e., task demands, role attributes, work group norms, and organizational climate and culture) (Chao, O’Leary-Kelly, Wolf, Klein, and Gardner 1994; Ostroff and Kozlowski 1993), having mentors within a workplace setting is beneficial for professionals. While professionals of color are at a disadvantage in that they face multiple barriers within workplace organizations that can prevent them from establishing useful mentoring relationships, they too benefit from the assistance of workplace mentors. In helping protégés to “learn the ropes” of a given job or workplace setting, mentors play a significant role in people’s career development and professional (or career) socialization.

*Professional Socialization and Getting Ahead in Corporate Environments*

Professional socialization is the process by which individuals acquire and internalize the values, norms, and behaviors of a profession (Page 2004; Lurie 1981). Agents of professional socialization are concerned with transmitting a profession’s specialized knowledge and skills to individuals, encouraging the development of a professional self among those practicing the
profession (Carroll 1971). According to Waugman and Lohrer (2000), professional socialization includes taking on an organization’s goals and mission, learning the language and technology of a profession, and forming a professional identity. For professionals working in corporate America, understanding the politics and procedures of organizational settings is important for “getting ahead” (i.e., achieving upward mobility in their careers). For professionals of color—Blacks in particular—in predominantly white workplaces, access to mentors and white networks is limited. Restricted accessibility to mentors (e.g., few mentors of color) and exclusion from white networks can leave Black professionals at a disadvantage in that both are critical for career advancement and undergoing professional socialization.

Corporations are competitive arenas in which workers vie for positions and seek upward mobility. In his analysis of the occupational rules and ethics of corporate managers, Jackall (1988) argues that constant political struggles are commonplace within corporate environments as: (1) subordinates must learn to let their bosses take credit for their work; (2) workers must deal with being “let go” during big purges or shake-ups in which new bosses surround themselves with people they know and trust; and (3) superiors (e.g., managers) strategically manipulate subordinates’ autonomy so that when mistakes are made, the subordinate—not the superior—is seen as being at fault. Navigating a corporate environment (or job) is like playing a competitive game, one that can range from simple tests of skill to aggressive battling for leadership positions. According to Maccoby (1976), a “gamesman” (i.e., a corporate leader) develops his or her career in terms of options and possibilities, as if these were moves in a game. The gamesman fits the leadership needs of the organization based on competition, innovation, interdependent teams, and fast-moving flexibility. The gamesman plays by the rules of the organization and can accept new rules as long as they are clearly defined. To achieve
advancement, corporate workers must be “gamesmen,” identifying and abiding by the rules of an organization in order to garner opportunities and out-compete others.

Whether or not workers achieve upward mobility within corporate jobs can be influenced by multiple factors. According to Jackall (1988), advancement within a corporation is dependent on one’s relationship with a patron (i.e., a mentor, a sponsor). A patron informs his protégé of political developments in the corporation, helps arrange moves if a protégé’s upward progress is blocked by a particular job or boss, applauds his protégé’s suggestions and presentations, and introduces his protégé to the right people (at the right times). In alignment with previous literature on organizational advancement, mentors are a vital resource to workers, providing them with professional support and guidance within the workplace. Furthermore, there are other features of the workplace that can influence the mobility of corporate workers.

In professional settings, networks play a key role in the hiring, promotion, and occupational mobility of workers. However, social networks can be formed and maintained in racialized ways that disadvantage workers of color and advantage white workers. Differential access to social networks, and differences in how these networks are used in the workplace, can result in racial minority workers being sorted into low-status, low-wage jobs and excluded from consideration for positions (Kirschenman and Neckerman 1991). In the case of Black male professionals, there is evidence to suggest that both race and gender affect how they construct networks with their white male counterparts. While Black male professionals claim that their gender provides them access to white male networks relatively easily compared to female co-workers, they find these networks lacking in comparison to white peers who have ties that are more likely to facilitate advancement and occupational rewards (Wingfield 2014).
In her study of Black mobility in corporations, Collins (1997) distinguishes between the types of jobs Blacks hold in white corporations. A “racialized” (i.e., support) job involves an actual or symbolic connection to Black issues, Black communities, or civil rights agencies, while “mainstream” (i.e., line) jobs lack racial implications. She found that Black executives moving into and through racialized management positions became locked out of mainstream management jobs. The devaluation of their abilities restricts their progress in corporate environments. More so, racialized jobs underdeveloped the skills that corporations value, and in turn, marginalized Blacks occupying such jobs. Therefore, the link between opportunity structure and human capital is also among the many factors shaping Black advancement in predominantly white corporations.

Black Professionals in White Work Spaces

Blacks employed in predominantly white workplaces engage in a number of behaviors in order to successfully navigate such environments. Professionals of color engage in self-presentation, emotion work—referring broadly to the act of evoking and suppressing feeling in oneself (Hochschild 1979, 1983), and other tasks that serve to alleviate difficulties and challenges associated with being a minority in predominantly white workplaces. According to Wingfield and Alston (2014), the positions and tasks that workers of color perform at work serve to reinforce the racial status quo within predominantly white work settings. They argue that workers of color in white work settings perform “racial tasks” at three levels: ideological (tasks that maintain an organizational culture that is normatively white and middle-class), interactional (involves routine self-presentation, emotion work, and behaviors necessary for upholding a racialized power dynamic in predominantly white organizations), and physical (a type of labor that includes physical, nonverbal communication and spatial organization) (Wingfield and
The ideological, interactional, and physical labor that minorities perform in mostly white work settings can maintain the racial hierarchy of predominantly white organizations. Black professionals are outsiders within predominantly white workplaces, especially corporate environments. According to Carbado and Gulati (2000), outsiders in work settings perform workplace identities, engaging in comforting acts to make insiders comfortable with their outsider status. Comforting acts include distancing oneself from the negative stereotypes associated with one’s outsider status. As a result, insiders are assured that the outsider is like one of them—more of an insider. As a consequence of performing this workplace identity, outsiders do extra work in order to make themselves acceptable in the workplace. White corporate environments are white spaces, institutional spaces that uphold white, middle-class culture and values, and are predominantly occupied by white people (Evans and Moore 2015). As a result of this, people of color become tokens—of proportional rarity—within these spaces.

According to Kanter (1977), tokens working in corporate environments face special situations. The proportional rarity of tokens is associated with three perceptual tendencies: visibility, contrast, and assimilation. Tokens receive attention—they have a higher visibility than the dominant group(s) looked at alone, their presence makes dominants more aware of their commonalities and their differences from the token, and furthermore, the characteristics of a token tend to be distorted to fit generalizations (or stereotypes) of a person’s social type (Kanter 1977). While the heightened visibility of tokens is often associated with negative experiences, there can be positive aspects of tokenism. For Black professional men, heightened visibility can facilitate social support from Black workers who occupy lower-status positions within organizations, and from Blacks in the general public, as well as the potential for upward mobility based on positive recognition from peers (Wingfield and Wingfield 2014).
Kanter’s (1977) theory of tokenism suggests that tokens should experience high levels of work stress. In a study of the effects of tokenism on Black elites, Jackson, Thoits, and Taylor (1995) found that low proportional representation by race (and gender) significantly increased symptoms of depression and anxiety among elites. Furthermore, they found that the higher the percentage of Blacks in the work setting, the fewer problems elites reported in regard to the salience of their Black identity (e.g., loss of Black identity, a sense of isolation, and having to demonstrate more competence than their peers) (Jackson et al. 1995). Furthermore, Blacks’ experiences with tokenism in the professional workplace leads them to engage in emotional performances. Feeling rules in professional workplaces are racialized in ways that deny Black professionals the same range of emotional expression that is accessible to their white counterparts (Wingfield 2010).

Rules in Organizational Settings

Rules play an important part in social interaction, in that people learn to guide their behavior and interpret the behavior of others in terms of a “prelearned package of rules” (known as social rules) (Handel 1982). By observing conduct, social actors can infer the rules being followed, and from that, conclude what “game” is being played. Generally speaking, when it comes to games of play or sport, rules are explicit, the stakes are low, and winning and losing are clearly defined. The game of getting ahead in corporate America, however, is much more complicated and the stakes are high. As will be demonstrated with Black STEM professionals and their mentors, the rules for advancing within organizations (or in one’s career) are not explicit within corporate America—at least not for Blacks. Furthermore, whereas winning in corporate America may involve climbing the corporate ladder, losing may be more complex, ranging from career stagnation to job loss and/or departing from the STEM field completely.
From a dramaturgical perspective, social actors draw upon and use rules to make interactions predictable, orderly, and meaningful (Schwalbe and Shay 2014). In the workplace, rules (e.g., display rules) can guide employees’ interactions with customers, helping individuals to cooperate effectively with others, and to enact proper behavior in front of audiences (Ho, Lien, and Ay 2013). In this study, I use the concept of “rules” to refer to a set of tacit understandings about how Blacks should behave in the workplace in order to be seen as competent employees, deserving of advancement. The rules I identify and discuss govern the interactions Black professionals have with whites within corporate environments, helping to make those interactions smooth and foreseeable. I derive rules from both the personal experiences of Black STEM professionals, and the advice they received from their mentors. In sum, these rules operate as implicit guidelines that surround the conduct of Black professionals within workplace organizations.

As a dominant racial group, whites are both the rule makers and referees in predominantly white organizations. This is particularly important for Black professionals because, as outsiders, they are usually under surveillance by whites (i.e., insiders). Whites occupy a position where they can observe Black workers (or “players”) intensely to make sure organizational rules are adhered to, and furthermore, whites possess the power to amend those rules as they see fit. By acting in accordance with the rules applicable to them within the workplace, Black professionals are able to interact smoothly with whites. For Black professionals (and other professionals of color), interacting successfully with whites constitutes taking on a workplace identity that consists of engaging in (i.e., performing) acts that allow whites to become comfortable with their outsider status (Carbado and Gulati 2000). Through the adoption and use of workplace rules—those that apply to everyone and those that apply to
Blacks alone—Black professionals are able to interact with whites in ways that are predictable, meaningful, and expressive. Rules are thus not only constraining but also enabling (Giddens 1984).

