The Stuff of Stereotypes: Toward Unpacking Identity Threats amid African American Students’ Learning Experiences

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ABSTRACT

In this article, the authors explore the influence of stereotypes and stereotype threats on African American learners’ experiences in situ, using mathematics-learning contexts as a specific setting. Although there has been growing attentiveness to the social contexts of students’ math-learning experiences, the influence of stereotypes on learning—beyond testing situations—has been largely unexplored, with only a few notable exceptions. The purpose of this article is to shed light on scenarios in which threatening stereotypes unfold, specifically in an institutional context in which African Americans are overrepresented. Drawing on data and findings from a recent study examining mathematics learning and identity in non-credit-bearing remedial math courses, the article centers on three vignettes that highlight features of identity threat in situ: a) identity contingency detection, b) threat susceptibility, c) stereotype cues (e.g., critical mass), d) transmission of stereotypes, and e) pedagogical implications of identity threats. The article concludes with implications for studying the intersection of stereotypes and learning experiences.

INTRODUCTION

They are like eyeglasses we have worn a long time. They are nearly invisible; we use them to scan and interpret the world and only rarely examine them for ourselves. (Delgado, 1989, p. 2413)

Stereotypes abound—and necessarily so. They are essential psychosocial tools that influence our individual capacities to perceive and engage complex societal contexts. From a social-psychological perspective, Stangor and Schaller (1996) describe stereotypes as “mental representations of the world” (p. 6), of “social categories” (p. 8), and of “social groups” (p. 280) that are shared broadly. They are a kind of representative heuristic (Kahneman & Tversky, 1972; Nisbett & Ross, 1980). The theoretical basis for stereotypes is not restricted to psychology, however; stereotypes have conceptual counterparts across numerous and overlapping disciplinary perspectives: storyline (Harré & van Langenhove, 1999; Nasir, Snyder, Shah, & Ross, 2012; van Langenhove & Harré, 1999), (big D) “Discourses” (Gee, 2008, p. 2), and “master narratives” (Martin, 2007a; Nelson, 2001). We appropriate, invoke, and perpetuate them, and they aid us in making sense of social settings, situations, and interactions with others (Nasir, 2012; Stangor & Lange, 1994).

Especially for the persons to whom they would be relevant, stereotypes are usually more than benign catalysts or merely over-simplified, fixed categorizations. Because stereotypes are often linked to biases, personal prejudices, and/or systemic discrimination, they become cultural assumptions about people that they represent. Both negative and positive stereotypes can threaten their subjects’ identities when recognized as relevant (Cheryan & Bodenhausen, 2000; Steele, 1997, 2010; Steele, Spencer, & Aronson, 2002), but in some cases, stereotypes may affirm individuals for whom they would be relevant (e.g., the “Good Samaritan” master narrative, see Nelson, 2001, p. 154).

Stereotypes are partial and typically inadequate summaries of socially shared understandings about individuals and the groups to which they may belong (Nelson, 2001). They are incomplete narratives or storylines. In this way, stereotypes adhere to a range of potential effects, and correspond to a similar range of opportunities and vulnerabilities (Larnell, 2011; Purdie-Vaughns, Steele, Davis, Dithmann, & Crosby, 2008). In educational contexts, threatening stereotypes not only offer fragments of explanations for the vulnerabilities of certain groups, they can discourage their targets from persisting in specific disciplines or in academic pursuits more broadly.

Despite their ubiquity amid our lived experiences, the influence of stereotypes in educational contexts has been explored primarily with respect to intellectual performance in experimental situations (e.g., Steele & Aronson, 1995; Steele et al., 2002), with some notable exceptions (e.g., McGee & Martin, 2011; Nasir et al., 2009; Ruthven, 1987). Our aim is to extend the focus on Black students in this issue and in mathematics learning contexts by exploring the ways in which stereotype threats are cued, appropriated, and paired with power-laden, racialized microaggressions (Tuit & Carter, 2008) in those contexts. It should be noted parenthetically that the terms “Black” and “African American” are used interchangeably in this article.

