



QuantCrit: rectifying quantitative methods through critical race theory

Nichole M. Garcia, Nancy López & Verónica N. Vélez

To cite this article: Nichole M. Garcia, Nancy López & Verónica N. Vélez (2018) QuantCrit: rectifying quantitative methods through critical race theory, *Race Ethnicity and Education*, 21:2, 149-157, DOI: [10.1080/13613324.2017.1377675](https://doi.org/10.1080/13613324.2017.1377675)

To link to this article: <https://doi.org/10.1080/13613324.2017.1377675>



Published online: 27 Sep 2017.



Submit your article to this journal [↗](#)



Article views: 35083



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 113 View citing articles [↗](#)

INTRODUCTION



QuantCrit: rectifying quantitative methods through critical race theory

Nichole M. Garcia^a, Nancy López^b and Verónica N. Vélez^c

^aGraduate School of Education, University of Pennsylvania, Philadelphia, PA, USA; ^bDepartment of Sociology, University of New Mexico, Albuquerque, NM, USA; ^cDepartment of Education, Western Washington University, Bellingham, WA, USA

ABSTRACT

Critical race theory (CRT) in education centers, examines, and seeks to transform the relationship that undergirds race, racism, and power. CRT scholars have applied a critical race framework to advance research methodologies, namely qualitative interventions. Informed by this work, and 15 years later, this article reconsiders the possibilities of CRT applications to quantitative methodologies through 'QuantCrit.' We ask the question: *Can quantitative methods, long critiqued for their inability to capture the nuance of everyday experience, support and further a critical race agenda in educational research?* We provide an abbreviated sketch of some of the key tenets of CRT and the enduring interdisciplinary contributions in race and quantitative studies. Second, we examine the legacy and genealogy of *QuantCrit* traditions across the disciplines to uncover a rich lineage of methodological possibilities for disrupting racism in research. We argue that quantitative approaches cannot be adopted for racial justice aims without an ontological reckoning that considers historical, social, political, and economic power relations. Only then can quantitative approach be re-imagined and rectified.

ARTICLE HISTORY

Received 31 July 2017
Accepted 22 August 2017

KEYWORDS

Critical race theory;
quantitative methodologies;
educational research;
QuantCrit

Studies relying on the assumptions that impose a decontextualized racial identity in a social stratum should be replaced by better studies that incorporate more accurate assumptions (x) ... Most racial statistics lack a critical evaluation of racist structures that encourage pathological interpretations ... We must recognize that the researcher is part of what he or she observes. We do not passively or objectively observe the statistical universe as scientific outsiders (Zuberi 2001, 144).

Introduction

This special issue emerged as the byproduct of a panel entitled, 'Advancing Critical Race Theory (CRT) and Critical Race Studies Methodologies and Methods,' at the Spring 2015 Critical Race Studies in Education Association Conference in Nashville, Tennessee. The panelists were concerned with the epistemological and ontological implications of quantitative

methods while also affirming their potential for critical race scholarship and praxis in education. The conference provided the opportunity to engage in a productive dialog as an emerging community of critical race scholars interested in adding quantitative methodologies to our praxis toolkit. During the question and answer period of the panel, as editor of *Race, Ethnicity, and Education*, David Gillborn invited the panelists to develop a special issue that could contribute to *QuantCrit* as a methodological sub-field of Critical Race Studies in education.