Administrative rules within organizations are “written rules,” agency regulations that expand on company policy and requirements. All professionals within an organization attend to (or play by) these particular sets of rules. However, as this study demonstrates, organizational settings include unwritten rules. These rules are not formally voiced or written down, and usually exist as “tacit knowledge” (Polyani 1958). While the written rules of organizations lend themselves to sociological study because they can be located on company books and manuals, the unwritten rules of organizations can be harder to identify, yet terribly consequential. Just as formal procedures and regulations have implications for workers’ job success, the unwritten rules of a workplace have an important impact on people’s job satisfaction, advancement opportunities, and overall career trajectory. While organizations’ unwritten rules may be hard to see, this study explores how the use of racial frames (or schema) can make these rules visible, bringing to light how white and Black professionals operate according to a different set of informal rules within corporate organizations.

_Framing_

Frames are shared perspectives that give meaning to events or conditions, and serve to organize collective action (Amenta, Caren, Chiarello, and Su 2010; McVeigh, Myers, and Sikkink 2004; Benford and Snow 2000; Ferree and Merrill 2000). Although both frames and ideologies are conceptual schemes through which experiences are interpreted, frames are usually seen as specific to a group or social movement. Multiple frames can also be compatible with a dominant ideology. Frames are not worldviews but a way of looking at more delimited situations
and problems (Akhavan-Majid and Ramaprasad 1998; Becker 1984). Framing includes prioritizing particular facts and events over others, thereby promoting particular interpretations and plans of action.

The concept of framing can be used to examine the shared perspectives not only of social movement participants, but also of members of racial groups. While framing often draws upon commonly held stereotypes (Cabrera 2014; Feagin 2010; Feagin and Cobas 2009; Pedriana 2006), “racial framing,” in particular, reinforces commonly held racial stereotypes among whites and people of color. According to Feagin (2010), a racial frame is broad, widely held, and encompasses racialized knowledge and understandings that shape human behavior in ways that are often involuntary or unconscious. For example, a white racial frame (discussed in more detail below) is a generic meaning system that is propagated and held by many white Americans, and to some extent, accepted by many people of color (Wingfield and Feagin 2012; Feagin 2010; Moore and Bell 2010). As demonstrated by this study, racial framing influences people’s actions and understandings about others. Furthermore, racial framing shapes people’s racial cognition, and has implications for how people of different races interact with one another. In this study, I examine how not only whites, but people of color—in particular Black STEM professionals—also engage in racial framing (i.e., the racial framing of whites).

**Why Study Black STEM Professionals?**

Black STEM professionals are a particularly interesting population to study. Students of color, especially Black Americans, are underrepresented in STEM disciplines. Students of color are more likely than whites to leave or “opt out” of a STEM major during the course of their college careers (Beasley and Fischer 2012; Beasley 2011). Some researchers have looked at the impact of “stereotype threat”—the anxiety caused by the expectation of being judged based on a
negative group stereotype (Steele 1997)—to help explain the absence of minorities from science, math, and engineering fields. The low number of Black students studying and obtaining degrees in STEM fields, suggests that the number of Black professionals working in STEM fields is also low. Blacks are underrepresented within STEM disciplines in college and universities (Palmer, Maramba, and Dancy II 2011), and also within computer science, engineering, and other technical jobs (Bui and Miller 2016). According to Bui and Miller (2016), technical degrees are not putting more Blacks in technical jobs because technology companies employ few qualified Black workers. Given what scholars know about the low numbers of Blacks studying and engaging in STEM work, Black STEM professionals are a particularly important group to study because of their ability to: (1) transcend racial barriers and navigate predominantly white spaces (e.g., universities and workplaces); and (2) obtain successful careers in STEM fields.

As is true for people in other groups and occupations, there is evidence to suggest that mentoring can play an important role in the development of students of color in STEM fields (Griffin, Perez, Holmes, and Mayo 2010). Positive mentoring experiences between Black STEM students and mentors can provide such students with intellectual (i.e., academic) and social support. More so, there may be particular advantages to Blacks having mentors of the same-race. In studies examining the effects of actual and perceived similarity between mentor and protégé, scholars have found that when protégés perceive themselves to be similar to their mentors—in terms of race and gender—they are more likely to like their mentors, to be satisfied with their mentoring relationships, and to have more contact with their mentors (Ortiz-Walters and Gibson 2005; Ensher and Murphy 1997).

Some scholars suggest that the race and gender of the mentor matters for how STEM students of color experience their mentoring relationship. Black-Beard and colleagues (2011)
argue that having a mentor of one’s own race is perceived to be particularly important by students of color. Students who have a mentor of their own race have reported receiving more academic help than those with a different race mentor (Black-Beard et al. 2011). The positive benefits that mentors can bring to Black STEM students suggests that similar benefits may be found among Black STEM professionals and their mentors.

While previous literature attests to the significant role mentors have in the lives of racial/ethnic minorities, less is known about what actually goes on between mentors and their mentees during the mentoring relationship. For instance, what kind of professional advice do mentors of color give their mentees of color? Furthermore, is this advice different in any way from the other kinds of advice given within mentoring relationships? There is a gap in the literature that leaves several things unanswered about the mentor-mentee relationship, including whether there are racial messages (or knowledge) transmitted between mentors and mentees of color. What needs further exploration are the lessons that mentors teach to their mentees, and how this learned knowledge goes on to shapes individuals’ professional and career development, and personal perceptions of the workplace. While scholars have examined the extent to which mentors of color help to promote economic success among people of color, more needs to be done to better account for the things mentors do and say that lead people of color to achieve economic mobility.

Similar to other Black professionals occupying predominantly white workplace environments, Black STEM professionals navigating corporate America must learn how to vie for positions in competitive environments, while also engaging in necessary behaviors that accompany working in such white spaces (e.g., emotion work, crafting an acceptable identity). Furthermore, mentors have been identified as a key contributing factor to people of color’s
professional development and socialization. Despite the challenges associated with securing mentors within workplace organizations (e.g., in terms of access), those that do succeed in finding mentors experience positive benefits.

In this study, I examine the mentoring experiences of Black STEM professionals, focusing on how mentors aid in their professional and career development. I find that mentors—Black mentors in particular—aid in Black STEM professionals’ professional socialization by informing them that getting ahead in corporate America is a racialized game that entails different rules for whites and Blacks. Through the use of racially framed advice, mentors teach Black STEM professionals how to get ahead in the corporate world, including how the game of getting ahead is played and the rules that Black players must follow.

**METHODS**

*Recruitment and Data Collection*

I conducted 16 in-depth, semi-structured interviews with Black professionals in a medium-sized metropolitan area in the southeastern United States. Participants were recruited from a local chapter of a national support organization for Black engineers. The organization consists of Black professionals working in science, engineering, technical, and mathematics fields. The purpose of the organization is to help its members succeed by offering them ongoing career development training, opportunities to network with other professionals, and support to alleviate difficulties and developments that affect the careers of Blacks and other minorities in STEM professions.

After receiving permission from the president of the local chapter, I attended a dinner meeting in January of 2016 to recruit interviewees. At this event, I introduced myself and my study to executive board members. During the following month, I attended a chapter meeting to
speak about my study and recruit more participants. Courtesy of the chapter president, my study was mentioned in the monthly newsletter and on the organization’s Facebook page. While some of my participants were recruited through the organization, others were recruited through snowball sampling. In the event that snowball sampling was used, participants identified professionals who might take interest in my study, and shared my contact information with them. Potential recruits then contacted me via e-mail.

To qualify for this study, participants had to be (1) a Black STEM professional in the workforce; (2) at least 18 years of age; and (3) have had at least one mentor (informal or formal) in their lives. Upon initial correspondence, recruits were screened and asked if they have had a mentor (or mentors) in their life. Black STEM professionals who had at least one mentor, in the past or currently, were interviewed. Interviews were conducted during a 3-month period between May 2016 and August 2016. Interviews generally lasted between forty-five minutes to a little over an hour. Participants were asked about their professions, their experiences in the workplace, and their conversations with mentors, especially those in which race and racial matters were a topic of concern (see Appendix for interview guide). Strict anonymity of all data was upheld. Participants were assigned a number and a pseudonym (e.g., 10 Emmett, 11 Monica). All interviews were conducted in a private setting, either in an office conference room or within participants’ homes. Verbal consent was given by all interviewees. Interviews were recorded and transcribed verbatim.

Sample

Sixteen Black STEM professionals (8 men, 8 women) participated in this study. Participants were employed as engineers, information technology specialists, and network security analysts. Fourteen worked for large corporations. Two worked for the federal
government. While almost all of the participants worked in predominantly white environments, one worked in a predominantly Black environment. The age of participants ranged from 22 to 52 years old, with half of the participants being in their 30s. All of the participants had at least some college experience; one had an associate’s degree; seven had a bachelor’s degree; five had a master’s degree. Participants’ annual incomes ranged from $70,000 to over $100,000, with three making below $70,000 a year (see Table 1 for more information on sample demographics).

To establish participants’ social class background, information was collected on participants’ parents, including the educational attainment and primary occupation of their parents. The following criteria were used to classify participants into three social class backgrounds: (1) working class if both parents’ primary occupation was blue-collar or clerical/secretarial; (2) middle class if at least one parent had some college, an associate’s degree, or a bachelor’s and whose primary occupation was independent professional, independent business operator, professional/technical worker in a company owned by someone else, or manager in government or private company; and (3) upper middle class if at least one parent had a graduate degree and whose primary occupation was independent professional, professional/technical worker in a company owned by someone else, or manager in government or in a private company.