IDENTITIES, STEREOTYPES, MATHEMATICS-LEARNING EXPERIENCE, AND AFRICAN AMERICAN STUDENTS: AN EMERGENT INTERSECTIONAL FOCUS

Coinciding with broader social and sociopolitical turns in mathematics education (Forman, 2003; Gutiérrez, 2010; Larnell, 2013a; Lerman, 2000; Martin & Larnell, 2013; Stinson & Bullock, 2012), perspectives on equity, race, discourse, identity, and power
have been slowly integrated into: research on mathematics learning (e.g., Martin, 2009; Secada, Fennema, & Byrd, 1995), resources for and research concerning mathematics teaching (e.g., Aguirre, Mayfield-Ingram & Martin, 2013; Stinson & Wager, 2012), and analyses of mathematics education policy (e.g., Gutstein, 2010; Martin, 2008; National Council of Teachers of Mathematics [NCTM], 2000). During the past few decades particularly, there has been growing attentiveness to the ways that African American students experience mathematics learning in school contexts—signaling a much-needed counterpoint to traditionally emphasized measures of achievement (e.g., standardized testing results and school grades) as the dominant frame for interpreting classroom teaching and learning (Ladson-Billings, 1997; Larnell, under review; Martin, 2007b; Nasir et al., 2009; cf. Leonardo & Grubb, 2014). As Nasir and colleagues note, the association between African American students and academic underachievement has become a tremendously persistent master narrative, and the risk is that this stereotype may be appropriated as African American students engage situations in which such a notion could be perceived as relevant.

Alongside this broader shift toward better understanding and unpacking students’ mathematics learning experiences, many researchers have turned to identity as an analytic lens for examining the character and impact of students’ in- and out-of-school interactions with mathematics teaching, learning, and thinking (e.g., Cobb, Gresalfi, & Hodge, 2009; Martin, 2000; Sfard & Prusak, 2005). From this emerging and growing body of research, scholars are beginning to uncover and unpack the dynamics of moment-to-moment classroom events and their relationship to students’ learning experiences and identities (e.g., Bishop, 2011), and the ways and processes by which identities are shaped in relation to math learning experience.

PURPOSE, CENTRAL QUESTION, AND KEY THEMES

The primary and general purpose of this article is to shed light on processes by which and scenarios in which stereotype threats or “identity threats” (Steele, 2010) emerge and become relevant in academic contexts and among Black students. Accordingly, the central question of the paper also centers the task of unpacking and illuminating key elements of stereotype threat: Beyond the context of performance on math assessments, how do threatening stereotypes unfold amid the mathematics learning experiences of African American students?

Following a discussion of relevant theoretical concepts, we present and discuss three data-sourced vignettes that highlight and richly contextualize the following key themes: a) identity contingency detection, b) threat susceptibility, c) stereotype cues (e.g., critical mass), d) social perpetuation of stereotypes, and e) implications of stereotypes with regard to teaching and learning. As a specific context for the vignettes, we focus on the math-learning experiences of young African American adults who, as first-year undergraduates, were enrolled and participating in non-credit-bearing remedial mathematics courses at a four-year university (see Larnell, under review, for full description of the study). Overall, our purpose is to bring attention to the potential influence of threatening stereotypes—particularly for Black students—and explore the relation between those threats and students’ learning experiences. Although we do review relevant theoretical concepts and provide descriptions of empirical contexts, we recognize that the purpose of our work is to illuminate but not resolve; that is, our aim is to promote attention to these issues and concepts by evincing them in vignettes drawn from students’ narrated learning experiences.

Relevant Theoretical Concepts

An exhaustive, cross-disciplinary review of literature on stereotypes, identity threats, and related topics is beyond the scope and bounds of this article; in this section we briefly highlight several associated concepts that are especially germane to the present purpose. Specifically, we discuss Steele’s (2010) and his colleagues’ (e.g., Purdie-Vaughns et al., 2008) perspectives on stereotypes as identity contingencies and how identity threats are “in the air”—that is, environmental conditions that individuals must negotiate because of an identity they have in a certain setting (Gates & Steele, 2009). We then consider those particularly racialized identity threats that are contingent on racialized identities (Gates & Steele, 2009; see also Nasir, 2012). As examples, we discuss the master narrative of African American underachievement (Ladson-Billings, 1997; Martin, 2007a) and the “model minority stereotype” that is a perilous (but seemingly positive) contingency of Asian American youth and young adult identity (Lee, 2009). Finally in this section we discuss the ways in which positive and negative responses to stereotype threats have been theorized and empirically evinced: stereotype lift, domain “disidentification,” identity infiltration, stereotype management, and counter-narrating.

