

Quantitative Intersectionality: A Critical Race Analysis of the Chicana/o Educational Pipeline

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Utilizing the critical race framework of intersectionality, this research reexamines the Chicana/o educational pipeline through a quantitative intersectional analysis. This approach disaggregates data along the intersection of race, class, gender, and citizenship status to provide a detailed portrait of the educational trajectory of Mexican-origin people along the Chicana/o education pipeline. In turn, this allows us to capture nuanced educational outcomes for this population as they are shaped by intersecting systems of oppression and privilege. Evident through this analysis are the diverse patterns of achievement for Chicanas and Chicanos who live under distinct social, economic, political, and legal conditions.

Key words: educational attainment, Chicana/o, intersectionality, Critical Race Theory

As a child, I was intrigued by exploring the most despised words in the American language within dictionaries. A native Spanish speaker, I looked to the dictionary as a resource to teach me about America's standard language, the "language of power" (Delpit, 2006). In my home we were permitted to speak only Spanish by our father; he told us of the great assets we would become in a changing American society as bilingual adults. Yet in the public sphere, especially in school, the power of the English language was clear. My second-grade teacher would teach

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me this poignant lesson the day she decided to change my name to its anglicized version by declaring, "I will call you Alex." She would rob me of that part of my identity until I would have the courage to reclaim it as an undergraduate in college.

I guess I was always a critical race theorist, conducting my own content analysis of dictionaries, looking up the words *bitch*, *wetback*, *nigger*, *fag*, and many others that demarcated the ways in which power was used to construct our intersecting identities and carry out its violence upon us. In the fifth grade, my attempt to problematize one of these words got me into serious trouble with my White, 30-something teacher. After encountering the word *bitch* in one of *her* dictionaries, I used it in its grammatically correct form referring to the family dog, which was female. I remember that my intentional construction of the essay revolved around my desire to use the word, so I built my story around it.

This pivotal decision was preceded by me approaching the teacher in astonishment at the fact that the word *bitch* was in an American dictionary. She immediately forbade me to use it without any discussion of its historical violence upon women. In reflection, I wonder whether she was attempting to intervene in my emerging matriculation into patriarchal norms or whether she was recentring her Whiteness in this power struggle between herself and an 11-year-old Mexican boy. Nonetheless, that moment would transform my educational experience and lead to many incidents of her targeting me as a "temperamental" child who "talked too much," labels that would follow me through my journey along the educational pipeline.

On a recent trip to the library at a small liberal arts college near my home, I encountered one of the biggest dictionaries I have ever seen: an aged *Webster's Dictionary* that must have weighed about 40 pounds. I happened upon this formidable document perched upon its own ornate pedestal, making its importance known to the passerby. My curiosity immediately took me to the copyright page of this record to discover its 1976 publication date. I immediately jumped to the N's, encountering the most reviled word in America's heritage. Its meaning of record indicated what I read as an uncommitted attempt to critique the word's usage and history: "1a: NEGRO – usu. Taken to be offensive b: a member (as an East Indian, a Filipino, an Egyptian) of any very dark-skinned race – usu. Taken to be offensive . . ." (Grove, 1976). I then jumped to the W's and read what I interpreted as a matter-of-fact and contemptuous depiction of Mexicans with no critique of the word's practice: "a Mexican who enters the U.S. illegally (as by wading or swimming the Rio Grande) <~s . . . willing to work for nothing if a rancher would conceal them – Irving Shulman>—compare to Bracero" (Grove, 1976). As my daughter walked up behind me, I hurriedly changed the page, responding vaguely, "I was looking up something," when she asked, "What are you doing?"

There are many formal and concrete ways that we are taught to look at differences among people. Often, we learn to assign value to these differences that serve to elevate the status of some people while diminishing the worth of others. These differences and their value, in turn, become “natural” to us because they become so widespread and consistently used. Just as these variations are made concrete and assigned a value within this dictionary, they are also assigned value and formalized through our educational experiences in schools. There, we again are taught to place positive and negative values on differences that may exist among various types of students. These distinctions then lead educators, administrators, and students themselves to perceive various groups of students differently. Perceptions of students ultimately become so persistent and pervasive that they can impact educational outcomes for people who are labeled by these terms, in some cases diminishing their potential.

The microaggressions (Solorzano, 1998) found in the dictionary and in the classroom are merely reflections of the highly organized, historical relationships that have utilized the social constructions of race, class, gender, sexuality, and immigration status to separate people and assign them disparate value. Although it is widely recognized that these identity markers are historically and socially constructed, this does not negate the fact that they create uniquely lived experiences for people labeled by them, including creating disadvantage for some while privileging others. The relationship systems that use these identifiers (i.e., racism, sexism, nativism, class-based discrimination, etc.) also intersect in people’s daily lives so that they have the potential to simultaneously create privilege and oppressive conditions for the same individuals within different conditions. For example, a man of color can simultaneously be paid more for the same job that a woman of color may be paid for but much less than his White counterpart. Hence, there can be simultaneously oppressive and privileging conditions based on the intersection of these systems. Schools have traditionally been one of the institutions that have served to create and maintain such demarcations among people and to establish and sustain their corresponding systems of relationships. They are often the places where we learn to “act like boys,” first express our sexuality, perform our class identities, identify the “aliens” among us, and claim a racial or ethnic identity.