Analysis

Each interview was recorded with a digital voice recorder and then transcribed verbatim. Using a grounded theory approach to my analysis, I engaged in both open (i.e., initial) and focused coding to look for themes and patterns within the data. Following fundamental tenets of grounded theory (Charmaz 2008, 2014), I simultaneously collected and analyzed data so that the two processes could inform one another. To evaluate potential concepts and paths of analysis, I
wrote memos throughout the data analysis process. The memo writing allowed me to inductively identify and explore patterns in Black STEM professionals’ experiences with mentors.

In their interviews, Black STEM professionals were encouraged to discuss both formal and informal mentors, and were allowed to speak about more than one mentor. Formal mentors included those that: (1) were assigned within the workplace setting as part of a company’s organizational set-up or policy, and (2) were graduate school advisors. Informal mentors however, consisted of professional peers, co-workers, university staff, community leaders, and others who provided career-relevant advice. A large number of participants discussed informal mentors. While an overwhelming number of participants had informal mentors in the workplace, including managers, co-workers, and peers, a few participants mentioned mentors outside of the workplace (e.g., middle/high school teachers, community figures/leaders). Most of the participants had Black mentors who were also STEM professionals. A few participants discussed having both white and minority mentors, and two participants discussed having only white mentors.

**Reflexivity**

As a Black woman studying Black professionals, it is important that I reflect on the ways in which my positionality shaped the data collection and analysis process. For one, my identity as a Black person influenced my ability to recruit and gain access to Black STEM professionals. My status as a Black graduate student also aided in this process. Black STEM professionals expressed various degrees of support for me and committed themselves to “giving back” (i.e., helping me out) by participating in my study and finding others to do the same. Secondly, my Black identity influenced the kind of data I was able to collect from participants. In the data, participants engage in the racial framing of whites, in talking about their own experiences as well
as their mentors’. Because such “racial frames” had the potential to be offensive to whites, or to reveal participants’ personal biases toward whites, I gather that participants were able to be more open (or comfortable) with me because I was a Black woman. Lastly, during the analysis process, I worked hard to take a step back from my data in order to be reflective and to ensure neutrality.
Table 1: Sample Characteristics

<table>
<thead>
<tr>
<th>Respondent Name</th>
<th>Gender</th>
<th>Age</th>
<th>Educational Attainment</th>
<th>Occupation</th>
<th>Annual Income</th>
<th>Social Class Background*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Darius</td>
<td>Man</td>
<td>38</td>
<td>Some College</td>
<td>Network Engineer</td>
<td>$60,000-$69,999</td>
<td>Middle class</td>
</tr>
<tr>
<td>2. Yvette</td>
<td>Woman</td>
<td>34</td>
<td>Master’s Degree</td>
<td>Civil/Technical Engineer</td>
<td>$90,000-$99,999</td>
<td>Upper middle class</td>
</tr>
<tr>
<td>3. Kevin</td>
<td>Man</td>
<td>30</td>
<td>Master’s Degree</td>
<td>Computer Science/Software Engineer</td>
<td>$80,000-$89,999</td>
<td>Upper middle class</td>
</tr>
<tr>
<td>4. Malcolm</td>
<td>Man</td>
<td>48</td>
<td>Associate’s Degree</td>
<td>Network Engineer</td>
<td>$70,000-$79,999</td>
<td>Working class</td>
</tr>
<tr>
<td>5. Edward</td>
<td>Man</td>
<td>37</td>
<td>Master’s Degree</td>
<td>Software Engineer</td>
<td>$90,000-$99,999</td>
<td>Upper middle class</td>
</tr>
<tr>
<td>6. Charmel</td>
<td>Woman</td>
<td>27</td>
<td>Bachelor’s Degree</td>
<td>Electrical Engineer</td>
<td>$90,000-$99,999</td>
<td>Upper middle class</td>
</tr>
<tr>
<td>7. Breanna</td>
<td>Woman</td>
<td>30</td>
<td>Bachelor’s Degree</td>
<td>Chemical Engineer</td>
<td>$90,000-$99,999</td>
<td>Upper middle class</td>
</tr>
<tr>
<td>8. Trent</td>
<td>Man</td>
<td>45</td>
<td>Bachelor’s Degree</td>
<td>Information Technology Specialist</td>
<td>$90,000-$99,999</td>
<td>Working class</td>
</tr>
<tr>
<td>9. Andrew</td>
<td>Man</td>
<td>31</td>
<td>Master’s Degree</td>
<td>Environmental Health Engineer</td>
<td>$60,000-$69,999</td>
<td>Upper middle class</td>
</tr>
<tr>
<td>10. Emmett</td>
<td>Man</td>
<td>22</td>
<td>Bachelor’s Degree</td>
<td>Process Engineer/Research Technician</td>
<td>Under $50,000</td>
<td>Middle class</td>
</tr>
<tr>
<td>11. Monica</td>
<td>Woman</td>
<td>35</td>
<td>Some College</td>
<td>Information Technology Specialist</td>
<td>$70,000-$79,999</td>
<td>Working class</td>
</tr>
<tr>
<td>12. Monique</td>
<td>Woman</td>
<td>52</td>
<td>Bachelor’s Degree</td>
<td>Network Security Analyst</td>
<td>$90,000-$99,999</td>
<td>Upper middle class</td>
</tr>
<tr>
<td>13. Hakeem</td>
<td>Man</td>
<td>41</td>
<td>Master’s Degree</td>
<td>Computer Science Engineer</td>
<td>Over $100,000</td>
<td>Upper middle class</td>
</tr>
<tr>
<td>14. Noelle</td>
<td>Woman</td>
<td>42</td>
<td>Some College</td>
<td>Network Engineer</td>
<td>$70,000-$79,999</td>
<td>Middle class</td>
</tr>
<tr>
<td>15. Danielle</td>
<td>Woman</td>
<td>39</td>
<td>Bachelor’s Degree</td>
<td>Technical Sales/Design Engineer</td>
<td>Over $100,000</td>
<td>Upper middle class</td>
</tr>
<tr>
<td>16. Shonda</td>
<td>Woman</td>
<td>45</td>
<td>Bachelor’s Degree</td>
<td>Network Engineer</td>
<td>Over $100,000</td>
<td>Working class</td>
</tr>
</tbody>
</table>

*working class if both parents’ primary occupation was blue-collar or clerical/secretarial worker; middle class if at least one parent had some college, an associate’s degree, or a bachelor’s and whose primary occupation was independent professional, independent business operator, professional/technical worker in a company owned by someone else, or manager in government or private company; and upper middle class if at least one parent had a graduate degree and whose primary occupation was independent professional, professional/technical worker in a company owned by someone else, or manager in government or in a private company.
THE (UNWRITTEN) RULES OF A RACIALIZED GAME

I began this study interested in the relationships between Black STEM professionals and their mentors. In particular, I wanted to explore how mentors aid in the personal, intellectual, and professional development of Black STEM professionals. However, in the course of interviewing, I discovered participants repeatedly mentioned “the game” and how their mentors helped them learn to play it. In fact, multiple participants used the terminology of “the game” when discussing the advice they received from their mentors. Furthermore, I noted another pattern in which the advice professionals received from their mentors was often racialized, or inflected by a “racial frame.”

The list of unwritten rules outlined in this study was drawn from both the advice that Black STEM professionals received from their mentors, and from Black STEM professionals’ accounts of their own experiences. While mentors played a key role in educating professionals about how to get ahead in the workplace, personal experience was also an important teacher. These rules emerged from the data and were made visible through Black STEM professionals’ use of racial frames. I define Racial frames as subjective theories used to organize generalized knowledge about whites’ (and Blacks’) behaviors and attributes. Both Black STEM professionals and their mentors engaged in racial framing when discussing workplace relations between whites and Blacks.

Generally speaking, rules are used and drawn upon to make interactions orderly, predictable, and expressive, in order for people to guide their own behavior and interpret the behavior of others. For instance, the administrative rules that accompany company policy are an example of written workplace rules. Unlike such formal rules however, I identify a set of unwritten workplace rules that apply differently to whites and Blacks in corporate America. As
previously stated, these rules govern the behaviors of Blacks. I define these rules as a set of tacit understandings about how to behave in the workplace—most notably, how to make a positive impression and avoid a negative one. While many participants discussed similar “rules of the game,” participants also discussed different rules. Nonetheless, through the use of these racial frames (or racialized advice), I was able to discern over a dozen unwritten rules that may apply in an organizational setting.