Identity Contingencies and Cues

According to Steele (2010), stereotype threat is a “standard predicament of life” that is “tied to an identity” and “is present in any situation to which the stereotype is relevant” (p. 5). In this way, stereotype or identity threats are social identity contingencies, because they are “things you have to deal with in a situation because you have a given social identity” (p. 3). Social identity contingencies are “possible judgments, stereotypes, opportunities, restrictions, and treatments” that, when cued, can influence “the extent to which a person will trust and feel comfortable in a given setting” (Purdie-Vaughns et al., 2008, p. 615). There are social identity contingencies available for any conceivable identity: being “old, young, gay, a White male, a woman, Black, Latino, politically conservative or liberal, diagnosed with bipolar disorder, a cancer patient, and so on” (Steele, 2010, p. 3). (For an elaborated operational definition of identity, particularly as a narrative construct, see Larnell, under review.)

When situations are meaningfully linked to specific identities (e.g., being an elder in public spaces), there are possibilities for either positive treatments (e.g., as a senior citizen, one may eat
for free at the buffet on Tuesday) or negative ones (e.g., age discrimination in the workplace favoring young workers). Aside from this example of valorization (or reward), identity contingencies can also be regarded as positive if the person for whom they would apply—and perhaps otherwise threaten—is somehow treated as an “exception” and has self-regard as an exception (Steele, 2010, p. 133n).

When negative identity contingencies are threatening (i.e., identity threats), the danger is that their effects may damage the identities of those for whom the contingencies are relevant (Nelson, 2001). As we discuss further in the following sections, those individuals may take up some part of the threatening stereotype as their own identity (believing it to be an acceptable assessment of them) or they may disidentify with the domain in which the stereotype is triggered—thus, in either case, possibly depriving them of opportunities that may be gained in the setting or domain.

Although identity contingencies—and identity threats, in particular—lie about diffusely “in the air” of the settings in which our identities become a part, they must be activated in order for their effects to take hold or for individuals to respond to them. Contingency cues are the situational mechanisms or features by which contingencies are activated and recognized as relevant to an individual’s identity (cf. Marx & Stapel, 2006). These cues can be subtle, immediate and difficult to ignore, as well as consistent, or inconsistent. For instance, the “critical mass cue” signals the relevance of an individual’s identity when that person has a critical mass of “identity mates” in a certain context (Steele, 2010, p. 133n). We will return to this and other cues in the vignettes.

Racialized Identity Threats

Especially in the United States, some of the most widely held, emblematic, and threatening identity contingencies are those that hinge on racialized identities. Yet, as Nasir and colleagues (2012) assert, “students’ racialized identities matter for school success” (p. 85), and racial storylines become a means of both racialized and academic socialization. In the particular context of a math-learning experience, race and racialized meanings are constantly being negotiated in concert with what it means to be a knower and doer of mathematics (Gholson & Martin, this issue; Martin, 2000; 2007a; Nasir, 2012)—and consequently, who can and who cannot avail themselves of opportunities to learn in math contexts.

As a version of a broader deficit-laden master-narrative on academic underperformance among African Americans, there is a longstanding racial storyline that juxtaposes “African American status, underachievement, and marginal participation” (Martin, 2007a, p. 149). Although we deeply believe this narrative to be troublingly defective, we also recognize that it must be identified in order to be challenged. Therefore, we aim to debunk storylines that would readily associate students’ racialized identities and academic underperformance by highlighting the complexity of threats and the ways in which Black students may respond to them.

Responses to Identity Threats

There has been relatively little attention paid to the ways that individuals respond to identity threats; instead, much of the focus has been on the relation between identity threats and measured intellectual performance. Characterizing at least some known responses would support the claim that stereotype threats are hardly deterministic; as McGee and Martin (2011) suggest, “students do not automatically experience a suppression of performance in situations where stereotypes exist” (p. 1349). In this section, we highlight several ways in which, from our review of the literature, responses to identity threats have been conceptualized. We focus on both positively oriented and negatively oriented responses to threats, which range from active resistance to threats (positively oriented) to the passive receipt of threats and the (perhaps) inadvertent adoption of stereotypes that substantiate the threat.

Identity “infiltration” / Domain “disidentification”

This threat makes the identity to which it is directed, of all the person’s social identities, the one that dominates emotion, thinking, the one that, for that time, invades the person’s whole identity. (Steele, 2010, p. 75)

According to Nelson (2001), the trouble with identity threats is that they portend damage to one’s self-conceptions and conceptions about others. For Steele and his colleagues, stereotype threat involves a concern that one may confirm a relevant stereotype or if prolonged, “develop expectations about discrimination or marginalization” (Purdie-Vaughns et al., 2008, p. 616). We refer to these twin responses of identity threat as identity infiltration and domain disidentification, respectively. Identity infiltration depicts instances in which individuals adopt or take up the possible identities that stereotypes offer; it amounts to a loss of agency (Nelson, 2001). This suggests more than concern about simply confirming the stereotype; in this case, we include the possibility that others may be concerned about conforming to the stereotype over time. In other words, the “infiltration” occurs when one narrates a first-person identity (Sfard & Prusak, 2005) with elements of masternarratives that are “other people’s stories” about who the person is (Nelson, 2001, p. 107).