A point of departure for our journey to this work, we first acknowledge efforts by our CRT colleagues to consider and deepen the use of critical race frameworks in qualitative inquiry. In 2002, Lynn, Yosso, Solórzano, and Parker published a special issue in *Qualitative Inquiry* that focused on Critical Race Theory (CRT) in education and its influence on qualitative research. This special issue was one of the first to depict how applying a critical race theoretical framework contributes to qualitative methodological interventions in which race and racism are central to studying Communities of Color, and particularly racially stigmatized hypervisible minorities that may be most vulnerable to unfair treatment based on what the meanings ascribed to their social characteristics in a variety of policy domains, including educational institutions, employment, housing, voting booths, and medical care (López et al. 2017; Telles 2014; Zambrana and Dill 2006). Lynn et al. (2002) laid the foundation for educational researchers to ‘explore CRT as an ontological and epistemological framework with which to analyze race ... CRT asks what needs attention analysis regarding qualitative research and the importance of race’ (5). Informed by this work, and 15 years later, this current issue of *Race, Ethnicity, and Education* applies a similar analysis to the use and application of *quantitative* methods by asking:

- Can quantitative methods, long critiqued for their inability to capture the nuance of everyday experience, support and further a critical race agenda in educational research?
- What possibilities does a ‘QuantCrit’ or quantitative methodological approach anchored in CRT, offer researchers interested in critically studying educational issues associated with race and ethnicity?
- How can ‘QuantCrit’ be in conversations with other tools of critical race qualitative analysis such as critical race feminisms?

Each of the authors in this special issue engage these questions, advancing the reach of CRT into methodological debates that call to question the ‘objectivity’ of quantitative methods. These authors (re)imagine decontextualized racial data conceptualizations, collection and analyses power and color evasiveness that characterizes the status quo of most quantitative research in education (Annamma, Morrison, and Jackson 2014). By exploring how quantitative methods are (mis)applied, (mis)interpreted, and often (mis)characterized, these articles remind us that quantitative approaches can’t simply be adopted for racial justice aims. This requires ongoing self-reflexivity and engagement with the historical, social, political, and economic structures and power relations at any given point in time. Only then can quantitative approaches be re-imagined and rectified.

Gillborn, Warmington, and Demack begin our special issue by theorizing, defining, and coining ‘QuantCrit,’ in their article *QuantCrit: Education, Policy, ‘Big Data’ and Principles for a Critical Race Theory of Statistics*. They define some of the key guiding tenets of *QuantCrit* as:

- (1) The centrality of racism as a complex and deeply rooted aspect of society that is not readily amenable to quantification;
- (2) The acknowledgment that numbers are not neutral and they should be interrogated for their role in promoting deficit analyses that serve white racial interests;
- (3) The reality that categories are neither 'natural' nor given and so the units and forms of analysis must be critically evaluated;
- (4) The recognition that voice and insight are vital: data cannot 'speak for itself' and critical analyses should be informed by the experiential knowledge of marginalized groups;
- (5) The understanding that statistical analyses have no inherent value but they can play a role in struggles for social justice.

Grounded in these five principles, we begin this introduction with an abbreviated sketch of the cognitive maps, ontological and methodological assumptions and epistemologies of CRT, and the enduring interdisciplinary contributions in the area of race and quantitative studies. Second, we examine the legacy and genealogy of *QuantCrit* traditions across the disciplines to uncover a rich lineage of methodological possibilities for disrupting what Zuberi and Bonilla-Silva (2008) describe as 'white logic' in quantitative research. We end with a summary of how each of the articles in this special issue contributes to developing *QuantCrit* within the field of education.

Promising tenets and conceptual pillars of critical race theory in education

CRT draws from several disciplines, including legal scholarship on civil rights, ethnic studies, feminist epistemologies, and gender studies and critical legal studies, to examine and transform the relationship among race, racism, and power (Delgado and Stefancic 2001). Matsuda (1991) defines CRT as: '... the work of progressive legal scholars of color who are attempting to develop a jurisprudence that accounts for the role of racism in American law and that works toward the elimination of racism as part of a larger goal of eliminating all forms of subordination' (1331). Thus, CRT is motivated by social justice and characterized by a passionate activism to eliminate racism as part of a broader effort to end subordination on gender, class, sexual orientation, language, and national origin lines (Ladson-Billings and Tate 1995; Solórzano 1997).