From the data, I have identified fourteen unwritten “rules of the game” that Black STEM professionals ought to know in order to compete in and navigate predominantly white corporate environments. Eight of the fourteen rules were implicit or explicit in the advice mentors gave Black STEM professionals (1-8). The other six rules were implicit or explicit in participants’ accounts of their professional experiences (9-14). The unwritten rules of the game for Black professionals are as follows:

1. Make sure your qualities and skills get recognized
2. Assume you’re being observed by whites (i.e., that you’re under surveillance)
3. Do not give whites reasons to doubt or complain about your work (i.e., whites won’t cut you any slack)
4. Do not let your guard down (i.e., whites will interpret your behavior differently)
5. Do not talk to whites about racial issues because they have limited perceptions (i.e., they don’t want to hear about racial issues, they live in a “perfect” world)
6. Do not discuss racial politics at work
7. Remember that you can’t do what whites do (i.e., you can’t make mistakes like whites can)
8. Brush off the unfairness and keep playing (i.e., keep working hard and brush things off)

9. Be aware of your network deficits

10. Create a workplace persona (i.e., expect to experience some inauthenticity)

11. Do not congregate too long with other Blacks in the workplace (i.e., you must avoid being seen as prioritizing tribal loyalties)

12. Learn to code-switch (i.e., don’t act ghetto)

13. Use whites to vouch for you (i.e., whites can provide you with validation and credibility)

14. Remember that you will have limited access to certain information

The unwritten rules listed above read like a “how-to” guide for navigating white organizational spaces. These rules prescribe how Black professionals should manage themselves in the workplace and what they should be aware of. Some of the rules teach Black professionals how to engage in “comforting acts,” behaviors that will make whites more comfortable with their outsider status (e.g., don’t discuss racial politics at work, avoid being seen as prioritizing tribal loyalties, develop the ability to code-switch). Other rules pertain to Black professionals crafting an acceptable workplace identity (e.g., make sure your qualities and skills get recognized, assume you’re being observed by whites, don’t let your guard down, create a workplace persona). Yet, some of the rules also suggest that whites and Blacks are held to different standards within the workplace (e.g., whites won’t cut you any slack, you can’t make mistakes like whites can, understand that you will have limited access to information).
There are slight discrepancies between the lessons that Black STEM professionals receive from their mentors (rules 1-8), and those that they learn from their own observations (rules 9-14). All of the rules are guides to awareness or behavior. For instance, the rules that professionals learn from their mentors revolve around topics of appropriate workplace interactions with whites (e.g., not discussing racial politics), and how one should go about competing (i.e., succeeding) in a corporate environment (e.g., being recognized for one’s skills and qualities). From their own experience, professionals learn about their personal weaknesses (e.g., network deficits, lack of credibility), and how they must alter (or change) aspects of themselves when presenting themselves to others (e.g., they must code-switch or create a workplace persona). The rules professionals learned from their own experiences are more about self-presentation. It makes sense that the latter would derive from direct experience, as individuals learn from and adapt to specific workplaces. The rules passed on by mentors are largely cautionary in nature, warning professionals about what they should and should not do when in the company of whites.

These rules reflect white dominance in the workplace. Predominantly white corporate environments not only uphold white, middle-class values and norms. In these structures, positions of power and importance tend to be occupied by whites. Therefore, these environments are considered white spaces because they define and reward appropriate behavior, appearance, and ways of speaking that are culturally associated with being white. Because people of color are often marked as outsiders in these environments, they must learn how to navigate such a social world by consciously changing how they behave or talk in order to pass as insiders.

The unwritten rules of the game say something about Blacks’ process of socialization into the corporate world. Blacks must be aware of and engage in a number of tasks distinct from
(and along with) those that apply to everyone in competitive, professional settings. These rules are significant in that they exemplify how the game of getting ahead in corporate America is racialized—operating according to different rules for Blacks and whites. Unlike Blacks, however, white professionals do not have to know that the game of getting ahead is racialized in order to climb the corporate ladder. Whites are likely to be unaware that Blacks are subject to and must play by a different set of unwritten rules.

Without adequate knowledge of the unwritten rules of the game, Black professionals risk losing at the game of getting ahead. While losing may consist of career stagnation or a lack in promotion for some, for others, losing can mean failing to survive the game altogether (i.e., losing a job or “opting” out of the STEM field). Uncovering the unwritten rules of a racialized game is important because these rules (1) attest to the racial tasks Black professionals engage in; and (2) exhibit a way by which Black professionals are able to combat inequality in the workplace. In the following sections, my focus shifts from the rules to how the rules are learned. Mentors play a key role in this process, though sometimes personal experience is the teacher.

*Mentors’ Advice: Getting Clued-in to the Game*

The concept of “the game”—the idea that upward mobility within corporate organizations is similar to a form of competitive play or sport (and the use of such terminology among participants)—has several implications. For one, referring to achievement as a game suggests that despite racial barriers within predominantly white workplaces, Blacks can be victorious—they can “win” the game, if they learn to play it right. This fact is particularly important for Black STEM professionals who, unlike their white counterparts in the corporate world, must understand (1) that the game of getting ahead is racialized; and (2) how it is
racialized in order to exist within such environments. These are some of the understandings conveyed to Black STEM professionals by their Black mentors. In short, in order to win the game, Blacks must be (1) willing to play the game; and (2) play by the set of rules that apply specifically to them.

Some of the advice that Black STEM professionals receive from Black mentors is generic; it’s what would be given to any professional competing in corporate environments: be on time, do quality work, and make sure your work is seen by others. However, such generic advice is often racially framed by Black mentors, attributing particular behaviors and privileges to whites in predominantly white workspaces, and highlighting the expectations that apply specifically to Blacks. For example, in discussing the professional advice he received from a Black male mentor, Edward, a software engineer, said:

Another piece of advice, you know, I think I was mentioning to you again, just like “be excellent in everything that you do—don’t give them [whites] any reason to doubt your work and your intellect, and your skills.” When I was working, I was constantly seeking out ways to, you know, just to improve my visibility and make sure that my manager knew what I was doing, and to make sure that I was being—like the stuff that I was doing was being recognized.

Hakeem, a computer science engineer, received similar advice from a Black male mentor:

You’ve got to make sure that you speak up at meetings and make sure that you’re known and seen, make sure you’re always on time for meetings—never be late, things like that. Pretty much, make yourself—follow all the rules to the tee, so that there’s nothing they [whites] can complain about, like—“Hakeem is always late for meetings, he’s never at work on time”—be to work early. Be the first one there and the last one to leave.

What Edward’s and Hakeem’s Black male mentors taught them is that they will be under surveillance by whites while at work. The racial framing demonstrated by Edward’s mentor makes it clear to Edward who will be evaluating him. Whites are identified as the reviewers of one’s skills, intellect, and work. More so, the racialized advice Hakeem receives from his mentor
also attests to whites as reviewers, those with the power to take action and cause damage (e.g., complaining to higher ups about one’s performance).

The rules mentioned here—that Blacks will be under surveillance by whites and that whites will not cut them any slack—teach Black STEM professionals who their audience is (i.e., who they are performing for), and who will evaluate their performances. Through their use of racial framing, Black mentors were able to bring to light the differential power dynamics between Blacks and whites within white corporate environments. Similar to Edward and Hakeem, Breanna, a chemical engineer, gave an account of her Black male mentor stressing the importance of being visible at work:

He’s, like, “white people, they don’t have a problem with tooting their own horns”—I’m like stereotyping on audio [laugh], but he’s like “white people don’t have a problem tooting their own horns, and you know, saying exactly what they’re doing.” He’s like “and they don’t have a problem taking credit for what you’re doing either, so if you’re not saying what you’re doing, trust me, somebody else is taking credit for that.” So he and I had a ton of conversations about that right, just letting people know “hey, this I what I’m working on, this is what I’m doing, this is how I’m leading.

“Toot one’s horn” (or to boast about oneself) is general advice that would be given to many professionals in a competitive, corporate environment. In order to vie for positions and opportunities, workers compete by doing great work and ensuring that they stand out because of such work. However, the advice Breanna receives from her mentor is racialized as he suggests that whites, in particularly, find it easier to promote themselves and to take credit for others’ work. For Breanna, this racially framed advice not only establishes whites as her competitors, it conveys to her a generalized assumption about whites as conniving, self-promoting competitors. Her Black mentor suggests that whites have no problem being visible, therefore, she shouldn’t either if she wants to play the game well. This particular piece of advice is salient in that
Breanna’s mentor instructs her on *how* to compete with them in the workplace (i.e., to take credit for her own work and make sure people know what she’s working on).

Other participants also received advice from mentors about being under surveillance by whites. As Noelle, a network engineer, said about her Black female mentor:

*She said, you know, “just cover your butt and make sure you are doing the things you need to do, regardless, therefore they [whites] can’t say anything.” I mean in some work places, it’s very hard for Black people and Black women. So she just wanted to make sure that I was doing the things I needed to be doing and then some, you know.*

Shonda, a network engineer, received similar advice from a Black male mentor:

*The main thing I think I remember him talking about race is just that, you know, “be on time for stuff—they’re [whites] going to be looking at you and expecting you to slip up, to not be on time, to not know what you’re doing, so you need to have your ducks in a row, and you need to get your information straight. You need to know how to do the job well.*

Here again, whites are characterized as observers of behaviors. The racial framing used in these instances sheds light on the privilege and power whites possess within the workplace, and informs Black professionals of their workplace role. This advice more or less teaches Black STEM professionals how to pass as insiders within these predominantly white environments. In other words, Black professionals must be conscientious, hardworking, and limit their number of mistakes in order to prevent increased surveillance and unwanted intervention on behalf of whites.

*Increased surveillance and interventions in one’s work (e.g., complaints) can further cement Black professionals as outsiders who don’t belong. Andrew, an environmental health engineer, received a variation of this from his Black male mentor:*

*He was just like “listen, don’t get caught up in nothing there.” I said “what you mean?” He was like “they [whites] are going to try and create this environment where you feel comfortable. So they are going to make you feel like you can do whatever you want to do, don’t do that. Do what got you there. Be smart.” When it comes from the Black counsel—the counsel you get from Blacks—it’s more about don’t forget who you are,*
you know? Like, don’t forget that you can’t do what they [whites] do. You can’t in this arena.

Andrew’s mentor suggests that whites can lay racial traps for Blacks. While whites may create a hospitable work environment, they are also the rule makers and referees in the workplace. Therefore, Black professionals have to always be careful and keep their guard up. Whites reserve the power and privilege to enforce rules, as well as to change them. In this instance, racial framing makes these “traps” visible. It is by the use of racial framing that Andrew’s mentor is able to clue him in to the reality that whites operate according to a different set of workplace rules. As the rule makers and enforcers (e.g., executives, managers, team leads), whites maintain a lot of authority over Black workers.