Domain disidentification is a response that corresponds to potential “deprivation of opportunity,” particularly apparent when the threat’s target no longer seeks to participate in the domain in which the stereotype threat is known to emerge. As a result, the persons who disidentify with the domain are no longer able to avail themselves of the full opportunities available in that domain (Nelson, 2001). With regard to education and learning experience, domain disidentification is a deeply troubling but anecdotally well-rehearsed response. Mathematics as a domain (and mathematics learning experiences as a key site in that domain) is rife with disidentified interlocutors; it is all too common today, for instance, to hear phrases like, “I’ve never liked math,” and subsequently witness little skepticism or contempt.
**Stereotype lift.** Inasmuch as stereotype threats pose negative identity-contingent possibilities for their targets, there has been some attentiveness to situations in which threatening stereotypes may provide a “boost” for non-targets (Marx & Stapel, 2006; Walton & Cohen, 2003). That is, an individual’s response to a threatening stereotype of someone else may actually be stronger performance within a domain, because that identity threat does not apply to the non-target’s identity. With regard to threatening racialized stereotypes, stereotype lift considers the impact on “non-historically marginalized groups (e.g., White males) when Blacks or other marginalized groups are stereotyped” (McGee & Martin, 2011, p. 1348). The stereotype-lift response to threatening contingencies—i.e., a lift in performance or possibly as subtle as a lift in morale—suggests that the processes by which stereotypes and stereotype threats unfold is more complex than the self-concept of the person under threat.

**Stereotype management.** More recently, McGee and Martin (2011) introduced the concept of stereotype management as a counterpoint to stereotype threat, accentuating the need to highlight academic resilience among members of groups that are routinely stigmatized by threatening stereotypes. Stereotype management is defined as a “tactical response to the ongoing presence of stereotype threat” (p. 1354). Prevalent among high-achieving students, stereotype management is similar to stereotype threat in that both are thought to affect the vanguard of a group (Steele, 2010).

We argue that stereotype management is a comprehensive strategy that begins before a given stereotype is cued as relevant to an identity. Engaging in stereotype management involves diffusing the negative fragments of stereotypes and converting them to sources of motivation. In this situational response, an individual wards off the negative potential of a threatening stereotype by reorienting its message. Put differently, stereotype management is akin to “taking the bull by the horns;” that is, it is like entering a space in which you are aware of potential identity threats, refusing to become a victim of such threats, and instead using those threats as motivation to persist.

**Counternarratives.** Although stereotype management may involve counter-narrating, we argue that these two responses are fundamentally distinct. While stereotype management involves using a stereotype as motivation, counternarratives are alternative stories that actively and knowingly resist the impending threat and oppressive elements of a stereotype or masternarrative (Nelson, 2001). Unlike stereotype management, counternarratives are produced in response to a cue. Beyond mere motivation, counternarratives refuse the coercive power of identity threats, and they aim to “retell the story about the person or group to which the person belongs in which a way as to make visible the morally relevant details that the master narrative suppressed” (p. 7).

THE STUFF OF STEREOTYPES, IDENTITY THREATS, AND MATH-LEARNING EXPERIENCE: THREE VIGNETTES

In this section we present three vignettes to illustrate some of the aforementioned theoretical concepts and to discuss and contextualize those concepts in relation to students’ learning experiences. Through each scenario, we show how threatening stereotypes are cued for individuals, we highlight the sources and contributing factors that substantiate and perpetuate stereotype threats, and we suggest how classroom-level learning experiences may be influenced by teachers and students when stereotypes are evoked. As much as is possible within this format, the vignettes are intended to not only serve the purpose of illustrating concepts but also to portray the experience of students’ “wrestling” with the deeply contextualized processes by which stereotypes unfold (Nasir, 2012).