Some of the basic tenets or themes of CRT include the re-examination of history through the experiences of People of Color and interest convergence or the insight that small gains in racial justice are achieved if they overlap with the interest of whites, the belief in racial realism and the insight that racial reform only served to promote whites' self-interest (Bell 2004; Delgado and Stefancic 2001). A CRT approach in education has sought to understand and challenge ways changing structures of racism mutate to reproduce educational inequality both in and out of the classroom across time (Solórzano 1997; Solórzano and Bernal 2001; Solórzano and Yosso 2001a, 2001b, 2002). While recognizing that there is no single and unchanging list of tenets in CRT, we highlight the following five elements as value-added approaches for framing its epistemological, ontological, methodological, and analytical use within research in education (Solórzano 1997; Solórzano and Delgado Bernal 2001):

- (1) The permanence of white supremacy and its intercentricity¹ with other forms of subordination.
- (2) The challenge to white supremacist ideology through counterstorytelling.
- (3) The commitment to a socially and racially just praxis.
- (4) The centrality of experiential knowledge.
- (5) The trans-disciplinary perspective.

We acknowledge that the conceptualizations of CRT tenets are evolving, fluid, and open to various interpretations (Crenshaw 1995; Harris 1993; Ladson-Billings and Tate 1995; Allen 2006). A common thread among these elements, though, is the commitment to unveil, deconstruct, and transform the oppressive educational realities that affect Students of Color, their families, and their communities. In this next section, we aim to provide a historical snapshot of the seminal work that has provided an anchor for the development of *QuantCrit* across the disciplines.

Historical legacy of QuantCrit: enduring cross-disciplinary insights

QuanCrit has its origins in a long legacy that spans over a century. One of the most enduring contributions comes from sociologist Du Bois (1899) seminal work, *The Philadelphia Negro*. It was one of the first multi-method studies that challenged what Zuberi (2001) refers to as the deracialization of statistics. By providing a counterstory to the prevailing essentialist and eugenist approaches to the study of social inequalities in Black communities in Philadelphia in the late 1800s and early 1900s, Du Bois provided a radical contextualization (Chapman and Berggren 2005) of the structural origins of social inequalities (Morris 2015). Du Bois was key to the development of thick descriptions of the relationships of power at the individual, institutional, and structural levels that generated inequities adversely affecting Blacks. By showing how structures of power operated to oppress Black communities, Du Bois made a major contribution to the beginning of the deracialization of statistics by challenging eugenicist assumptions that framed Black communities as innately inferior and self-destructive (Morris 2015; Zuberi 2001).

Building on this legacy, sociologist Zuberi (2001) in *Thicker than Blood: How Racial Statistics Lie*, traces the origins of statistics to the eugenics movement (See also Morris 2015). Zuberi (2001) urges all researchers to decouple eugenics logics from statistical models and tools. Despite this nefarious origin of social statistics, Zuberi embraces the use of statistics for racial liberation. Zuberi concludes by inviting all researchers to critically consider the ontologies and axiologies of racial statistics. By providing us with a blueprint for rectifying the mechanical and decontextualized use of statistics, Zuberi has influenced social scientists in their quest to advance of quantitative methods for racial justice (Du Bois 1899; Morris 2015; Zuberi 2001; Zuberi and Bonilla-Silva 2008).

In her groundbreaking book, *Framing Dropouts: Notes on the Politics of an Urban Public High School*, social psychologist Fine (1991) points to the ever present political nature of statistical regimes: ‘The fact that educational credentials breed neither automatic nor equitable exchange value across social groups is coveted as a precious secret within low-income public schools’ (180). Racial and ethnic minorities have substantially less returns to education in the form of wages and earnings and accompanying wealth than their white counterparts (Hamilton et al. 2015; Munoz et al. 2015). In *State Looteries: Historical Continuity*

Reararticulations of Racism, and American Taxation, sociologists Embrick and Henricks (2015) show how aggregate state data are used to define and enforce state policies that created disproportionate taxes and fines on Black communities as an act of racial violence. In a similar vein, demographer Hogan (2017) uses the American Community Survey (ACS) to illustrate how conventional reports that conflate Hispanic origin and race may hide how poverty rates among Latinas/os/x identifying as white are consistently lower than among Latinas/os/x identifying as ‘some other race’ or Black/AfroLatinas/os/x² (López et al. 2017; Sáenz and Morales 2015).