Schools are often the site of the adoption of such constructs by individuals and the site where those in power simultaneously ascribe these labels and their accompanying characteristics to students; both processes often have significant consequences for our educational opportunities and trajectories, as they will frequently impact the expectations and aspirations we have for ourselves and those that others have of us. Such belief systems can, and regularly do, lead to a distinction of resource availability for different groups that can significantly shape educational outcomes at all levels.

In this article, I utilize the framework of intersectionality to explore the educational trajectory of those who identify themselves as being of Mexican ancestry.¹ Coined by Kimberly Crenshaw (1989), *intersectionality* refers to the ways in which interconnected systems of domination based on race, class, gender, sexuality, and other social constructions simultaneously impact the lives of all people as they engage in socially mediated relationships and in their interaction with society and its institutions (Crenshaw, 1989, 1991). It seeks to move beyond singularly defined sociological theories that reduce our experiences as influenced by narrow and essentialist definitions of the self (Valdes, 1995, 1997). Intersectionality similarly challenges the notion that we live in a postcolonialist society in which these socially constructed divisions no longer impact or are impacted by power. Furthermore, it posits that institutions remain impacted by political projects that are guided by maintaining existing power relations at the expense of vulnerable populations along multiple intersecting continuums of difference. These political projects both are guided by and predictably, yet variably, influence the complex social relationships in which people partake daily—thus, this intersectionality happens at the macro levels of society and its institutions and at the same time is played out in our micro and intimate relationships on a day-to-day basis.

THE CHICANA/O PIPELINE

The Chicana/o educational pipeline, first introduced by Daniel G. Solorzano (Solorzano, Villalpando, & Oseguera, 2005), has been widely utilized to (a) capture a snapshot of current educational realities for people of Mexican descent, (b) depict a predictable pattern of educational outcomes, and (c) offer policy recommendations aimed at transforming the unjust experiences summarized by the pipeline. Despite its obvious utility for these efforts, to date the pipeline has conflated many variables that limit our ability to truly describe the nuanced experiences of those of Mexican descent. This conflation challenges our ability to provide specifically effective policy and practice recommendations that address the various dimensions of diversity within this population, including race, gender, immigration status, and class. The homogenization of this population has also led many to essentialize the Chicano experience and to make that of the Chicano citizen the norm.

¹ *People of Mexican descent*, *Mexican origin*, and *Mexican ancestry* are used interchangeably in this article to signify all people who are themselves of Mexican background or whose family lineage is of Mexican origin. *Chicana* and *Chicano* are also used to refer to this same group on several occasions. *Chicana* and *Chicano* is a sociopolitical identity adopted by many people of Mexican origin who are committed to the political project of transforming unjust relations of power.

Following the critical race tradition of “asking the race question,” Daniel Solorzano would transform the framework of the “educational pipeline” by prioritizing race as an analytical lens. Impressed by the work of Alexander “Sandy” Astin, who originated the pipeline as a conceptual framework, Solorzano,² similar to critical race theorists who would put race and racism at the forefront of the study of jurisprudence, would capture a snapshot of the educational outcomes for the most numerous racial groups in America. The education pipeline model has been useful for presenting data, revealing trends, and presenting the sequential patterns of success or failure for groups along their academic journeys. It has similarly been useful for educators and policymakers to make meaningful decisions about where to concentrate efforts and resources for addressing leakage points, or the many points of exit for students from various educational institutions.

INTERSECTIONALITY ALONG THE EDUCATIONAL PIPELINE

Those familiar with the educational pipeline were accustomed to seeing it as an excellent tool for visually displaying the educational path of various racial groups as they collectively made their way through their academic careers. Of course, the pipelines we were used to seeing often showed us that the academic careers of people of color were short lived and that most Chicanas and Chicanos never made it past high school. Nonetheless, the tool was useful and we were amazed at the simple elegance of this framework for helping us share our stories. We were especially impressed when the pipeline began with the simple yet telling intersection of race and gender, giving us the capacity to witness the points of divergence between male and female students and eventually the slow but inevitable higher academic outcomes for women of color compared to men of color. When I presented these data to my students, they questioned whether the data accounted for their various experiences—How about immigrants? How about working-class people? What about the middle-class U.S. citizen? All of these questions led me on a quest to “ask the other question” (Matsuda, 1991, p. 1189).