Although the vignettes are presented as stories in paragraph form, the embedded storylines are derived directly from qualitative data collected as part of a broader study that was focused on Black undergraduates’ learning experiences while enrolled in non-credit-bearing remedial (NCBR) mathematics courses. The people described in the vignettes are real (but pseudonymously represented), and events discussed in the vignettes were recounted by the study’s participants or otherwise chronicle in the conduct of the study.

**Description of Empirical Context, Study, and Data**

To prepare the vignettes presented in the next section, we reexamined portions of qualitative data from a recent study conducted by the first author to investigate the mathematics learning experiences of African American students then enrolled in NCBR mathematics courses at a four-year university (Larnell, under review; see Larnell, 2013b regarding NCBR math courses). In particular, we drew on extensive field notes and other artifacts from observations as well as narratives derived from series of semi-structured interviews with students, instructors, and other institutional personnel.

The course setting in which these students were enrolled is a critical component in understanding the nature of the identity threats they faced. The broader study was aimed not only at investigating issues of identity and engagement among Black students, but was also intended to explore those issues specifically in the context of remediation and the transition to mathematics courses at four-year universities. NCBR courses in both mathematics and writing have become preeminent gatekeepers in two- and four-year universities, despite their aim at helping students to shore up their content knowledge to satisfy general requirements or concentration-specific prerequisites. These courses, particularly NCBR mathematics courses, are replete with stereotypes and stigmas; students who are placed in them are often thought to have been conditionally admitted, thought to lack academic resilience, or even thought to be wholly academically deficient. Unfortunately, the data on NCBR math courses do little to debunk the stigma that often befalls students who enroll; the trajectory toward graduation is often lengthened (sometimes by several...
semesters, as students take the courses repeatedly before passing), and students who enroll in the NCBR courses are more likely to leave the university prior to graduating (Larnell, 2013b).

Although the central attention here is given to identity threats, we also discuss the environments of these classrooms, issues of teaching and learning, institutional support systems that complement NCBR coursework, and the ways in which students navigate the physical and social institutional environments that encompass these courses and students. Following each vignette, we discuss and analyze the scenarios in relation to theoretical concepts.

**Vignette 1: Contingency Detection, Critical Mass, and NCBR Math Courses at a Predominantly White University**

Imagine a long, institutional hallway with evenly spaced doors lining each side; freshly painted cinderblock walls (beige); bright fluorescent lighting overhead; and the sounds of orderly foot traffic and casual conversations from the adjoined rooms, within the hallway itself, and trickling down from the floor above. Today is Cedric’s first day of college classes, and he is headed to his first math course. After a confusing rush to find the correct building—and getting it wrong, twice—he is late and hurrying. There are easily hundreds, maybe thousands, of people walking around. Cedric joins a stream of students moving at a panicked pace through the meandering crowds. As he enters a building and scampers down the hallway in search of the math class, he begins to notice that many of the chalkboards are already littered with numbers and symbols, and some of those messy formulas remind him of the high school calculus course in which he once excelled. He soon enters a room near the end of the hall on the left.

As Cedric enters the class for the first time, he quickly scans the room for available seats. Although he naively attempts to disguise his tardiness, only the front-row desks have gone unoccupied, and he is forced toward the center of the instructor’s gaze to claim a seat (again, reminiscent of high school). In full view, he reaches in his bag for a notebook and mechanical pencil. After he gets settled and begins writing (and thinking, “Wow, this stuff is really simple.”), he briefly looks around, and he instantly notices an unexpected but striking pattern: Most of the students in the room are either Black or Brown—that is, from what he can discern, almost every student seems to be African American (like him) or Latina/o. Initially, Cedric thinks little of it (Why should he?), even though the vast majority of students at the four-year university are White. It does, however, seem oddly affirming—at least initially.

Two weeks later, he finds himself back in the same hallway, headed toward the classroom near the end and on the left. He’s early this time and able to meander and notice more. As Cedric passes the other classrooms, he notices that several mathematics lectures are concluding. Suddenly, he also notices that there are very few, if any, Black or Latina/o students in those classrooms. He doesn’t quite recognize the symbols on the board; they are much more complex and foreign than those typically appearing in his course. The next room has a similar scene: advanced mathematics on the board and very few Black or Brown students in the seats.

Over time, as Cedric travels that hallway to attend his math class every day, he continually notices the other rooms and—seemingly on cue—he rehearses his wondering about what goes on there and why there aren’t more students who look like him, an eighteen-year-old Black male. (And why, he thinks, don’t those other classes meet every day like mine?) Eventually, all the noticing and wondering begins to coagulate into a kind of narrative, the substance of which is informed by a series of questions like these: Why are all the Black and Latina/o students sitting together in those low-level math classes? What do others think of the Black and Brown students in those math classes? Do others think that only or mostly Black and Brown students take these math courses? Do others think that members of my group are not smart enough to take those other, advanced math courses? Am I smart enough?