In the early 2000s, Latinas/os/x critical race theorists in education initiated the visualization of the ‘educational pipeline’ among Students of Color in higher education (Solórzano, Villalpando, and Oseguera 2005; Solórzano and Yosso 2000). These educational pipelines, derived from US Census Bureau data, visually displayed the proportion of Students of Color who entered K-12, community college, undergraduate, and graduate education, documenting the ‘leaks,’ ‘cracks,’ and ‘trickles’ in their educational trajectories and spoke to the structural reasons for these cracks. These scholars intentionally disaggregated data among the Latinas/os/x population to expose the heterogeneity within groups and the various pathways through educational institutions. Framing these educational pipelines within CRT disrupted how statistical data was being interpreted by (re)telling, in our own words, the experiential knowledge and counterstories behind the data (Solórzano and Yosso 2000). In doing so, they asked critical questions as to why there were higher proportions of Chicanas/os/x and Salvadoran populations experiencing ‘push-out’ at every segment of the pipeline by again examining the structural conditions shaping this dynamic (Pérez Huber et al. 2006).

Extending our understanding of the educational pipelines, Covarrubias (2011) advanced intersectional inquiry (Collins 1998; Crenshaw 1995) to examine interlocking systems of power among Chicanas/os/x and Mexican American populations to display trends of ‘gender-based discrimination, patriarchy, class inequality, nativist racism and their interconnected effects’ (103). Building on this work, Covarrubias and Velez (2013) conceptualized ‘critical race quantitative intersectionality’ to cross-examine how descriptive statistical data historically have advanced deficit perspectives affecting research, policy, and practice for People of Color in educational settings (Huyser, Sakamoto, and Takei 2010; Irizarry 2015). Further, Gillborn (2010) had previously explored CRT and the misuse of statistics by examining secondary education data in England. Gillborn (2010) informed critical race theorists in the US of how CRT is relevant to global interpretations of data implementation and use. Taken together, these studies paved the way for engaging in critical approaches to advancing a productive conversation and dialog and promising practices in CRT and quantitative research methods.

Contributors’ summaries

Making the Invisible Visible: Critical Race Theory and Intersectionality for Contextualizing Race-Gender-Class ‘Achievement Gaps’ in Higher Education, López, Erwin, Binder and Chavez argue for the importance of engaging structures of settler colonialism and accompanying configurations of intersecting inequalities for interrogating the simultaneity of race–gender–class for examining six-year college graduation rates at a large public university in the US Southwest. Through creating 20 distinct and contextualized race–gender–class social locations as categories of experience, the authors argue that *QuantCrit* coupled with intersectional knowledge projects, has the potential to make the invisible visible and reframe conversations on the complexity of racialized inequality in higher education. They

urge researchers to employ critical race intersectional self-reflexivity as a starting point for engaging in *QuantCrit*.

More than 'Papelitos': A Counterstory of Using QuantCrit to Critique Latina/o Degree Value and Occupational Prestige, Pérez Huber, Vélez, and Solórzano use CRT to (re)frame the discourse on degree attainment and advance conceptualizations of post-secondary degree value across multiple communities and contexts. They argue that economic performance measures cannot capture the non-monetary, or 'symbolic,' benefits to a college degree. Analyzing patterns of educational attainment and occupational outcomes for Communities of Color from the US Census Bureau's Current Population Survey (CPS), 2015 March Annual Social and Economic Supplement, they offer a counter-index to the popular Duncan Socioeconomic Index – a *Critical Race Occupational Index* – that measures occupational prestige and value based on a job's commitment to social justice through occupations associated with service and care for others and social advancement, that can be used to better explain the significance of higher education for Students of Color.

