Researching race without researching White supremacy in mathematics education research: A strategic discursive practice

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In this essay, through reviewing three "equity" articles over the span of nearly 30 years, the author argues that researching race in mathematics education research has become a strategic discursive practice. But what about racism? What happens when racism is opened up —theoretically and methodologically—as an object of inquiry in mathematics teaching and learning? Doesn't researching racism require an examination of the pervasiveness of White supremacy? That is to say, can we (ethically) examine racism without examining White supremacy? After all, aren't racism and White supremacy two sides of the same coin?

INTRODUCTION

A few years ago, I wrote an editorial titled “Race′ in Mathematics Education: Are We a Community of Cowards?” (Stinson, 2011) The purpose of the editorial was to bring to light that the percentage of (Anglophone) peer-reviewed journal articles which address race and mathematics teaching and learning had stayed pretty much constant throughout the 1980s to 2000s, roughly 4%. Using the work of Lubienski and Bowen (2000) and Parks and Schmeichel (2012), I provided numerical evidence that there had not been a proliferation of “race talk” (or gender talk, or culture talk, etc.) within the mathematics education literature. In building my argument to the provocative question are we a community of cowards, I made reference to some of the earlier research and scholarship that began explicitly attending to issues of race in mathematics teaching and learning, and then briefly highlighted current research and scholarship. In this essay, I revisit the editorial to do two things: (a) review and contextualize three journal articles on race and mathematics education; and (b) bring to the fore, for discussion, a vital aspect that continues to

1. The argument was counter to the collective sentiments of the mainstream or “White-stream” (Gutiérrez, 2011) mathematics education community at the time; see Martin, Gholson, and Leonard (2010) for a critical response to the assumptive question Where's the math in mathematics education research? (Heid, 2010)
be absent in research (and in conversations generally) on race and mathematics education.

A couple of caveats are necessary before I begin, however. First, the discussion is centered with and in a USA perspective; that is the sociohistorical and geopolitical context that I know. The discussion, however, is neither reflective of only the United States of America nor should it remain only in the USA context. Valoyes-Chávez and Martin (2016), building on the work of race theorists such as Omi, Winant, and Bonilla-Silva, recently argued:

The meanings of race and racial categories are created, politically contested, and re-created in any given sociohistorical and geopolitical context as a way to maintain boundaries of difference related to domination and oppression. No matter what country (e.g., the USA, South Africa, Brazil, and throughout the European Union), these meanings emerge to shape all social structures and institutions in a given society... including mathematics education. (p. 1)

Second, the reviewing of the three articles on race and mathematics education over a span of nearly thirty years is done cautiously. Given the limitation of space here, I attempt to capture only a few of the big ideas of the past and present. This essay and talks delivered at other conferences (Stinson, 2014, 2016) are an introduction, if you will, to a larger project of conducting a Foucauldian archaeology/genealogy (cf. Foucault, 1966/1994, 1975/1995; see, e.g., Bullock, 2013) of race discourses and discursive practices found in the USA mathematics education enterprise. Through the larger project, my intent will be to clarify, with respect to issues of race and mathematics teaching and learning, not only what we have been researching about (and how and why) but also, and perhaps more importantly, what we have not been researching about (and how and why).

RACE AND MATHEMATICS EDUCATION RESEARCH

In this section, I briefly review three articles that span nearly thirty years –1984 to 2013. Contextually, all three articles are from “equity” (broadly defined) special issues of the Journal for Research in Mathematics Education (JRME), the leading mathematics education research journal in the United States of America. Each of the three issues was guest edited by recognized leaders of the larger mathematics education community:

- Minorities and Mathematics – 1984 (Vol. 15, No. 2): Guest Editor: Westina Matthews
- Special Equity Issue – 2013 (Vol. 44, No. 1): Guest Editor: Rochelle Gutiérrez
Westina Matthews – 1984

The first article reviewed is “Influences on the Learning and Participation of Minorities in Mathematics,” written by Westina Matthews (1984b). This article was the introductory article, so to speak, to the first JRME equity issue. The special issue aimed to bring to the attention of JRME readers “various aspects of research into the learning of mathematics by minorities” (Kilpatrick & Reyes, 1984, p. 82). The JRME Editorial Board hoped to “provide a continuing forum in JRME so that reliable knowledge of the learning of mathematics by minorities is shared as widely as possible with people who can put that knowledge into practice” (p. 82).