**Discussion of Vignette 1.** Cedric may have been enrolled in an NCBR math course, but he certainly considered himself to be a high-achieving student, and in the previous year was certainly in the vanguard of his high-school graduating class (he graduated as one of several salutatorians, and he successfully matriculated at a major four-year university). So, as Cedric travelled those hallways to attend his math class, he was juxtaposing his academic status as he saw it against the visual information that he was collecting by looking into other university mathematics classrooms.

According to Steele (2010), this practice that Cedric adopted was purposeful, he was searching for answers to the questions posed near the end of the vignette. That is, Cedric was engaged in contingency detection by canvassing a setting to confirm or disconfirm suspicions that a stereotype or identity contingency may be relevant. For Cedric this suspicion was triggered by the higher numbers of African American students in his math class as compared with other math classes—particularly, the more advanced math classes. This particular trigger, or cue, is well known in the stereotype-threat literature; Steele (2010) calls it the critical mass cue. Although “critical mass” is not a precise term, the numbers of persons in a given environment and their social attributes can be enough of a signal to bring about the onset of stereotype threat.

As the end of the vignette suggests, Cedric’s negotiation of the critical mass cue and the contingency detection work caused him to question his own status and capacity in the setting, at least initially. As is discussed elsewhere in more detail (Larnell, under review), Cedric’s response to the threat was to counter-narrate. He recognized the racialized identity threat and what it may have signaled about him and responded by asserting that he would not only do well in the course, but that he would do so to prove that African American students were indeed capable of doing well in courses like it (Larnell, 2013a).

**Vignette 2: Perpetuating Stereotypes in an Academic Support Group**

Four weeks into the semester, a young woman named Vanessa enters a classroom that is already brimming with lively conversation and activity. There must be at least 30 other similarly aged students
there, with a few who seem to have the know-a-bit-more bearing of older, more experienced students. Vanessa does not seem surprised that nearly all of the students in the room are, like her, African American. The space reminds her of her math course, particularly those moments before instruction begins, and students are engaged in casual group conversations, commiserating and joking around, eating and sharing snacks, or making plans for the evening or weekend. In fact, Vanessa thinks momentarily that she may be in the wrong place, but she quickly remembers that although she is entering a classroom, she is not there for a normal class.

Vanessa finds an open desk-chair combo near a couple of known acquaintances in the back corner of the room and away from the door. She’s glad to have a full glimpse of what was going to occur. She sees several more students enter the room before an obviously older man enters and closes the door. The man begins to speak immediately and resolutely to the crowded room and introduces himself as Jeff, a staff member in the university’s student support office. He refers to the group as Team NESS (Network for Enhancing Student Success), and he then asks the new folks in the room to quickly introduce themselves. Upon her turn, Vanessa offers her name, her hometown (which is immediately welcomed by surprisingly many cheers), and her status as a first-year student. She smiles at the warm reception and resettles comfortably in her seat.

After the introductions, Jeff shifts to the business of the day, and the purpose of the group gains greater focus for the newcomers. As the acronym implies, Team NESS is intended to help first-year students transition to the university’s campus and academic coursework. The group’s approach to this mission is broad, regularly taking up issues as diverse as academic tutoring, homiesickness, homecoming activities, and conflict resolution. Team NESS’ central tactic, however, is student-centered and -led support; often the sessions are completely structured around students asking and answering each other’s questions. Jeff explains that his role is to preside over these conversations, set the tone, and keep attendance for reporting purposes.

For the day’s session, a central topic is MATH 099, the university’s only NCBR math course. It is a perennial topic, as many of the first-year students were usually enrolled in the course. This course is a daily part of Vanessa’s experience, and her back straightens as she hears Jeff claim that Team NESS has been dealing with the topic since he began this group years ago. Suddenly, however, Jeff asks if the “MATH 099 crew” (pronounced “Oh-ninety-nine”) is ready, and Vanessa sulks with an immediate pang of nervousness that causes her to squirm in her seat. She had no expectations of participating in front of a crowd. Her confusion is abated as a group of older students stand and approach the front of the room. Jeff introduces them individually by name and collectively as members of Team NESS’ previous cohort.