The Threat of Unexamined Secondary Data: A Critical Race Transformative Convergent Mixed Methods, Garcia and Mayorga point to the importance of examining data regimes as domains of power that need to be interrogated as sociopolitical artifacts. They argue that before we can dismantle the status quo uncritical use of secondary data sources, we must engage in examining the professional and collective interest driving the changes that are occurring in data collection. To advance this endeavor, they put forth the concept of 'critical race transformative convergent mixed methods,' as a way of integrating quantitative and qualitative methods for analyzing race and ethnicity in higher education secondary data-sets.

Critical Race Quantitative Intersections: A Testimonio Analysis, Covarrubias, Nava, Lara, Burciaga, Vélez, and Solórzano, (re)engage the educational pipelines first constructed in the early 2000s by providing their powerful and thought provoking *testimonios*. Creating a Critical Race Intersectionality Think Tank they trace their evolution of coming to this work, thinking through what the Chicana/x/a/o educational pipeline has meant for each one of them, and documenting the intersections of their stories. Focusing on a recent reiteration of the Chicana/x/a/o California educational pipeline, their *testimonios* serve as a historical genealogy to how these pipelines should be used and understood.

Conclusion: the future of *QuantCrit* & promising strategies for advancing the field

The problems concerning the ahistorical and decontextualized 'default' mode and misuse of quantitative research methods are not insurmountable. We believe that a productive dialog between CRT and quantitative methods or what we call '*QuantCrit*,' has the potential to be used for racial justice and other liberatory projects. In *Thicker Than Blood: How Racial Statistics Lie*, Zuberi (2001) poses a valuable question: How do we deracialize the social conditions that produce racialized inequalities? We agree with Zuberi's (2001) assertion that rigorous quantitative methodologies or what the contributors in this special issue advance as '*QuantCrit*' has a role to play (LaVeist 1994). We invite all researchers to engage in critical self-reflexivity as a necessary first step for the long journey of deracializing statistics, one that departs from the premise that 'race is a measure of a relationship – not an inalterable trait' (Zuberi 2001, 110). We must ground our social positions, values, epistemologies,

ontologies, and praxis when using quantitative research methods, or any research/scholarly endeavor for that matter (Ladner 1973). Quantitative approaches cannot be adopted for racial justice aims without an ontological reckoning that considers historical, social, political, and economical power relations. Only then can quantitative approach be re-imagined and rectified. It is our hope that this volume contributes toward building communities of practice within and beyond the academy that advance critical approaches of inquiry on race and racism in education for liberation.

Notes

1. Intercentricity builds off the notion of intersectionality (Crenshaw 1995). It centralizes an analysis of race and racism while acknowledging its fundamental entanglements with gender, social class, sexuality, ability, and other social locations.
2. We employ the term ‘Latina/o/x’ to refer to women, men, transgender individuals, and communities that come from the Spanish-speaking Caribbean, Latin America, and/or the descendants of former Spanish colonies in the Western and Southwestern US AfroLatina/o/x denotes those communities that are also descendants of enslaved Africans in Latin America and the Caribbean (Flores and Román 2009).

Disclosure statement

No potential conflict of interest was reported by the authors.