Matthews (1984a), in her introduction, noted that the authors who contributed to the special issue represented a “rainbow coalition of researchers with a history of involvement and interest in the topic of minorities and mathematics” (p. 83). Many of the contributing authors had attended, in February 1981, the National Council of Teachers of Mathematics’ (NCTM) Core Conference on Equity in Mathematics. In total, including the editorial, there were 16 mathematics educators and researchers who contributed to the 96-page special issue.

In her lead article, Matthews (1984b) marked 1975 as the starting point in researching “minorities” in mathematics education, but noted several problems that limited the “usefulness and appropriateness” of these early studies:

One problem is that most reports of the studies are either unpublished papers or final reports to funding agencies and therefore are relatively inaccessible. Another problem is that some of the findings could be fortuitous in that neither the original nor the primary focus of the study was on minorities. More often than not, the study concerned sex-related differences, and race was included as a background variable. Inadequate reasons are then given to explain any race effects. (p. 84)

With the limitations of the existing research noted, Matthews (1984b) proceeded to provide a summative review of 24 studies, which although flawed, collectively, did identify some stable patterns. The data (largely quantitative) of the studies reviewed varied from single- to multi-year collection periods, including the years from 1960 to 1981; published report dates ranged from 1976 to 1982. Neither the instruments used nor the classifications made of “minority populations” were consistent across the reviewed studies. Nonetheless, there were two outcomes examined that were somewhat consistent throughout the 24 studies: participation and performance.

Matthews (1984b) noted three clusters of variables that influenced minority students’ participation and performance in mathematics: parent, student, and school. Parent variables found to have an influence on
participation and performance included cognitive (e.g., parents’ education level and occupation), affective (e.g., parents’ attitudes toward mathematics), and cultural (e.g., parents’ native language). Student variables included ascribed (e.g., students’ belief about who is or is not “good” in mathematics), cognitive (e.g., students’ enrollment patterns in advanced mathematics courses), and affective (e.g., students’ attitudes toward mathematics and its perceived utility). School variables included climate (e.g., school discipline and attendance), organization (e.g., class size and academic tracking), resources (e.g., adequate or inadequate facilities and materials), racial composition (e.g., course offerings correlated to racial demographics), and personnel (e.g., student–teacher relationships).

In concluding her review, Matthews (1984b) highlighted three findings. First, collectively, school variables have important influences on minority students’ participation and performance in mathematics, yet little research has been conducted. Second, there is limited research with respect to course-taking patterns and minority students. Third, additional research is needed with respect to the parents’ (especially the mother’s) cognitive, affective, and cultural influences on minority students’ participation and performance in mathematics. She also expressed significant concern that research on minority students had over emphasized students who had been unsuccessful. Matthews made a direct call for more studies that explored both mathematically successful and unsuccessful minority students. In the end, she claimed, “If energy and resources could be directed toward minorities and mathematics as effectively as we have seen done with women and mathematics another step would have been taken toward ensuring equal access and equal opportunity for all students” (p. 93).

William F. Tate – 1997

The second article reviewed is “Race-Ethnicity, SES, Gender, and Language Proficiency Trends in Mathematics Achievement: An Update,” written by William F. Tate (1997). This article, like the Matthews (1984b) article, was somewhat of an introduction to a JRME equity special issue. Twelve mathematics educators and researchers contributed to the 134-page special issue. Tate and D’Ambrosio (1997), in the guest editorial of the second equity issue, noted that the larger political movement devoted to social justice that seemed possible in the 1980s had all but disappeared in the 1990s “because of a period of political retrenchment” (p. 650). They contended that questions around how race, class, gender, and language matter in mathematics teaching and learning were no longer mere educational questions but also (polarizing) political questions. In short, the “Rainbow Coalition [had] stalled” (p. 650).
In his lead article, Tate (1997) documented the changes in USA mathematics achievement at the elementary and secondary levels during the 1980s and 1990s. Specifically, he reviewed the quantitative literature on national achievement trends, college admission examinations, and Advanced Placement tests of "various social groups defined along lines of race, class, gender, ethnicity, and language proficiency" (p. 652). The review, nearly 30 pages long, was painstakingly detailed and provided a clear picture of the current mathematics achievement (based on standardized measures) in the United States of America. Some of the key findings included: (a) race, class, and language proficiency differences in mathematics achievement were more pervasive than gender differences; (b) mathematics achievement differences between race and ethnic groups had narrowed but African American and Hispanic students continued to perform at significantly lower levels than their White and Asian American peers; (c) all students across the different demographic groups benefited from additional mathematics courses in high school; and (d) male students tended to outperform female students on standardized measures of mathematics achievement but the differences were not statistically significant.