As the MATH 099 crew gathers in front of the classroom, they rearrange spare desks in the first row into a configuration that simulates a setting-within-a-setting. With a small nod from their leader, the group of six immediately initiates a loosely prepared skit. They announce themselves as the MATH 099 crew, and they tell the audience that the skit will focus on navigating their math classes and the importance of seeking help with math when needed. One of the crewmembers steps forward in the role of the instructor, and the others assume the roles of the students. Along with most of her peers, Vanessa is rapt with anticipation for what they may say, although there seems to be no wonder about why the skit is focusing on just one course, MATH 099.

The 12-minute skit incorporated numerous issues and circumstances that involve transitioning to university life and reflected the actors’ personal and anecdotally acquired experiences. The skit’s loose plot was intended to reflect these classes and their typical routines, but it also showcased the student-centered perspective on what actually occurs. The skit portrayed students who were attempting to capture as much of the breakneck-paced lecture as they could, while for many of the actors this ended quickly as they instead opted to ignore the classroom activity and carry on with their social exchanges. Eventually, none of the actor-students were paying much attention to the actor-instructor, who was seemingly oblivious to the loss of audience. The skit ended abruptly as someone imitated a ringing bell (which was not a true element of the college classroom), and the actor-students dashed madly for the door, leaving their books behind.

**Discussion of Vignette 2.** “Sustained and systematic deception by an intimate, then, is potentially even more destructive to a person’s sense of her own worthiness to act than is oppression” (Nelson, 2001, p. 33). Like Cedric, Vanessa also considered herself to be among the vanguard of her high-school graduating cohort. She was ranked in the top tenth of her class, and she had been an inductee in her school’s local chapter of the National Honor Society. After matriculating at the university, however, Vanessa began to deeply question her academic status as she renegotiated her identities (e.g., racial, generational, academic, gender) within that new institutional context. She was in need of supports to help her transition successfully, and Team NESS was seemingly a perfect match. Team NESS was set up especially to support first-generation college students (which she was), and college advisors carefully guided African American and Latina/o students from the state’s largest urban area (Vanessa’s hometown) to these groups to offer culturally relevant supports. Also toward that end, African American or Latina/o staff members typically guided these university-based groups.

In this particular case, the Team NESS experience may have had unintended and threatening consequences for Vanessa. As a kind of twist on the critical-mass cue concept, the largely Black student group in Team NESS was appealing to Vanessa and enhanced her uptake of the messaging taking place in that setting. Here, the critical mass initially signaled affirmation, not threat. Vanessa attended the meetings regularly and in interviews talked at length about their impact on her growing comfort at the university. For Vanessa, Team NESS was a kind of identity-affirming counter-space within the university’s largely White campus body (Carter, 2007).
Although Team NESS affirmed some of her identities, the messaging of the Math 099 skit group sent unintended, identity-contingent threats to Vanessa’s domain-specific identity (i.e., mathematics) in ways that connected to her racialized identities—signaling that, in this case, Black students in the class were not seriously pursuing the opportunities to learn that may have been available. Instead, the skit gave Vanessa imagery of domain disidentification, and as the semester progressed, Vanessa referred to those lingering scenes as she began to question her own willingness to progress in her math courses.

Those growing sentiments began to affect Vanessa’s first-person math-specific identities. Although she was a graduate of a STEM-focused curricular track in high school and reported a desire to pursue a STEM-related field, that focus began to diminish as she continued to doubt her capacities. At one point during an interview Vanessa announced that Math 099 was “where I needed to be,” a statement that simply did not align with her high-achieving status, both previously and in the Math 099 course (in which she had the highest exam average).

**Vignette 3: Negotiation of Stereotypes between Student and Teacher and Cues about the Setting’s Inclusiveness**

A few days after attending the Team NESS meeting, Nicole returns to her math class near the end of a beige hallway. She quickly notices the usual pre-class conversations around the room, and remembering the skit group’s parody, she smirks as she approaches her seat. She makes her way toward the back of the room, and finds three of her classroom buddies: Bishop, Renetta, and Joe. Several other students drop in and out of nearby conversations—with topics that include happenings in the student section at the recent basketball game, anticipations of an upcoming party, or whether or not one should return home for the Thanksgiving holiday. Although Nicole is an active participant in the exchanges (“Oh, I’m definitely going home,” she says in a matter-of-fact way), she seems slightly less engaged than the other three. As the instructor enters the room, the conversations are hushed but continue until the class officially begins.