Black professionals are not only vulnerable to racial traps enacted by whites, they are also at risk of being associated with negative stereotypes. As such, Black professionals must be careful about the images they project to whites. Andrew alludes to this problem in recalling a conversation he had with a Black female mentor about a job interview that went awry:

I went back to my mentor at the time [after the job interview]—at the environmental law firm. She said—and this changed a lot about how I do things now—she said, “You can’t come in the door militant. You can’t do that, you know? A Black woman can’t do that because then she gets hit with the angry Black woman. A Black man sure can’t do that because then he gets hit with the angry Black man. Yeah, you can’t do that. If you do that, you’re labeled, and if you get that label at the beginning, you have to work to get that off.” First of all, if you get that in the interview stage, you ain’t getting a job… so it’s that kind of counsel—when we talk about counsel, when you don’t have that specific Black counsel, you forget and you start thinking you can do what the majority does. You start to think that you can be judged the way that they [whites] are being judged. You start to think that you can make mistakes.

Through her use of racial framing, Andrew’s mentor teaches him that unlike whites who may be divorced from negative stereotypes, Blacks have to actively detach themselves from damaging stereotypes. In learning that Blacks and whites are perceived differently in the workplace,
Andrew is better equipped to monitor his behaviors and avoid potentially negative images (e.g., as the militant Black man).

In discussing advice received from his Black male mentor, Hakeem describes learning about the racialized nature of getting ahead in corporate jobs:

What he would do is tell me there are certain things you can say and certain things you can’t say being Black. There are certain things you can do, certain things you can’t do, such as you can’t take the long lunches...there are certain things you can’t talk about like—you can’t talk about salaries, can’t talk about—you really can’t bring up a lot of racial stuff, so whatever is going on in the news, you can’t really bring that up at work, things like that. [Q: Did he [Black male mentor] say why that is?]. It’s just the tension you don’t need at work. I mean, ‘cause like when we work together, we are working as teams and we don’t need that extra tension, and like he always said, “A lot of white people don’t want to hear that—they think we live in a perfect world.” They might see the news or whatever, but they don’t know the real world, what’s going on.

In this instance, racial framing identifies white people as having limited perceptions of the world, perceptions that may not include any kind of race consciousness. This is particularly important for Black professionals who navigate white corporate spaces with race at the forefront of their minds or identity. Hakeem is taught that while racial matters may matter to him, the workplace is not an environment on which to bring up such matters, especially because whites may have little understanding, interest, or stake in such issues. To white professionals, racial matters may be perceived as “personal matters,” therefore lacking relevance in a professional setting. Once again, the use of a racial frame by mentors makes the racialized nature of the game visible—Black and white professionals are abiding by a different set of workplace rules in order to get along and advance within the organization.

The Unwritten Rules of an Intersectional Game: Mentors’ Advice for Black STEM Professional Women

For Black STEM professional women, career advancement is affected not only by race, but also by gender. This advice can be seen as additionally inflected by a gender frame—an
awareness that sexism, as well as racism, creates unwritten rules for Black women that have important implications for their upward mobility. Black STEM women thus received advice from mentors concerning sexuality, interactions with white men, and inevitable unfairness that comes with being a woman in male-dominated spaces. While it is also possible that race and gender work together to affect Black STEM men’s upward mobility, no such evidence appeared in my data. Furthermore, it is likely that Black STEM men received solely racialized advice from their mentors because they are a part of the dominant gender group.

One female participant, Breanna, received counsel from her Black female mentor about the likely sexist behavior of her white male co-workers:

So like I said, I travel a ton, so whenever I do travel with my team, there’s all older white men, and I don’t drink, but she drinks a lot and she’s like “hey, one of the number one rules is that when you hang out with a bunch of older white men, do not drink. No matter how much they try to get you to drink, don’t do it, because older white men are nasty.” (Slight laugh) this is bad right? This is the kind of conversations we had. She’s like “older white men are nasty,” and she’s like “and they’re all married, but when they get drunk, Breanna, you just got to leave. You just got to stay there with them, let them drink, and then you just say you have something to do and leave.” She’s like “never stay out at night with them.”

The racial and gender frame Breanna’s mentor uses here characterizes older white men as a sexual threat when consuming alcohol in a casual, non-work setting. This warning teaches Breanna that as a woman working alongside many (older white) men, she may be particularly vulnerable to male misconduct and their unwarranted sexual advances. The gender framing used here teaches Breanna that sexual harassment is a real possibility in male-dominated environments. Breanna went on to describe a time in which she had to use her mentor’s advice:

I thought she was just being over the top dramatic right, this is Maxine just being Maxine, over the top dramatic. But then my first work trip with them, with my team—of course we were at the Minneapolis Golf Club, because that’s where we stay right. So we’re at the Minneapolis Golf Club and you know, work was over with and it was probably 4 o’clock or something like that, and “oh, let’s go get drinks or whatever.” So whatever, I went, I didn’t drink, I just got some coke, and I remember people started getting a little
rowdy and I remember just the atmosphere started changing, people started getting a lot more friendly, like there were more like casual lower back touches, and I was like “oh it is time for me to go,” and so I remember her telling me that piece of advice and man, she was right—that’s real world stuff that people don’t get, like nobody is going to tell you that, and you just find that stuff out by experiencing it. But like the fact that she actually called it out, before it even happened, like that’s real world stuff, you have to be aware of being a single, Black woman in corporate America.

After experiencing a similar scenario to one her mentor warned her about, Breanna expresses an awareness of how both sexism and racism matter when it comes to Black women’s experiences in the corporate arena.

Another participant, Monica, an information technology specialist, also received advice from her Black female mentors (two corporate bosses and a military figure) about female sexuality:

I was always told, in the same way, do not earn your living laying on your back, and that was something that always stuck with me, and that was something I was told by my drill sergeant—female, and that was something that I was told by these two ladies [Black female mentors]. She [drill sergeant] said “you want to respect your person. If you want to earn respect, respect yourself.” She said “there is a lot of females here and abroad that have earned their rank by laying on their back, that’s not for you. If you can’t achieve something or if you feel something is hard, do not take the easy route out, keep pushing, keep working, never lose hope, stay focused and always believe in yourself if no one else does.”

In this instance, no racial framing is evident. Instead, Monica is left with a bit of gendered advice warning her about the use of her sexuality for career advancement. Similarly, Monique, a network security analyst, discussed the strategies her mentor taught her for managing her interactions with men in the workplace:

She [white female mentor] was excellent in terms of teaching me how to navigate—it’s a lot more to just working in the field. We have to understand the whole dynamics in order to move around and survive, even down to specific words in dealing with men—when you’re writing an e-mail, there are certain words you should use and words that you should never use. She taught me how to do that... For example, if you’re writing an e-mail or even if you’re just talking to them [men], you never say “help,” you always say “assist.” “Help” appears—coming from a woman, saying help gives this vision of damsel in distress. Now unless you’re trying to use that impression, you don’t use those words.
But because for men, that’s what they think of and that’s how they’ll perceive you, and you’ll never be able to get to a position of—I won’t say power—but you know, of authority and get them to respect you.

Just as Black professionals must distance themselves from negative stereotypes as outsiders in white spaces, women must resist sexist images of women as helpless. Such advice is important because it speaks to the “gendered tasks” that professional women must engage in in order to gain respect from their male counterparts.

Breanna, now a manager in a majority white male corporation, receives important advice from her Black male mentor about how to manage white men, in particular:

…they [white men] can feel offended or feel threatened by having an African American female manager…So he [Black male mentor] would tell me like “yeah, you know what, white men, they feed on their ego. So anything that might challenge that ego, they feel threatened by it. So you have to be very delicate and use that to your advantage, so you have to feed into their ego to make them feel like they are great, and awesome, and pumped up, and make them feel like if they have a bad idea, you craft that idea into a good one, and you want to make them feel like it’s theirs. Then you just have to really like pump it up to feed into their ego.” He was like “you can’t change the fact that white men have big egos, that’s just the way they were raised” (laughs) that’s bad right? He was like “you just got to deal with it and then you gotta feed into it, and use it to your advantage, because when they do good, they make you look good. So you just got to make sure they’re doing good.

Both racial and gender framing are used here to convey that white men have fragile egos that can be damaged by the authority of Black women. Such advice is particularly important for Black women whose advancement depends on successfully supervising white men.

Similarly, Yvette, a civil/technical engineer, received advice about how to interact with whites in predominantly white workplaces. After giving an unsuccessful presentation at work, Yvette received advice from a white male mentor:

I remember him telling me “well, you know what Breanna, how are you presenting the ideas,” you know? I was like “well I said this, this and this, and this, that and the third,” and he was like “did you try it this way?” I was like “no I didn’t.” So I went back and tried it that way, and I was like “and they still shut me down.” He said “well, how did you try to present it to them,” right, and I remember telling him, I was like “I don’t feel like I
should have to present it six or seven times,” right, “you know, when Evan presents his stuff, he doesn’t have to present six or seven times.” He said “well Breanna, you know what, guess what? You’re not Evan,” and literally I just remember being like dang, he’s right—he’s right, I’m not, so why should I expect to be treated the exact same way. Even though I feel like there should be equality there, I am not Evan, right, maybe Evan has a certain way that he’s influencing people that I’m not, that has nothing to do with race, maybe it does, I don’t know. So I remember just having to pitch ideas like 30 to 40 times, some of them stuck, some of them didn’t, but I remember him telling me, he’s like “you’re not Evan.”

Yvette’s white male mentor is “cooling her out” (Thomas 2014), encouraging her to accept her loss and to not expect fairness in her predominantly white and male workplace. Yvette’s case demonstrates how race and gender work together in the workplace to condition Black women’s experiences. It is unknown to Yvette whether her race and/or gender is the source of how she is treated by colleagues, or if it’s simply that others (e.g., Evan) are better engineers than she is. Expecting unfairness and pushing forward (e.g., pitching one’s ideas several times) is just one of the unwritten rules of getting ahead.