After discussing, in detail, the findings of his review, Tate (1997) outlined some limitations of the mathematics education literature. He noted two specific limitations found in many of the quantitative studies reviewed: (a) the data were not organized in such a way that the examination of two or more demographic variables was possible, and (b) the complexity inherent within demographic groups called for more integrative statistical analyses than those conducted. Tate then provided a pivotal critique of the mathematics education research in general:

The paradigms boundaries of most mathematics education research –mathematics and psychology– have constrained the nature and scope of scholarship to the development and testing of new methods and materials.... Thus the scope of recommendations to administrators and policymakers responsible for urban and rural schools has been limited to suggestions that inform decisions on curriculum, student assessment, and teachers' professional development.... These recommendations are important. However, they do not completely address the realities of many students of color and low-SES students in urban and rural communities. Thus the need to borrow from scholarship in which the political and cultural dimensions of low-SES students and students of color have been explicated... (pp. 673–674)

Tate (1997) concluded by recommending both fiscal and cultural policy options in search of equitable responses to the rhetoric of "high standards for all" found in the federally mandated, standards-based movement of the late 1990s. In making his recommendations, Tate was
compelled to cross “epistemological boundaries” (p. 675) because of the restrictive paradigmatic boundaries. Briefly, his fiscal policy option recommended changes to the allocation of educational funds moving from fiscal equity to fiscal adequacy. He noted, “an equity strategy that fails to include an appropriate fiscal adequacy component cannot fully support the adoption and implementation of high-level mathematics standards for all” (p. 675). Tate’s cultural policy option recommended future equity-related policies be informed by the Professional Standards for Teaching Mathematics (see NCTM, 1991)—

which calls for mathematics pedagogy to build on (a) how students’ linguistic, ethnic, racial, gender, and socioeconomic backgrounds influence their learning; (b) the role of mathematics in society and culture; (c) the contribution of various culture to the advancement of mathematics; (d) the relationship of school mathematics to other subjects; and (e) the realistic application of mathematics to authentic contexts. (p. 676)

In the end, Tate (1997) argued, “The importance of the mathematics standards movement for traditionally underserved students is obvious: previous reforms efforts have not met their needs. … The challenge is before us” (p. 676).

Danny Bernard Martin – 2013

The third and final article reviewed is “Race, Racial Projects, and Mathematics Education,” written by Danny Bernard Martin (2013). Unlike the Matthews (1984b) and Tate (1997) articles, it was not an introduction per se but rather a closing of a JRME equity special issue. Twenty-five mathematics educators and researchers, including an eight member Special Issue Editorial Panel (Martin was a member of the panel) and the JRME editor in chief, contributed to the 334-page third equity issue. In the introduction, the members of the Special Issue Editorial Panel (D’Ambrosio et al., 2013b) noted that the equity issue arose out of interest from the NCTM Board of Directors “to understand how issues of equity play out in today’s mathematics classrooms” (p. 5). With an initial targeted focus on identity and power, contributing authors explored how, as a field, mathematics education influences the ways in which individuals are constructed in schools and in society, who is seen as intelligent or not, and whose “voices” are heard or silenced. Within this targeted focus, issues around racism, classism, and the politics of language were revisited throughout, illustrating “that mathematics education is always social and political” (p. 6).

In his closing article, Martin (2013) conducted a critical structural analysis of the internal dynamics of the USA mathematics education enterprise. He noted that many critical scholars are making powerful arguments about the dangers of mathematics education becoming
increasingly influenced by and aligned with neoliberal and neoconservative market-driven projects and agendas. Martin, however, believed that many of these critical scholars’ responses to issues of race and racism were often problematic. In particular, Martin characterized their responses as an unfortunate backgrounding of race and racism in some analyses or a conceptually flawed foregrounding in others, which, in the end, obscured the evidence that mathematics education all the while has been influenced by and aligned with neoliberal and neoconservative racial agendas (p. 316). Martin organized his critical structural analysis around three questions: What kind of project is mathematics education? What about racism? Is mathematics education itself a racial project? Each question is discussed in turn.