The goal of this quest was to do what many scholars had effectively done for the past few decades: that is, to capture the nuances of our lives as the intersecting systems of oppression simultaneously acted upon us while we resisted or reenacted them. Much of this work has effectively demonstrated that our lives and relationships to others, and institutions, are complicated. We experience these relationships through the simultaneity of our multiple political and social identities as mediated by external conditions and context. Hence, we live a life in which

²Although Daniel Solorzano is well known for his work with educational pipelines, he credits Alexander “Sandy” Austin, his colleague, for introducing him to this method of capturing and presenting data (D. Solorzano, personal conversation, May 14, 2010).

we are constantly recreating ourselves while the inertia of power continues to maintain itself and define us in ways that shape our opportunities.

Schools, at all levels, often serve to try to make us fit within these prescribed norms (Freire, 2008). Although many of us constantly attempt to deconstruct and resist existing prescriptive social constructs and expected roles for those constructs, they are accepted by most and often ratified in policies and practices. For example, we know that in schools, most Chicanas and Chicanos are not tracked toward college readiness but rather relegated to underresourced, overcrowded schools where they are taught by less experienced teachers and are often taught curricula that are the least valued (Oakes, 1985; Valencia, 2002; Yosso, 2006). Both Chicanas and Chicanos, although often relegated to vocational tracks, are tracked distinctly based on their gender. Chicanas are often tracked into courses like home economics, typing, sewing, and cooking, whereas Chicanos are steered into woodshop, auto mechanics, welding, and sports. These directives can often shape what we perceive as being within our capacity to do. They also ultimately can shape our career decisions and life opportunities.

The intersectional analysis of the Chicana/Chicano educational pipeline, therefore, becomes critical to understanding how practices and policies within educational institutions have impacted our eventual outcomes. Although it does not provide us a detailed narrative of what happened within the schooling experiences of the diverse members of this diverse group, it gives us the patterns that have resulted from varied experiences shaped by the prescriptions that have often been imposed on its members. Qualitative research has done a great deal to help us understand these narratives, and it provides rich counterstories that shed light on the lived experiences of diverse people of color (Delgado Bernal, 2001; Solorzano, 1998; Solórzano & Yosso, 2001, 2002a, 2002b; Yosso, 2006). But quantitative intersectionality helps tell a broader story and captures patterns that cut across space and time. The quantitative intersectionality in this study uses the most recent census data to capture the impact of the intersection of race/ethnicity, class, gender, and citizenship status.

METHODOLOGY

Data for this study were gathered through the publicly available Census software Data Ferret. This software makes several Census databases available to the public for research purposes. For this project, I used the March 2009 Supplement of the Current Population Survey, the most complete, recent data available with the variables of interest. These data are gathered and reported annually for a strategic and representative sample of the general population that is then statistically extrapolated to provide accurate projections of the rest of the population. The Current Population Survey is collected monthly for 50,000 American households and is

used to report national labor statistics. It also contains detailed data on educational attainment for all respondents. I was specifically interested in gathering data on educational attainment for people of Mexican descent and disaggregating them by multiple factors. Thus, I was able to download these data along race/ethnicity and select for those Latinas/os who identified as "Mexican." I further disaggregated these data by gender, class, and citizenship status using the five categories of citizenship used by the Census: (a) born in the United States, (b) born in Puerto Rico or another outlying area of the United States, (c) born abroad of U.S.-citizen parents, (d) naturalized citizen, and (e) noncitizen. For the purpose of creating these intersectional pipelines, the focus was on categories (a), (d), and (e), as these represented the highest number of respondents among Mexican-origin people.

Attainment data for this study only utilized data for the population aged 25 and older. This approach has been used by several scholars to gather (Rumberger, 1991), disaggregate, and analyze data on attainment rates, as it usually is able to capture the most representational sample of the population to attain terminal degrees (meaning these people are not likely to return to earn a high school diploma beyond this age or to earn advanced degrees prior to it, either). Of course, this creates some limitations in that it may not capture those cases in which older adults return to school to complete a high school degree or other cases in which advanced degrees are earned at a very young age. Nonetheless, it is the most representative sample of the population available and is a method utilized consistently across comparison groups.

The U.S. Census does not have a measure of wealth that can be accurately used to account for class status. Hence, I used family income to come up with four equally distributed quartiles as a proxy for class. It is recognized that family income does not capture the importance of accumulated wealth for determining class, especially privilege. However, it does provide a consistently reported measure that was used to compare groups' economic circumstances.

FINDINGS

An updated analysis of the Chicano educational pipeline demonstrates that people of Mexican origin continue to be failed by American educational institutions at all levels. Figure 1 demonstrates that 44% of students entering the educational pipeline are eventually pushed out before completing a high school diploma. Of the remaining 56% who graduate from high school, 27 will enroll in college, some going to community college and others enrolling in 4-year universities. We find that of the 27 who move on to college, 5 will terminate their educational journey having earned only an associate's degree, whereas 10 will earn a baccalaureate. Still, of those who enter college, 12 (44%) will be pushed out prematurely, having earned no degree. Of the 10 with a bachelor's degree, only 2 will earn a graduate or professional degree, and an insufficient 0.2 will earn a doctorate.