LEARNING THE UNWRITTEN RULES THROUGH PERSONAL EXPERIENCE

Mentors play an important role in teaching Black STEM professionals how the game of getting ahead is racialized. But Black STEM professionals also learn about this from their own experience. This experience contributes to the development of a racial frame through which workplace realities are perceived. In turn, this makes visible more unwritten rules that mentors might never have mentioned. In this section, I discuss general rules that participants reported learning on their own.

One of the rules Black professionals learn on their own is to beware of their network deficits. Participants reported that whites have a network of “well-placed” white people that allows them to more or less “skip” parts of the game. While Blacks may need extra credentials or
a white person to speak on their behalf in order to get ahead, whites can rely on a group of white peers to help them advance. As Hakeem put it:

Based on you just being Black, you get disadvantages. Like Chris Rock used to say, “it’s alright if it’s all white.” Like my manager, he doesn’t have to go through the same process that I have to go through to get to his position. He was pretty much given it—that good ol’ boy kind of white network is there. So you try to fit in as you can, but then you realize you’re still Black. You try to fight it as much as you can... Pretty much, you gotta do double the work. You have to work twice as hard and learn twice as much.

Another participant, Andrew, spoke about being excluded from white networks:

She [white female professional] was like “listen now, you’re going to get your PhD, I have a connection here, I have a connection here” and I’m calculating like a connection? That’s all I need. If I have a white folk saying something for me, supporting me, then I can move forward, you know. Again, I want to say to, this isn’t an attack on her or anything like that, but the process is different for white folks than it is for people of color, you know. We don’t get in the door the same way. She knows people—they [white people] have a network that is inherent to being white. Our [Black people] networks don’t look like that. We don’t have cousins and uncles, and aunts and everybody that’s all Ivies. We ain’t got that.

Hakeem and Andrew have learned from that their own experiences that exclusion from white networks leaves them disadvantaged. Andrew also learned another important unwritten rule: whites can vouch for Blacks, lending them credibility. Having a white person speak on one’s behalf can help combat disadvantage associated with an exclusion from white networks (e.g., missed opportunities, limited information about workplace affairs).

Through the development of their own racial schema, Hakeem and Andrew came to see that Blacks not only have deficient networks compared to whites, but they must also employ other tactics (or strategies) for getting ahead (e.g., getting additional or “necessary” credentials, finding whites who can speak on their behalf to other whites). Danielle, a technical sales/design engineer with only white mentors, learned a similar lesson about how whites can vouch for Blacks in the workplace:
You know what, it probably has helped me, the fact that my mentors are white. When we walk into a room and they’re [whites] like “she’s with him,” it gives me a validation, maybe it’s given me something more that I wouldn’t have had. This white man to that white man saying “yes she is good,” they [whites] take that—I don’t know, it helps clear out something with race that might be there. It adds to my credibility to the other white people who may have some prejudice initially, like upfront prejudice.

Through her own experiences with white male mentors, Danielle learned that having white mentors can be advantageous in that they can lend her credibility in a room full of other whites (especially white males). Learning this rule on her own was important because it is unlikely that her white male mentors would have articulated it.

Another rule participants learned on their own was about being ready to code-switch.

Code-switching involves alternating or changing one’s speech patterns and linguistic features in conversation. Emmett, a process engineer/research technician, spoke about learning how to code-switch from his professional peers:

So as I got older, I started to see, more so, that people preach to be professional in the workplace, but when you’re outside of the workplace, say if you’re—ok, so let’s say we go bowling. You’re having fun, everybody’s having fun, and you might like—I’ll say socially unacceptable in some crowds. So you’re with a group of people, say, who are your friends and they accept you, and maybe they come from different backgrounds, but you guys understand each other, everybody is cool with it. But if you were to go to work and make that joke, it doesn’t quite go over the same way. So basically, they’re [professional peers] saying—and I’ll use the terms they use—“you have your slang that you use, and then when you’re in a professional situation, you switch it back and you talk regular. I think I wasn’t in particular a problem, but whenever you do dress up or if you do have a professional event, you should, you know, tie your tie, put on a jacket, a shirt, and try to look professional when you do things—kind of like watch your behavior. You don’t want to be I guess caught acting foolish.”

As suggested by Emmett’s account, learning how to code-switch is a key rule to playing the game of getting ahead. Black professionals who are perceived as acting ghetto, loud, foolish, etc., will stand out as unprofessional. More so, such Black professionals run the risk of being negatively stereotyped, further affecting their ability to climb the corporate ladder.
While developing and maintaining a professional image is the goal of code-switching, adopting a professional persona can also affect one’s “personal self.” Charmel, an electrical engineer, discussed being unsure of how to integrate her professional and Black selves:

I’ve always tried to keep a strict divide between my personal self and my professional self, and I try my best not to let the two overlap and even with my other Black friends who work at the same facility, I don’t like to stop and chit chat, and sometimes I’m forced to do it because I don’t want to be the person who is just all work and no play. Now I have to like force myself—I shouldn’t say force myself, but I make a conscious decision to stop and talk with people, and have truly genuine conversations. It is a race related issue feeling that we as Black people cannot be our genuine self in the workforce, and I think that of all of the people who came to that to speak, they felt very comfortable in their Blackness, in being who they are. Like me and some of my other younger Black peers, like if it’s more than three of us together, it starts to look a little suspect [slight laugh]. So we try not to congregate so much together, whereas you know, these other people [Blacks at a top performer forum]—other Black leaders in these positions—they’re completely comfortable being themselves. I’m not saying that they just let the hood come out, but you know, they showcase their Blackness, they can be loud, they dap each other up.

Charmel’s account speaks to an unwritten rule that professionals are likely to learn on their own: expect to experience inauthenticity. Due to the development of a professional self—a work identity separate from her actual self—Charmel confronts an authenticity dilemma, leading her to question the extent to which she is her genuine self in the workplace. Learning such a rule on one’s own is particularly important because matters of inauthenticity involve conflicting or troublesome feelings about oneself. Battling feelings of inauthenticity is one way that Black professionals are shaped by the process of getting ahead—the process of learning and living by the rules necessary for them to function and succeed in corporate environments.

**DISCUSSION**

Previous literature on Black professionals working in white workplaces attests to the emotion work, self-presentation, and other behaviors that Blacks engage in to ease difficulties associated with being a minority in white spaces. Following a distinct set of unwritten rules
within the confines of white workplaces is yet another “racial task” (Wingfield and Alston 2014) that Black professionals perform at physical, ideological, and interactional levels. By learning that the game of getting ahead is racialized, and by following the organizational rules set for them, Black professionals reinforce the existing state of racial affairs within corporate organizations. Perpetuating the status quo within white corporate environments is problematic on multiple fronts. For one, it maintains the power dynamics between Blacks and whites within organizations, resulting in white dominance that is neither addressed nor directly challenged. Secondly, by playing the game of getting ahead and upholding the status quo within organizations, future Black professionals entering such environments are put at risk of not surviving. Similar to the Black STEM professionals in this study, Blacks entering white corporate environments must learn that the game of getting ahead is racialized, and how to play the game successfully.

White professionals in corporate environments are unaware that the game is racialized—in other words, that they operate to a different set of workplace rules than workers of color do. As previously stated, whites do not need to know and understand that the game is racialized, and how it is so, in order to be successful at work and to achieve upward mobility. Instead, white professionals need only the skills and behaviors necessary to play the game competitively. As seen in the advice of Black mentors, there is a generic element to the kind of advice they gave: show up on time, take credit for your work, and make sure that your work is recognized. White professionals can navigate corporate environments on this generic advice alone. Black professionals, however, cannot exist and compete in corporate environments solely on this information.
While Black professionals may encounter generic advice for navigating the workplace, as evidenced by this study, receiving racialized advice is just as—if not more—important for their occupational success. Racialized advice is often generic advice that is racially framed (or discussed through a racial lens). For Black professionals, generic advice becomes racialized in that there are racial undertones attached to the verbal and behavioral acts Blacks engage in while occupying white corporate settings. As demonstrated by the racialized advice taught to Black STEM professionals by Black mentors, “be on time” is valuable not only because it’s professionally sound, but because Blacks are perceived differently than whites. Without awareness of this fact, one plays the game with a handicap.

The unwritten rules of getting ahead are used and drawn upon by Black professionals in order to carry out successful interactions with whites. This is particularly important because previous literature has addressed the numerous behaviors (or racial tasks) that professionals of color perform in predominantly white work settings (Wingfield and Alston 2014; Wingfield 2010; Carbado and Gulati 2000). However, this study expands on that literature by identifying the unwritten organizational rules that govern Black professionals’ behavior, leading them to engage in numerous racial tasks. Furthermore, my findings suggest that Black professionals can learn how to perform racial tasks from others (i.e., Black mentors), and by catching on to the reality that Blacks cannot do what whites do in the workplace (e.g., that there are different repercussions for each group when it comes to misconduct), they can more effectively play the game of getting ahead. While previous literature covers the extent to which Black professionals are ideologically and interactionally bound by the norms of white organizational culture (Wingfield 2014; Collins 1997; Kirschenman and Neckerman 1991), this study highlights how Black professionals strive to secure their upward mobility within these organizations, in spite of
such norms. Indeed, Black professionals secure their futures by learning how to play the game—i.e., learning the unwritten rules of the game and then playing by them.