What kind of project? In response to this question, Martin (2013) provided a review of critical mathematics education research and scholarship over the past 30 years or so. The review included the work of mathematics education researchers and scholars who are credited with critical mathematics, ethnomathematics, social justice mathematics, and mathematics as a civil right, to name just a few. The review was impressive; it illustrated what kind of project mathematics could be or should be. So what kind of project is mathematics education? In the end – mathematics education is a political project.

What about racism? Here, Martin clarified what he meant by unfortunate backgrounding and conceptually flawed foregrounding responses to race and racism. Unfortunate backgrounding occurs simply when race and racism are inadequately conceptualized in mathematics education research, which, unfortunately, has been the norm not the exception. Specifically, Martin argued, "race – especially white supremacy – rarely has been centered in the analyses, rarely theorized for conceptual clarity, and rarely theorized in relation to the market-driven goals of globalization that mathematics education increasingly is said to serve" (p. 319). Conceptually flawed foregrounding occurs when race and racism are framed primarily historically, which disallows an “accounting for the contemporary, political expedient forms of everyday, institutional, and structural racism in the post-Civil Rights era, including neoliberal and neoconservative color-blind racism” (p. 321). Martin noted that these responses to race and racism are particularly troubling given the attention that these issues receive in scholarly arenas outside mathematics education.

Is mathematics education a racial project? Yes. Martin’s (2013) response was intended to be provocative. He began here by first “turning the gaze inward” (p. 322). In so doing, he positioned mathematics as a white institutional space, borrowing the term from sociologists. Such spaces are characterized by:
(a) numerical domination by Whites and the exclusion of people of color from positions of power in institutional contexts, (b) the development of a White frame that organizes the logic of the institution or discipline, (c) the historical construction of curricular models based upon the thinking of White elites, and (d) the assertion of knowledge production as neutral and impartial, unconnected to power relations. (p. 322)

Martin then proceeded to provide a historical sketch of mathematics education reform efforts over the past 50 years. Each reform effort, as Martin illustrated, “had not been disconnected from the racial projects that have continued to shape [USA] racial dynamics and social policy” (p. 325).

Martin (2013) concluded by contending that the “critical structural analysis of the internal dynamics of the mathematics education enterprise show that it is a racialized space, an instantiation of White institutional space” (p. 328). In the end, Martin called mathematics educators to continue to ask:

- What kind of project is mathematics education?
- Whose interests are served by this project?

WHITE SUPREMACY AND MATHEMATICS EDUCATION RESEARCH

As I write, I try to remember when the word racism ceased to be the term which best expressed for me exploitation of black people and other people of color in this society and when I began to understand that the most useful term was white supremacy.

bell hooks (as cited in Gillborn, 2005, p. 485; emphasis added)

WHITE SUPREMACY could just as easily be crossed out in the heading above. Unlike the previous heading RACE AND MATHEMATICS EDUCATION, it just doesn’t apply. Does it? Let’s see. A Google Scholar search of “race” and “mathematics education” returns nearly 24,700 results; a search of “White supremacy” and “mathematics education” returns 282. So roughly 1.1% of the scholarly discussions that mention race in mathematics education also mention White supremacy. Correct? What about “racism”? Let’s see. A Google Scholar search of “racism” and “mathematics education” returns about 4,180 results. So then, roughly 17% of the scholarly discussions that mention race in mathematics education also mention racism.

Staying with Google Scholar analytics, how many scholarly discussions mention just “mathematics education”? The search results – about 456,000. So using the previous search of “race” and “mathematics education” (about 24,700) roughly 5.4% of the scholarly discussions that mention mathematics

2. Google scholar searchers are not an exact science; they can, however, provide a sketch of the discourses that frame topics. The search reported here was conducted on January 3, 2017; it is important to note that the search results included scholarly publications written in English, not just those originating from USA sources.
education also mention race. Nearly 1.5 percentage points higher than the 4% noted in the introduction of this essay. But Google Scholar searches also capture scholarly books and other scholarly publications (e.g., conference proceedings); the roughly 4% calculated independently by Lubienski and Bowen (2000) and Parks and Schmeichel (2012) included only peer-reviewed journal articles in the percentage of mathematics education articles that contained descriptors of race and/or ethnicity.