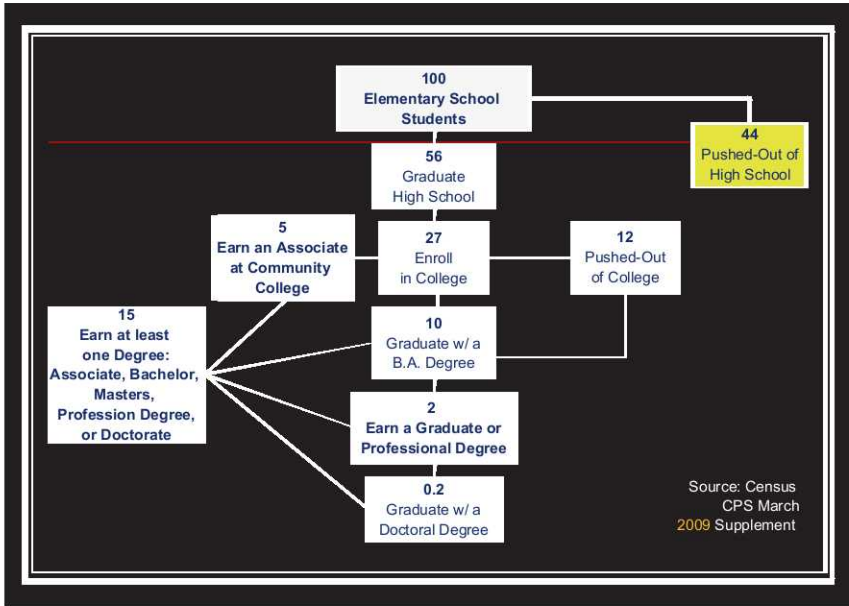


FIGURE 1 The Chicana/o (Mexican) educational pipeline. B.A. = bachelor's degree; CPS = Current Population Survey. (Figure is provided in color online.)

These findings, although showing some improvements from 2000 Census data for this group (Yosso & Solorzano, 2006), continue to illustrate that Chicanas/os are the poorest served students of all of America's sizeable racialized groups. Nonetheless, race alone cannot account for the disparate outcomes captured in the pipeline.

As previously demonstrated by Yosso and Solorzano (2006), disaggregating educational outcomes for Mexican-origin people by gender provides a more complete portrait of the state of education for Chicanas and Chicanos. Figure 2 shows that when the data are disaggregated, Chicanas outperform their Chicano counterparts at all points along the educational pipeline. Chicanos are pushed out of high school at higher rates; earn fewer high school diplomas; and earn fewer associate's, bachelor's, master's, professional, and doctoral degrees. And although fewer Chicanos than Chicanas are pushed out of college, this is only the case because they enroll in college in fewer numbers—the college push-out rate for Chicanas is 46% compared to 45% for Chicanos. This pattern reveals a trend that has been in the making for more than two decades, as Chicanas were once outperformed by Chicanos at all levels of education. Even so, finding the distinct outcomes for Chicanos and Chicanas is only part of the quest to understand the varied educational outcomes and experiences of people of Mexican ancestry

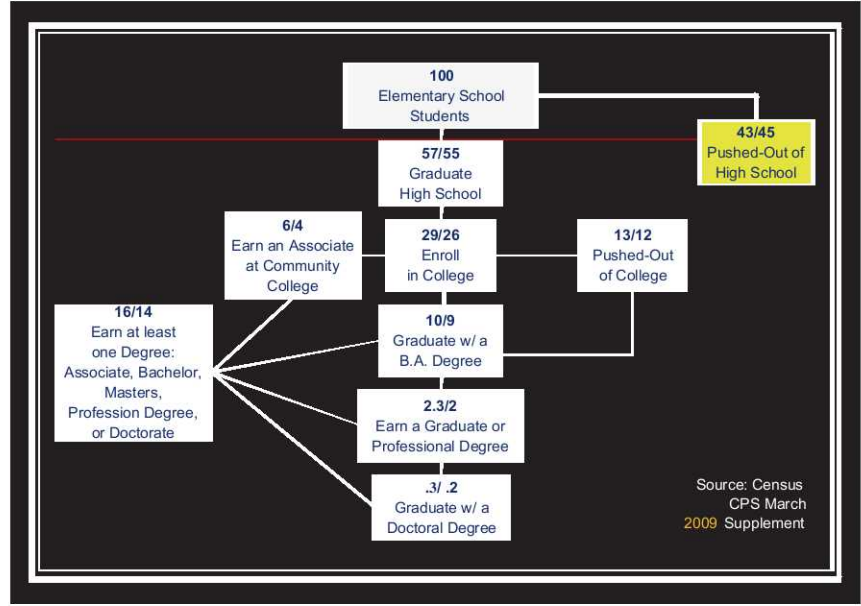


FIGURE 2 The Chicana/o (Mexican) educational pipeline disaggregated by gender. B.A. = bachelor's degree; CPS = Current Population Survey. (Figure is provided in color online.)

and to capture the impact of socially constructed variables that make up different aspects of our identity.