References

- Allen, R. L. 2006. “The Race Problem in the Critical Pedagogy Community.” In *Reinventing Critical Pedagogy: Widening the Circle of Anti-Oppression Education*, edited by C. A. Rossatto, R. L. Allen, and M. Pruyun, 3–20. Lanham, MD: Rowman & Littlefield.
- Annamma, S., D. Morrison, and D. Jackson. 2014. “Disproportionality Fills in the Gaps: Connections between Achievement, Discipline and Special Education in the School-to-Prison Pipeline.” *Berkeley Review of Education* 5 (1): 53–87.
- Bell, D. A. 2004. *Race, Racism, and American Law*. Silver Spring, MD: Aspen Publications.
- Chapman, R. R., and J. R. Berggren. 2005. “Radical Contextualization: Contributions to an Anthropology of Racial/Ethnic Health Disparities.” *Health* 9 (2): 145–167.
- Collins, P. H. 1998. *Fighting Words: Black Women and the Search for Justice*. Minneapolis, MN: University of Minnesota Press.
- Covarrubias, A. 2011. “Quantitative Intersectionality: A Critical Race Analysis of the Chicana/o Educational Pipeline.” *Journal of Latinos and Education* 10 (2): 86–105.
- Covarrubias, A., and V. Velez. 2013. “Critical Race Quantitative Intersectionality: An Anti-Racistresearch Paradigm That Refuses to ‘Let the Numbers Speak for Themselves.’” In *Handbook of Critical Race Theory in Education*, edited by A. Dixson and M. Lynn, 270–285. New York City: Routledge.
- Crenshaw, K. 1995. *Critical Race Theory: The Key Writings That Formed the Movement*. New York City: State University of New York Press.
- Delgado, R., and J. Stefancic. 2001. *Critical Race Theory: An Introduction*. New York City: NYU Press.
- Du Bois, W. E. B. 1899. *The Philadelphia Negro: A Social Study*. Philadelphia, PA: University of Pennsylvania Press.
- Embrick, D. G., and K. Henricks. 2015. “Two-Faced-Isms: Racism at Work and How Race Discourse Shapes Classtalk and Gendertalk.” *Language Sciences* 52: 165–175.
- Fine, M. 1991. *Framing Dropouts: Notes on the Politics of an Urban Public High School*. New York City: State University of New York Press.