Let’s do some more math; again, staying with Google Scholar analytics. Using 456,000 as the denominator (the search return of “mathematics education”), what percentages of scholarly discussions that mention mathematics education also mention racism? White supremacy? Roughly, 0.9% and 0.06%, respectively.

Need something more precise? The nature of Google Scholar analytics are that they are somewhat imprecise, providing algorithmic-determined estimates of word and phrase searches. For more precision, let’s explore the three JRME special equity issues that included the three articles previously reviewed. Although not intending to provide an exacting picture of each equity issue, I did intend to capture at least the spirit of each issue through the three reviews. The 1984 special issue contained 12 contributions (contributions counts include editorials, introductions, and articles): six mentioned race (or racial), one mentioned racism, and zero mentioned White supremacy. The 1997 special issue contained seven contributions: six mentioned race (or racial), three mentioned racism, and zero mentioned White supremacy. The 2013 special issue contained 15 contributions: 12 mentioned race (or racial), nine mentioned racism, and two mentioned White supremacy.

But a mentioned is just that, a mere mention. So how are race, racism, and White supremacy being addressed (or not) in mathematics education research across nearly 30 years—as least as depicted in USA-based JRME special equity issues? Through the 96 pages of the 1984 issue, race was mentioned 25 times (racial 38 times). In each case, it was used “primarily [as] an easily defined category to which one belongs and to which particular traits or outcomes can be assigned” (Parks & Schmeichel, 2012, p. 244). Johnson (1984) provided the single mention of racism: “These factors [for black students’ lack of interest in taking mathematics] are related to one another and are rooted in centuries of institutionalized racism that perpetuated unequal education for black people” (p. 149, emphasis added). White supremacy was never mentioned throughout the 96 pages.

Through the 134 pages of the 1997 issue, the word race is mentioned 26 times (racial 33 times); again, most often as a category. Different from the first special issue, however, the contributors to this special issue cross the paradigmatic and epistemological boundaries “to address the realities of many students of color and low-SES students in urban and rural
The analysis of the 2013 JRME special issue is much different; this difference is clearly visible in the Martin (2013) contribution previously reviewed. The attempt to address issues of race and racism (and White supremacy) head on, so to speak, is communicate through a published dialogue among the Special Issue Editorial Panel so titled “Addressing Racism” (D’Ambrosio et al., 2013a). The purpose of the dialogue is to—

highlight how teachers and researchers are often more comfortable talking about race, but not racism; how the field of mathematics education is implicated in the construction of race; and how we still have insufficient knowledge about the contexts and experiences of Latin@, African American, and American Indian students to inform policies and practices that will be in their best interest. (D’Ambrosio et al., 2013b, pp. 7–8).

Race, racial, and racialized are mentioned over 200 times in the 334-page special issue, but here, race (and its derivatives) is used and understood not only as a socially constructed category but also as a category that can be and is contested. Racism is mentioned about 130 times, but still dangerously absent in many of the discussions. The panel defined racism as—

both individual practices and institutional structures that support whites maintaining a position of privilege and superiority in society. Racism is not an inherent quality of people, but rather something into which we are socialized. Through the practice of racism, students, teachers, and others are given their roles in society. (D’Ambrosio et al., 2013a, p. 36)

White supremacy is mentioned eight times in only two of the contributions. Stinson (2013) merely mentions it, once. But Martin (2013) places it side by side with racism, returning to it and racism often throughout his argument that substantiates mathematics education itself as a racial project.

CONCLUDING THOUGHT

In the end, researching race in mathematics education requires researching racism. But opening up racism as an object of inquiry in mathematics teaching and learning requires an examination of the pervasiveness of White supremacy. After all, racism and White supremacy are two sides of the same coin. But do we have the theoretical frames to research White supremacy? Do we have the methodological tools? And, more importantly, do we have the will?

3. See Battey and Leyva (2016); they offer a “(developing) framework to support mathematics education scholars in general, and White scholars specifically, in examining the racist internal structure of mathematics education” (p. 50).
White supremacy is the unnamed political system that has made the modern world what it is today.

Charles W. Mills (1997, p. 1)

REFERENCES