Although the intersections of race/ethnicity and gender yield a telling pipeline, there remains a conflation of citizenship that conceals vast educational outcomes for Mexican-origin people of distinct legal statuses. In order to exhibit this varied range of achievement as impacted by legal status, I offer Figures 3, 4, and 5 to illustrate the educational outcomes for Mexican-origin people who are noncitizens, U.S.-born citizens, and foreign-born naturalized citizens, respectively.

Figure 3 presents the dismal educational outcomes for noncitizen Mexicans. It shows that nearly two-thirds of noncitizen men and women are pushed out of school before being presented with a high school diploma, leaving slightly more than a third to continue their perilous trek through the educational pipeline. Of those who do get a high school diploma, only about a third will enroll in college, with only five earning a baccalaureate and one receiving a graduate or professional degree. Although we see the pattern of Chicanas outperforming Chicanos at different levels of education, we also see that compared to the pipeline in Figure 2, this one shows a couple locations where Chicanos outperform Chicanas. For example, men attain doctoral degrees at twice the rate of women, and Chicanas are pushed out of college at a slightly higher rate than Chicanos. Thus, the broader Chicana/o

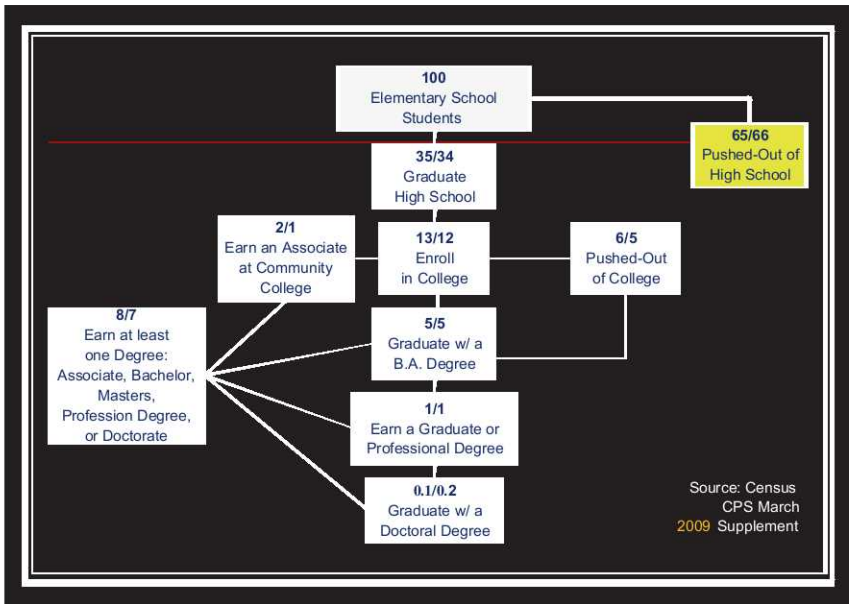


FIGURE 3 The noncitizen Mexican educational pipeline disaggregated by gender. B.A. = bachelor's degree; CPS = Current Population Survey. (Figure is provided in color online.)

educational pipeline obscures differences in educational outcomes associated with the intersection of race, gender, and noncitizenship status.

Figure 4 illustrates the clear privilege of American citizenship. Those Mexican-origin people granted citizenship by virtue of their birthright are more than twice as likely as noncitizen Mexicans to earn a high school diploma and nearly 3 times less likely to be pushed out before receiving their diploma. In addition, more than 4 in 10 of the original 100 U.S.-born Mexican-origin students who enter elementary school will enroll in college, with women having a higher likelihood of enrolling and earning some type of degree. These numbers are roughly 3 times the rate of their noncitizen Mexican counterparts. Moreover, 15 U.S.-born Mexican-origin women will earn a bachelor's degree compared to 14 U.S.-born Mexican-origin men, whereas 10 of the original 100 women will end their academic careers with an associate's degree and 8 men will do the same. The baccalaureate degree attainment rate for U.S.-born women is 3 times the rate for noncitizen Mexican women, and the bachelor's degree rate is nearly 3 times more for U.S.-born Mexican-origin men than for noncitizen Mexican men. Of those who make it beyond the bachelor's, four men and four women of Mexican origin who are U.S. born will earn a graduate or professional degree, with 50% more women (0.3 of the original 100 female students) earning doctorates than