The instructor begins with an announcement about an upcoming exam and admonishes the students for their poor performance on the previous one. Although it is uncommon for faculty in her department to be called by their first names by students, she insists that students call her Maria. She seems to have a good rapport with many of the students, although there are several students in the classroom who are clearly disengaged. Her criticism of the students’ performance on the previous exam doesn’t win any converts.

Nicole is certainly not pleased with Maria’s discussion of the exam. (She performed poorly.) Although Nicole understands the motivating purpose behind Maria’s declaration of disappointment, Nicole feels a lack of connection with Maria and thus interprets the discussion as being condescending and antagonistic. Nicole leans over to Bishop and whispers, “She don’t really care.” As Nicole discusses in a later interview, she feels that Maria consistently demeans the students and their capacities, often using labels to describe them as underachievers or otherwise lacking the skills to succeed in the course. For instance, she often refers to some of the subpopulations of students in Math 099 as “Team NESS students” (as in, “and for those Team NESS students”), and sometimes includes commentary about their capabilities (“they don’t like to think” or “people who hate math”). As Nicole would later admit, it was difficult to disassociate Maria’s talk about underperformance and her indirect allusions to the largely Black and Latina/o classroom.

**Discussion of Vignette 3**. Set in the classroom, this vignette positions a student’s perceptions and identity work against the actions and perceptions of an instructor. As Maria, the instructor, tries to motivate her students to perform better her admonitions are interpreted as race-tinged slights by Nicole, a student positioned in the classroom’s periphery. Nicole is cued by the instructor’s use of labeling to describe the student population, and responds to the threat by continuing to disengage and disidentify with the domain.

Unlike Cedric and Vanessa, Nicole was not regarded as being in the academic vanguard. She did not identify as a “high achiever,” despite successfully matriculating in the university and performing well in some of her other courses. In an interview, she attested to being “cheated” in high school:

> Let’s be real here, that’s how it went. So that’s how high school was for me when it came to math. So I guess I cheated myself and I feel like the teachers cheated me too. So now I am paying the price for it.

Nicole’s struggles in the course were solidified as she continued to associate the instructor’s references to past cohorts and to what successful students should do and how they should behave. Nicole’s growing sentiments were reflections of the instructor’s continued appraisals. For instance, Nicole’s notion of being cheated was very similar to a statement that the instructor often shared with students in class:

> And so, it’s hard for them to accept that the lowest [college] class is not . . . is too high for them. But it’s . . . I always tell them, it’s not your fault. It’s your high school’s fault. You weren’t prepared when you got here.

**CONCLUDING REMARKS AND IMPLICATIONS**

Our central aim in this article was to provide an in situ sense of the influence of stereotypes and identity threats amid Black students’ learning experiences, using mathematics-learning experience as a particular context in which to explore stereotypes and identity threats. We interpreted this task as an “unpacking” which involves considering and cataloging the conceptual web in which the primary concepts—identity, stereotype, and learning experience—are situated. We also aimed to deepen the theoretical basis for understanding the influence of stereotypes and stereotype threats in order to encourage other researchers to consider their roles and, perhaps, for teachers and other instructional leaders to consider their roles in their practice and institutions, as well.
Through three illuminating vignettes, we raised questions and scenarios about the sources of identity threats, the ways in which they are cued for students, and the possibilities for students to respond to threats and the resources on which they draw in order to respond. The first vignette focuses on Cedric’s construction of mathematics learning and his own positioning. Cued by the high numbers of Black students in his math course, he openly explored the halls to investigate the possible interpretations of his suspicions about the unusual and unexpected critical mass. In the second vignette, we challenged the conventional understanding of critical mass cueing, raising the possibilities that critical mass could trigger identity affirmation as well as threat. In that scenario, Vanessa was learning the nature of localized identity threats that were being perpetuated by more experienced students who also shared other identities with the students—affirming their trustworthiness. Given the connection, Vanessa found it difficult to resist the stereotype-laden messaging that was occurring in those groups. In the third vignette, we examined the flipside of affinity-oriented narrative-sharing. In that scenario, Nicole sees the instructor as being a disinterested outsider and interprets the instructor’s attempts to connect and express an interest in the students’ trajectories as threats that align to generalizations about her group membership.

Across the vignettes, we aimed to stress that stereotypes and related identity threats are complex constructions that unfold for students in deeply context-dependent ways. Performance on tests is only one setting in which stereotype threat occurs; as we have shown, these threats emerge in the classroom, in the hallways, in student support groups, and certainly among the minds of the students that are negotiating these environments.

References


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