- Flores, Juan, and Miriam Jiménez Román. 2009. "Triple-Consciousness? Approaches to Afro-Latino Culture in the United States." *Latin American and Caribbean Ethnic Studies* 4 (3): 319–328.
- Gillborn, D. 2010. "The Colour of Numbers: Surveys, Statistics and Deficit-Thinking about Race and Class." *Journal of Education Policy* 25 (2): 253–276.
- Hamilton, D., W. Jr, Darity, A. E. Price, V. Sridharan, and R. Tippett. 2015. *Umbrellas Don't Make It Rain: Why Studying and Working Hard Isn't Enough for Black Americans*. Oakland, CA: Insight Center for Community Economic Development. Accessed August 15 2015.
- Harris, C. I. 1993. "Whiteness as Property." *Harvard Law Review* 106 (8): 1707–1791.
- Hogan, H. 2017. "Reporting of Race among Hispanics: Analysis of ACS Data." In *The Frontiers of Applied Demography* (pp. 169–191). Basel: Springer International Publishing.
- Huyser, K. R., A. Sakamoto, and I. Takei. 2010. "The Persistence of Racial Disadvantage: The Socioeconomic Attainments of Single-Race and Multi-Race Native Americans." *Population Research and Policy Review* 29 (4): 541–568.
- Irizarry, J. 2015. *Latinization of US Schools: Successful Teaching and Learning in Shifting Cultural Contexts*. New York City: Routledge.
- Ladner, J. A. 1973. *The Death of White Sociology: Essays on Race and Culture*. Baltimore, MD: Black Classic Press.
- Ladson-Billings, G., and W. F. Tate. 1995. "Toward a Critical Race Theory of Education." *Teachers College Record* 97 (1): 47.
- LaVeist, T. A. 1994. "Beyond Dummy Variables and Sample Selection: What Health Services Researchers Ought to Know about Race as a Variable." *Health Services Research* 29 (1): 1.
- López, N., E. Vargas, M. Juarez, L. Cacari-Stone, and S. Bettez. 2017. "What's Your 'Street Race'? Leveraging Multidimensional Measures of Race and Intersectionality for Examining Physical and Mental Health Status among Latinxs." *Sociology of Race and Ethnicity*. doi:10.1177/2332649217708798.
- Lynn, M., T. J. Yosso, D. G. Solórzano, and L. Parker. 2002. "Critical Race Theory and Education: Qualitative Research in the New Millennium." *Qualitative Inquiry* 8 (1): 3–6.
- Matsuda, M. J. 1991. "Voices of America: Accent, Antidiscrimination Law, and a Jurisprudence for the Last Reconstruction." *Yale Law Journal* 100 (5): 1329–1407.
- Morris, A. 2015. *The Scholar Denied: WEB Du Bois and the Birth of Modern Sociology*. Berkeley, CA: University of California Press.
- Munoz, A. P., M. Kim, M. Chang, R. Jackson, D. Hamilton, and W. A. Darity. 2015. *The Color of Wealth in Boston*. <https://www.bostonfed.org/publications/one-time-pubs/color-of-wealth.aspx>.
- Pérez Huber, L., O. Huidor, M. C. Malagón, G. Sánchez, and D. G. Solórzano. 2006. *Falling through the Cracks: Critical Transitions in the Latina/O Educational Pipeline*. 2006 Latina/O Education Summit Report. CSRC Research Report. Number 7. Los Angeles, CA: UCLA Chicano Studies Research Center.
- Sáenz, R., and M. C. Morales. 2015. *Latinos in the United States: Diversity and Change*. Hoboken, NJ: John Wiley & Sons.
- Solórzano, D. G. 1997. "Images and Words that Wound: Critical Race Theory, Racial Stereotyping, and Teacher Education." *Teacher Education Quarterly* 24 (3): 5–19.
- Solórzano, D. G., and D. B. Bernal. 2001. "Examining Transformational Resistance Through a Critical Race and LatCrit Theory Framework: Chicana and Chicano Students in an Urban Context." *Urban Education* 36 (3): 308–342.
- Solórzano, D. G., and T. J. Yosso. 2000. "Toward a Critical Race Theory of Chicana and Chicano Education." In *Charting New Terrains of Chicana (O)/Latina (O) Education: Themes of Urban and Inner City Education*, edited by C. Tejeda, C. Martinez, and Z. Leonardo, 35–65. Cresskill, NJ: Hampton Press.
- Solórzano, D. G., and T. J. Yosso. 2001a. "From Racial Stereotyping and Deficit Discourse Toward a Critical Race Theory in Teacher Education." *Multicultural Education* 9 (1): 2.
- Solórzano, D. G., and T. J. Yosso. 2001b. "Critical Race and LatCrit Theory and Method: Counter-Storytelling." *International Journal of Qualitative Studies in Education* 14 (4): 471–495.
- Solórzano, D. G., and T. J. Yosso. 2002. "A Critical Race Counterstory of Race, Racism, and Affirmative Action." *Equity & Excellence in Education* 35 (2): 155–168.

- Solórzano, D. G., O. Villalpando, and L. Oseguera. 2005. "Educational Inequities and Latina/O Undergraduate Students in the United States: A Critical Race Analysis of Their Educational Progress." *Journal of Hispanic Higher Education* 4 (3): 272–294.
- Telles, E. 2014. *Pigmentocracies: Ethnicity, Race, and Color in Latin America*. Chapel Hill: UNC Press Books, University of North Carolina.
- Zambrana, Ruth, and Bonnie Dill. 2006. "Disparities in Latina Health: An Intersectional Analysis." In *Race, Class, Gender and Health: Intersectional Approaches*, edited by Amy J. Schulz and Leith Mullings, 192–227. San Francisco: Jossey-Bass.
- Zuberi, T. 2001. *Thicker than Blood: How Racial Statistics Lie*. Minneapolis, MN: University of Minnesota Press.
- Zuberi, T., and E. Bonilla-Silva, eds. 2008. *White Logic, White Methods: Racism and Methodology*. Lanham, MD: Rowman & Littlefield Publishers.