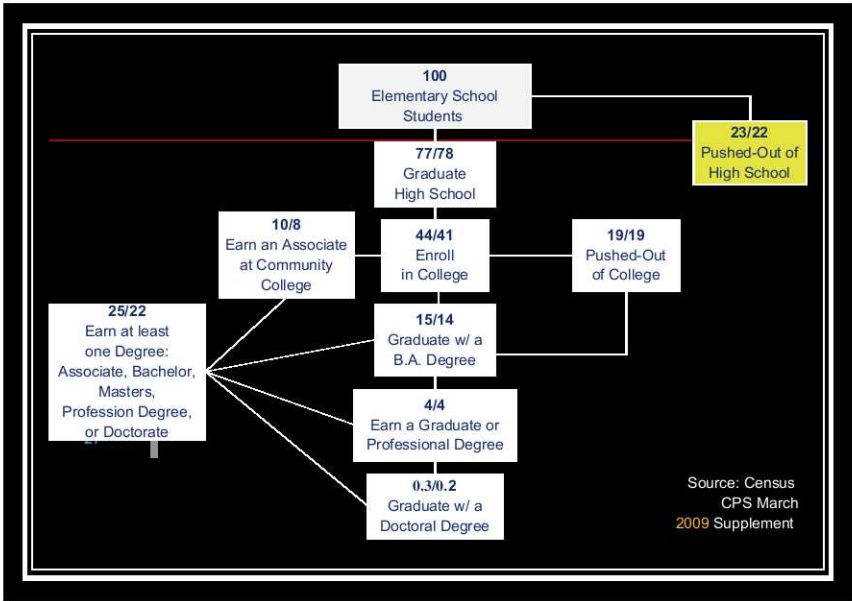


FIGURE 4 The U.S.-born Mexican educational pipeline disaggregated by gender. B.A. = bachelor's degree; CPS = Current Population Survey. (Figure is provided in color online.)

men (0.2 of the original 100 male students). Again, we see a fourfold graduate or professional degree attainment rate for U.S.-born Mexican-origin men and women in relation to noncitizen U.S.-born men and women. These consistently and significantly higher attainment rates for the U.S.-born Mexican-origin population than noncitizen Mexican-origin people point to the importance of citizenship and the rights and privileges associated with this sociopolitical designation. They also affirm the significance of nativist racist ideologies that drive down attainment rates for Mexican transnational migrants (Perez Huber, Benavidez Lopes, Malagon, Velez, & Solórzano, 2008).

Foreign-born Mexicans who eventually become citizens gain legal, social, and political status that can lead to educational privileges, resulting in generally higher educational attainment rates than for Mexican nationals in the United States who are noncitizens. Still, they attain lower rates than U.S.-born Chicanos. Figure 5 shows that 51 (51%) girls and 52 (52%) boys out of 100 elementary students who are naturalized citizens of Mexican descent successfully earn high school diplomas, with 24 of each group successfully enrolling in college. These college enrollment numbers for Mexican-born naturalized Americans are twice as high as those for noncitizens of Mexican origin and nearly half those for U.S.-born Chicanas/os, again showing an impact continuum for citizenship status.

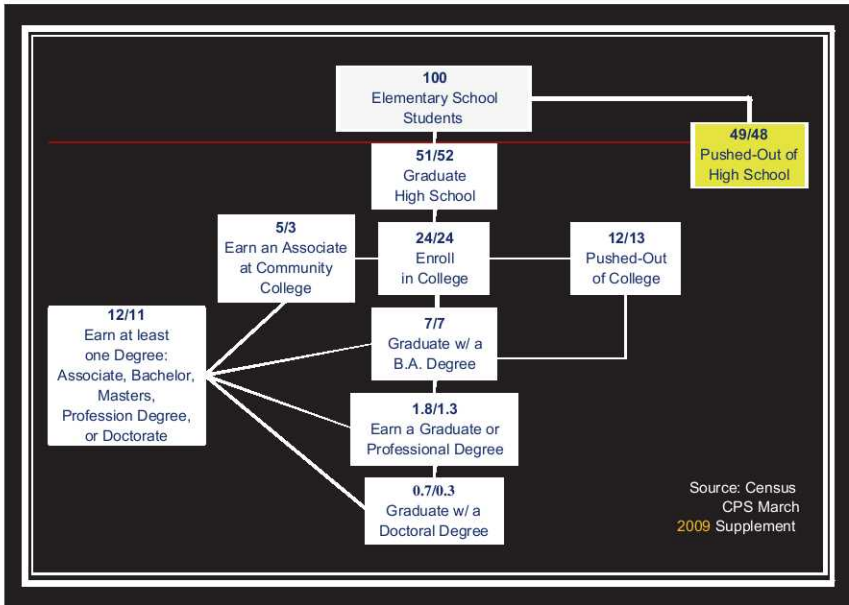


FIGURE 5 The foreign-born naturalized Mexican educational pipeline disaggregated by gender. B.A. = bachelor's degree; CPS = Current Population Survey. (Figure is provided in color online.)

Naturalized Mexicans demonstrate an outlier in this consistent citizenship pattern given that 0.7% of female students will earn a doctoral degree, more than twice the rate for men in this group, 7 times the rate for female noncitizens, and 2.5 times the rate for U.S.-born women. This result challenges the additive perspective of understanding the combined and simultaneously nuanced manner that different systems of oppression take on when they intersect.