Whites, as well as Blacks, operate to their own set of racial frames. During the Civil Rights Movement, challenges to racial inequality resulted in white backlash, in which a “new right” emerged. In order to uphold and protect the racial status quo, the new right employed a new mechanism of race, outside of the narrative of biological racial inferiority, one that involved a racially coded language (Omi and Winant 2014). In the post-civil rights era however, the new right and left have adopted a discourse of abstract liberalism and color-blind racism (Bonilla-Silva 2014), which minimizes the relevance of race and the existence of racism. Neo-conservative discourse has spread well beyond political constituencies, and functions as a central part of the “white racial frame.” A “frame” is one that gets imbedded in people’s minds and helps them to make sense of everyday situations.

As previously discussed, framing is separate from ideology. Ideology stems from framing, as framing is a mechanism by which ideology—a framework in which people view the world—is communicated to people. The white racial frame is defined as an organized set of racialized ideas, emotions, and actions that are consciously and unconsciously expressed in racist institutions (Feagin 2010). The white racial frame is a dominant framework (or ideology) that centers on whiteness, a white perspective, and as a result, normalizes and justifies white superiority and black inferiority (Wingfield and Feagin 2012; Moore and Bell 2010). A white racial frame is what white professionals in corporate environments are likely to possess. The unconscious and conscious framing of white professionals is what Black professionals must combat in order to climb the corporate ladder.
As a dominant frame, the white racial frame shapes people’s thinking and interaction in everyday life. According to Feagin (2010), whites consciously and unconsciously use this frame where and when they find it appropriate, in order to emphasize their privileges of whiteness in relating to (or evaluating) people of color. The white racial frame is maintained by white elites through institutions that have cultural impact (e.g., academia, religious communities, political discourse and the media), and is reinforced within white families. In short, the white racial frame is institutionalized. It is important to note that the white racial frame has changed over time (e.g., from arguments of biological differences between racists, to the new color-blind racism era). The racial framing of white Americans has a few important features, including: racial stereotypes; racial narratives and interpretations; racial images; racialized emotions; and inclinations to discriminatory action. Feagin argues that in order to address, discuss and analyze the white racial frame, communities of color have engaged in counter-framing, which includes: accenting the strengths and humanity of people of color, calling for revolutionary action, and critiquing white social structures and conventions.

Similar to the white racial frame, the framing used by Black STEM professionals and their mentors influences Black professionals’ thinking and interaction with whites in everyday situations. Moreover, I would argue that Black professionals can consciously and unconsciously use this frame when navigating predominantly white spaces in which the white racial frame is institutionalized (e.g., in corporate workplaces). While the white racial frame can be used by whites to perpetuate or secure their white privilege, the “Black racial frame” used by Black professionals in this study can be used to combat their underprivileged status and to allow them to effectively interact with whites. A Black racial frame equips Black professionals with an understanding of the relationship and interactions between whites and Blacks in the professional
and economic arena. A Black racial frame serves as a cognitive tool in that it helps Blacks to interpret (or make sense of) the expectations that whites hold for them. Through the adoption and use of a Black racial frame, Blacks can learn how to maneuver within institutions where racial inequality is pervasive. A Black racial frame offers the Black professional a way of viewing their white bosses, co-workers, and peers who are likely to possess a white racial frame. Consequently, the Black racial frame provides the Black professional with appropriate strategies for overcoming racial barriers presented and enacted by such whites. The Black racial frame is also not an instance of counter-framing. Instead of critiquing white conventions and institutions, or offering a discourse of Black strength and resilience, the Black racial frame provides Black professionals with a way of coping within predominantly white structures.

Furthermore, the Black racial frame serves as a cognitive device that leads Black professionals to experience a “double consciousness” (Du Bois 1903) of sorts, causing them to see themselves through the eyes of whites within the workplace (e.g., white managers, supervisors, and co-workers). In navigating a racially stratified society, possessing some awareness of how the dominant group views oppressed groups within society, prepares the oppressed for potential racial bias. For Black professionals, engaging in racial framing about whites not only clues them into the ways in which race matters in the workplace, but provides them with the opportunity to be strategic in their interactions with whites (e.g., engaging in code-switching when communicating with white bosses). In distinction from the white racial frame, the concept of a Black racial frame serves as a racial lens through which Blacks learn how to relate to whites in a way that is effective and advantageous to them.

Although a Black racial frame has a similar purpose to Feagin’s white racial frame (e.g., to encourage predictable interactions with others), the concepts are dissimilar in that one
maintains white dominance, while the other offers strategies for overcoming it. However, by identifying the rules of the game for Blacks and thereby following them, Black STEM professionals perpetuate the white corporate culture of which they are a part, consequentially reproducing inequality. Schwalbe and colleagues (2000) argue that sociologists must not only understand the consequences and extent of inequality, they must also understand the interactive processes through which inequality is created and maintained. My analysis contributes to the literature an understanding of how framing plays a role in the perpetuation of inequality. Both white racial frames and those utilized by Black professionals ultimately protect white superiority (and Black inferiority), in that structural (i.e., white) racism is left unaddressed and unchallenged within corporate America.

While one consequence of Black STEM professionals learning and abiding by unwritten rules involves the reproduction of inequality, another consequence is Black economic success. In playing by the set of rules that apply to them, Black professionals put themselves in the running for winning the game—in other words, obtaining upward mobility. Mentors aid in this process. The vast majority of the participants in this study discussed one or more Black mentors, and it is these mentors in particular who offer racialized advice. The process by which Black mentors teach Black professionals about the racialized nature of getting ahead, and how to play the game strategically, is a form of resistance in which Black professionals combat racial and economic inequality the best way they know how. By sharing “insider” knowledge with Black professionals, Black mentors resist oppression by increasing the likelihood of Black economic success.

This study suggests that Black mentors play a significant role in teaching Black professionals how to play the game of getting ahead. While my findings also suggest that Black
professionals can learn the game on their own, it very well may be costly to do so. If Black professionals are without mentors and left to learn for themselves that the game of getting ahead is racialized, they risk: (1) never learning the rules of the game that they need to adhere to; and (2) learning the rules of the game through trial and error. In corporate arenas where workers are vying for positions, it can be costly (and time inefficient) for Blacks to have to learn the rules designed for them on their own. While the full extent to which Black mentors are required for the professional socialization and success of Black professionals in white organizational environments is unknown, it seems likely that having such mentors can “speed up” the socialization process for Black professionals. More so, Black mentors can offer advice tailored to the needs of Black professionals in white organizational settings—something that white mentors may not be able to do.

Although my findings suggests that mentors play a key role in teaching Black professionals about racial framing (and how to do so) through their racialized advice, part of my data also suggests that Black professionals engage in racial framing all on their own (i.e., they learn on their own that the game of getting ahead is racialized). The notion that Black professionals engage in racial framing without the help of a mentor suggests that Black professionals may *enter* the work world possessing an implicit racial frame about whites. This implicit racial frame about whites could have been learned from family members during childhood, adolescence, and even adulthood. During racial socialization—the *process* by which families teach their children about the social meaning and consequence of race and ethnicity (Burt, Simons, and Gibbons 2012; Brown, Tanner-Smith, Lesane-Brown, and Ezell 2007; Demo and Hughes 1990)—parents prepare children of color for life in a racially stratified American society (Cooper, Smalls-Glover, Metzger, and Griffin 2015; Burton, Bonilla-Silva, Ray,
Buckelew, and Hordge Freeman 2010). Racial socialization may account for the ability of Black professionals to engage in (and operate to) racial frames about whites.

Two of the three forms of racial socialization are preparation for bias and promotion of mistrust. During preparation for bias, Black parents prepare their children for possible future experiences with prejudice and discrimination (Caughy, O’Campo, Randolph, and Nickerson 2002; Hughes and Chen 1997). African American parents present a set of protective messages and practices to their children, providing them with necessary competencies to deal with racism. This form of racial socialization makes children consciously aware of the racial bias, prejudice, and discrimination that still exists in society. Promotion of mistrust consists of African American parents encouraging out-group mistrust in their children (Hughes and Johnson 2001; Hughes and Chen 1997). This form of racial socialization involves African American parents issuing warnings or cautions to children about their interactions with whites. Parents convey messages to children such as “white people think they are superior” or “don’t trust white people” (Hughes and Chen 1997; Demo and Hughes 1990). Both components of racial socialization are related.

By teaching Black children about the possibility of racism, parents may use racial framing to communicate to their children warnings about whites (e.g., whites think this or whites do that). Many groups of color participate in racial socialization, with racial-ethnic minority families being significantly more likely than white families to discuss their racial-ethnic heritage and other racial matters with their young children (Brown et al. 2007).

Odds are that Black professionals, like many Black Americans, have undergone some degree of racial socialization within their families. More than likely, Black professionals have been racially socialized about themselves (e.g., preparation for bias) and about others (e.g., promotion of mistrust). With this being the case, Black professionals’ encounters with Black
mentors, and their experiences in the workplace, may not be the first time Black professionals have engaged in “racial framing” about whites. Indeed, it could be the case that Black professionals enter the workplace, and their mentoring relationships, possessing some kind of racial frame about whites. These racial frames would become embedded in the minds of Blacks, serving as a framework that helps them to make sense of their interactions with whites, and to navigate white institutions. The racial framing of Black Americans could include racial narratives, interpretations, and images of whites. Furthermore, majority of the participants in my sample are educated, receiving at least a bachelor’s degree. While a couple of participants discussed attending an HBCU (historically Black college/university) as undergraduates and then an HWCU (historically white college/university) for graduate school, many of the participants attended only HWCU. Therefore, it is likely that corporate workplaces are not the first time these Black professionals have encountered such racialized “rules.”

Many of the rules established within these white corporate environments are applicable to other predominantly white environments, including educational institutions (e.g., whites won’t cut you any slack). The family is an institution that is responsible for the transmission of cultural capital from parents to children (Parcel and Hendrix 2014; Lareau 2011). Cultural capital refers to acquired assets or skills that promote social mobility outside of economic means, including education, style of dress or physical appearance, and linguistic features. Most of the participants in my sample were from upper-middle-class backgrounds, with educated and economically successful parents. Given both the educational and economic success of the participants themselves (see Table 1), it is probable that their familial backgrounds played an important role in their life outcomes (e.g., the ability to afford higher education). However, what is less clear is
why the parents of these professionals did not teach them about the rules of getting ahead—or if they did, what lessons they taught.