Figures 3, 4, and 5 provide evidence that the intersection of race, gender, and immigration status consistently leads to women outperforming men, woven in with an upswing in performance as legal rights and social status increase through citizenship. These patterns, however, do not explain all of the variability that exists in educational attainment among a heterogeneous Mexican-origin population. Another clear pattern that occurs when the data are disaggregated is the positively correlated relationship between class and educational attainment rate—that is, as class increases for Mexican-origin Americans, these people have greater educational success (see Figure 6). The high school push-out rate for the Mexican-origin population decreases as their income level rises, from a high of 60% for the lowest quartile to 16% for the highest quartile. Conversely, high school attainment rates increase for Chicanas/os as their income level rises, from as low as 40% for the lowest quartile to as high as 84% for the highest quartile. These skewed outcomes

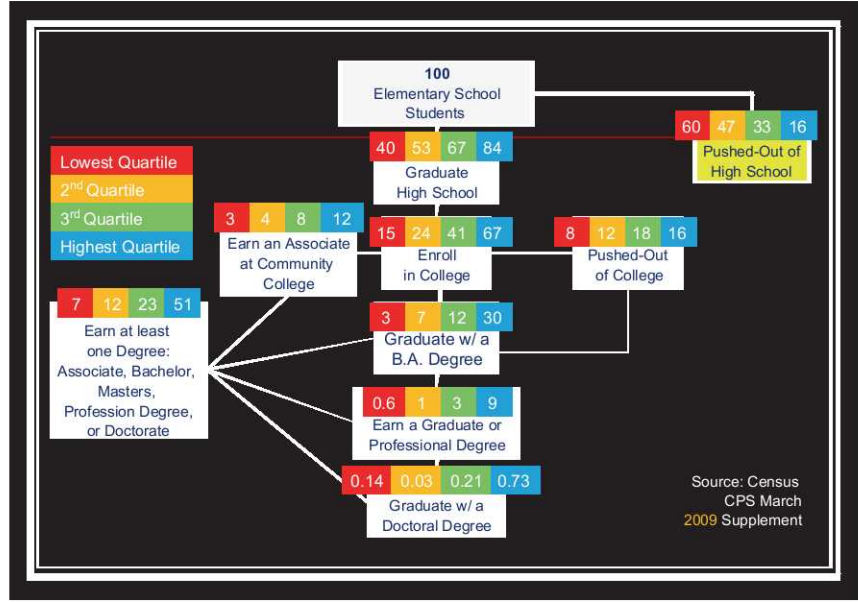


FIGURE 6 The Chicana/o (Mexican) educational pipeline by class. B.A. = bachelor's degree; CPS = Current Population Survey. (Figure is provided in color online.)

typically result in the Mexican-origin population having generally low attainment rates, because most Chicanas/os live in working-class conditions in which they face underresourced schools that spend a great deal of money on surveillance and enforcement, have the least experienced teachers, have densely populated schools, and are marked by other factors that hinder educational success. Case in point, as few as 3 of the original 100 Mexican-origin students from the lowest quartile will successfully navigate the pipeline to earn a baccalaureate, and only 0.6 will get a master's or professional degree. On the other end of the spectrum, nearly 7 in 10 (67%) Chicanas/os from the highest quartile will enroll in college, with 30 (30%) continuing on to a bachelor's, 9 (9%) getting a graduate or professional degree, and 0.73 earning their doctorate. This developing trend demonstrates the effects of class privilege.

Clearly, the pattern of class being positively correlated with educational attainment continues throughout the educational pipeline with a couple exceptions. The highest college push-out numbers (18 and 16) are concentrated in the two highest quartiles; however, this is only a reflection of the very high college enrollment numbers. These numbers represent 44% (third quartile) and 24% (highest quartile) of college push-out rates within their class, well above the 53% (lowest quartile) and 50% (second quartile) for the lowest two income brackets. Among doctoral

degree recipients we see that the lowest quartile of Mexican-origin people has more than 4 times the rate (0.14) of doctorates compared to the second quartile (0.03). The doctoral degree attainment for those earning a bachelor's degree is 5%, one tenth of 1%, 2%, and 2% for Quartiles 1, 2, 3, and 4, respectively. This marks a significant break in the pattern revealed throughout the pipeline that may signal a resilience attribute (Yosso, 2006) and perseverance among lower income Chicanas/os. This finding requires more research to learn what may impede doctoral degree attainment for second-quartile Chicanas/os.