While it is outside the bounds of my study to address the role parents’ played in preparing Black professionals for life in predominantly white institutions, it appears that having mentors, especially Black mentors within the same profession, is particularly useful for Blacks. I would argue that the one thing that majority of the mentors offered the participants in my study was insight about working in the STEM field, and furthermore, working for corporations. Though the parents of the Black professionals may have acquired educational and economic success themselves—hence, having to navigate predominantly white environments also—these parents may have lacked the appropriate and necessary knowledge that Black STEM professionals need to navigate white corporate environments in particular. The mentors participants encountered were often professional peers who work in the STEM field and have experiences working in corporate jobs. Therefore, such mentors are able to give Black professionals important knowledge that will be directly applicable and worthwhile to their STEM careers.

Secondly, while the youngest participant in this study was born in 1994, the rest of the participants were born between 1964 and 1989. This suggests that the parents of the participants in this study were born before or during the civil rights era. I would argue that the point in time in which professionals and their parents are in the workforce matters for their experiences. It is possible that professionals’ parents, educated or not, were not clued in to how race and racism play out in the workplace during the post-civil rights era of color-blind racism. It is unclear to what extent parents of Black Americans see their children as being “held back” in the 21st century. All of these things would certainly affect the extent to which educated Black Americans effectively teach their children about how to get ahead in a racially stratified society.
With the exception of one participant (of sixteen) who pursued STEM due to family members working in such fields, the parents of the participants in this study took on various occupations outside of STEM. Therefore, while the educated parents of Black professionals may have been able to clue them in to the fact that whites and Blacks play to a different set of rules in the work world, they may have lacked the particular experience or knowledge needed to tell Black professionals what those rules are. This is particularly important because Black professionals are able to derive explicit “rules” about working in corporate America from the racialized advice of their mentors. Moreover, through their own experiences in the workplace, Black professionals learn to decipher the rules that they need to play the game of getting ahead effectively. Whether through mentors or own their own, Black STEM professionals learn what the rules of the game are.

Though the parents of Black STEM professionals may have been in a position to offer them economic insight and cultural capital, through the process of racial socialization and by other means, it is possible that these parents lacked the kind of knowledge and/or skills needed for Black STEM professionals to appropriately navigate the corporate arena—one that involves intense competition and position jockeying among workers. The findings of my study imply that Black professionals need more than cultural capital to get ahead. While the right kind of cultural capital (e.g., middle-class cultural capital) can provide individuals with symbolic resources that facilitate upward mobility in the workplace, the Black STEM professionals in this study (and their mentors) suggest that Black professionals must also know how getting ahead is racialized. If Black professionals lack knowledge about how upward mobility is achieved differently for whites and Blacks, they will be economically disadvantaged. Because corporate environments remain white spaces where whites are likely to operate with an implicit white racial frame,
Blacks must acquire the education and skills necessary for them to play the *rigged* game of getting ahead successfully. Inequality is inherent in how the game of getting ahead is structured. As previously discussed, in learning the rules of a racialized game, Black professionals simultaneously perpetuate and resist inequality—reinforcing the status quo while also defying the odds stacked against them.

Although implications have been drawn based on the participants’ social class background (e.g., ideas about their parents’ cultural capital), no analytical differences were found among the class groups. There were no clear differences between the kinds of advice mentors gave professionals across class categories. Furthermore, I found no differences across classes in the kind of experiences, or rules, participants discussed in their personal accounts (or racial frames). One reason for the lack of differences found could be the small sample size of this study (N = 16). Secondly, a little more than half of the sample came from an upper-middle-class background (N = 9). A larger sample, and one that includes more class diversity, could yield different results in which class differences are found among participants, the racialized advice they receive, and how they experience the workplace and getting ahead.

**CONCLUSION**

In this study, I have examined the mentoring experiences of Black STEM professionals. I find that mentors, notably Black mentors, aid in Blacks’ professional development by teaching them that organizational settings operate according to a different set of rules for whites and Blacks. Through the use of racially framed advice, Black mentors instruct Black STEM professionals about how to play the game of getting ahead in corporate America. In support of previous literature, this study provides evidence of the important role mentors play in the career advancement of people of color within organizations. Furthermore, this study contributes to the
literature an understanding of how mentors matter for the mobility prospects of professionals of color. In the case of Black STEM professionals, mentors teach them the unwritten racialized rules of getting ahead in corporate America.

Implications

Similar to research on the behaviors and emotion work of Black professionals in predominantly white work settings, this study highlights the racial tasks that Black STEM professionals engage in, such as adopting behavioral and verbal acts in order to successfully navigate white corporate culture. Consequently, in following organizational rules that are established for Blacks (and created by whites), Black STEM professionals perpetuate inequality by maintaining the status quo within these organizations. However, Black professionals also challenge the status quo of these organizations by abiding by unwritten rules and thereby getting ahead. My research informs scholars of the ways in which corporate mobility is achieved differently for whites and professionals of color. While both white and Black professionals must adopt and enact competitive behaviors to succeed in corporate environments, Black professionals cannot compete effectively without recognizing that they will be judged differently than whites within the same settings. Moreover, an implication of this study is that middle- and upper-middle-class cultural capital is not enough for Black professionals to get ahead. In addition, they must understand the unwritten rules that govern organizational and professional settings.

This study also addresses the leaky pipeline phenomenon. Scholars are well aware of the underrepresentation of women and minorities in STEM fields, and that there are multiple reasons for why this is the case. Mentoring has been proposed as a possible remedy. The findings of this study suggest that mentors can be useful for more than academic and professional socialization.
Mentors can serve as allies and informants, teaching individuals about the unwritten rules and procedures of the organization. Mentors can provide individuals with information that is crucial to their upward mobility, offering them knowledge they may not have known or learned otherwise. In sum, this study extends (or builds upon) literature on the important role of mentors in the lives of women and minorities in STEM.

More so, this study brings insight into how Black Americans can be removed from the pipeline yet also kept in. By understanding that whites and Blacks are subject to different workplace rules—and more importantly, knowing what the rules are—Black STEM professionals are better able to maintain their reputations, jobs, and overall careers. Knowing how to play the game of getting ahead in corporate America can help secure Black professionals’ presence in the pipeline, keeping them from “leaking out” (i.e., diverting from STEM fields). Furthermore, I discovered that mentors can teach Black STEM professionals about the game of getting ahead, or they can learn on their own through personal experience. The fact that some Black STEM professionals learn on their own how to play the game of getting ahead may account for the loss of Blacks from the pipeline. It could be the case that Black STEM professionals who never learn or understand how to play the game are some of the ones removed from the pipeline. The substantive importance of this study lies in its contribution to scholars’ understanding of the processes and features at play that shape the likelihood that Blacks will remain in STEM, and be successful in doing so.

Limitations and Future Research

While this study offers important additions to the literature on Black professionals, mentors and organizations, and professional socialization, it is not without limitations. For one,
the retrospective nature of this study (i.e., having participants recall racial instances and experiences with mentors) suggests that individuals may have demonstrated a current sanitized view of themselves and past events; a clearer view than the one they had at the time of their experiences. Relying on hindsight when discussing individuals’ mentoring experiences can give rise to retrospective biases (Hoffrage, Hertwig, and Gigerenzer 2000; Conway 1990). Secondly, snowball sampling and recruiting from one professional STEM organization may have led to my sample being more homogenous (e.g., participants of similar social class and STEM occupations) than heterogeneous.

More importantly, while this research identifies the usefulness of mentors in Black people’s professional socialization and career development, it fails to identify the conditions under which mentors are necessary for Black professionals’ understanding of how the game is racialized. There is evidence to suggest that Black professionals can learn the rules of the game on their own. Therefore, future research should address under what conditions it matters for Black professionals to have mentors who can teach them about getting ahead. More so, to what extent are mentors essential for learning the rules of the game? Future research should examine the costs associated with learning the game through trial and error. Future research should also aim to identify the unwritten rules that other groups of color, and women, encounter and adhere to in predominantly white, male workplaces.

Finally, although this study identifies a dozen or so of the rules that Black professionals must follow to advance within predominantly white organizations, it does not fully account for the effect that adhering to such rules has on individuals. While a couple of participants discussed experiencing some form of inauthenticity in having to separate their real (or Black) selves from their corporate (or workplace) selves, more needs to be done to investigate how playing such a
game makes Black professionals feel. How does abiding by an unwritten set of workplace rules affect Black professionals? Future research should further examine feelings of inauthenticity and alienation among Black professionals who struggle to succeed in corporate America.
REFERENCES


APPENDIX
Interview Guide

1. I am interested in Black STEM professionals and their experiences with mentors. I don’t know much about STEM fields, so can you tell me what you do and how you got into it?

2. I am specifically interested in your experiences with mentors in which race and racial matters were a topic of conversation. For starters, can you tell me about a mentor that you have had?

3. Have you ever talked to a mentor about a racial issue or concern you had? Can you tell me about a time when you did this?

4. Have you and a mentor ever talked about issues related to being Black in a predominantly white environment? Can you tell me about a time when this happened?

5. Who do you turn to for advice about dealing with workplace or career issues, especially those that might have a racial element?

6. Did you ever ask a friend or mentor to help you make sense of something that happened in the workplace?

7. Who do you turn to for advice about being yourself in the workplace, especially when it comes to being a Black person in predominantly white environments?

8. Is there anything else that’s important to know about your mentor or mentoring experience that I haven’t asked about?