Even when class was controlled across all of the major groups in the United States, we find that Latinas/os generally, and Chicanas/os specifically, continue to be pushed out at the highest levels among all major racialized groups in the United States, regardless of class status (see Figure 7). A baseline for all of the distinct racialized groups combined yields a 13% push-out rate for Whites, 16% for African Americans, 12% for Asian Americans, 26% for Native Americans, 38% for Latinas/os, and 44% for Chicanas/os. Among those in the lowest quartile for each group, Whites have a 29% push-out rate, Blacks a 27% rate, Asians 25%, Native Americans 38%, Latinas/os 54%, and Chicanas/os a whopping 60%. This method of controlling for class reveals a surprisingly higher push-out rate for Whites than African Americans at the lowest quartile. Nonetheless, Native Americans, Latinas/os, and Chicanas/os are ejected from schools prematurely at significantly higher rates in this quartile. In the second quartile the pattern is repeated, although at a lower level: Whites (15%), Blacks (13%), Asians (13%), Native Americans (32%), Latinas/os (40%), and Chicanas/os (47%). Clearly, there remains a class impact across the board such that all push-out rates decrease as class increases, but Latinas/os and Chicanas/os continue to be disproportionately and negatively impacted. Asians and Blacks in this quartile are pushed out at the same rate, and Whites remain with a higher push-out rate compared to both. It is Native Americans, Latinas/os, and Chicanas/os who are pushed out at 2.5 times, 3 times, and 3.5 times the rates of others, respectively. In the fourth quartile, 7% of Whites and Blacks, 10% of Asians, 13% of Native Americans, 28% of Latinas/os, and 33% of Chicanas/os are pushed out before receiving their high school diploma. Most disturbing for this income bracket is that Chicanas/os within this third quartile are pushed out at a higher rate (33%) than Whites (29%), Blacks (27%), and Asians (25%) of the lowest quartile. These numbers should sound the alarm for policymakers and practitioners who suggest that with income comes access to schools with greater resources, which leads to better outcomes. For Latinas/os generally and for Chicanas/os specifically, access to quality education can clearly not be reduced to class alone. Nonetheless, there is also convincing evidence that for the most part, class is a predictable indicator of educational attainment for most groups and can at times reduce, but not eliminate, the impact of race. Finally, among the highest quartile individuals the marked distinctions from the previous series of data have been diminished but

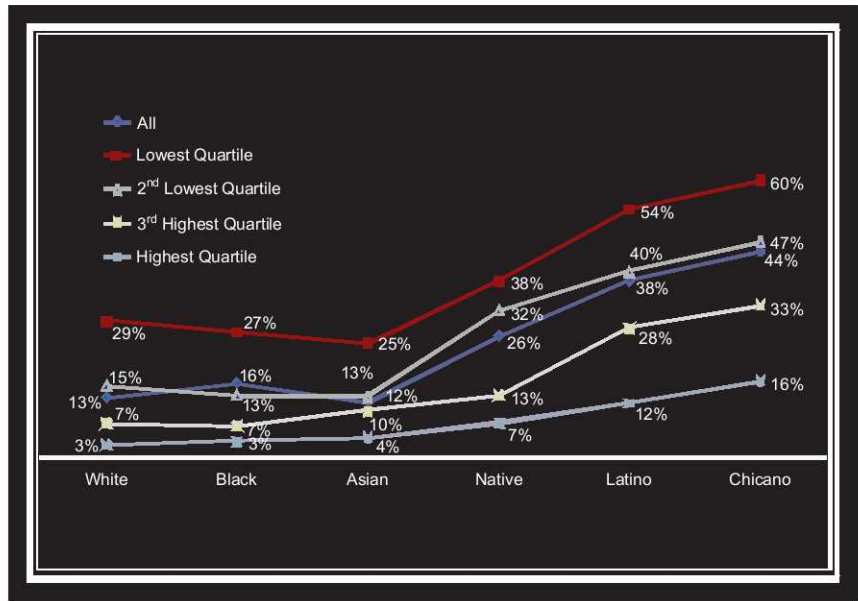


FIGURE 7 Push-out rates controlled by class. Native=Native American. (Figure is provided in color online.)

not erased: Whites (3%), Blacks (3%), Asians (4%), Native Americans (7%), Latinas/os (12%), Chicanas/os (16%). In the last two quartiles class seems to have negated the attainment difference between Whites and Blacks, yet Asians remain undoubtedly more likely to complete their diploma. Still, Chicanos are as much as 5 times more likely to be pushed out, even in this class-privileged group. Evidently, a simple class-based analysis of the distinct educational outcomes for the different racial groups will not suffice. We need to utilize a more complex intersectional analysis that captures the various impacts of these multiple social constructions.

Figures 8 and 9 capture the intersection of race, class, gender, and citizenship status in relation to being pushed out before earning a high school diploma and attaining a bachelor's degree, respectively. These figures offer a multidimensional cross-tabulation, or a quantitative intersectional analysis that provides the most complete account of the simultaneous impact of race, class, gender, and immigration status on Chicanas and Chicanos. With it, we can trace the clear patterns that each of these social constructs has on this population individually and collectively. We can also arrive at more sophisticated within-group comparisons. For example, in Figure 8 we can see that although native-born Chicanas/os tend to get pushed out in lesser numbers than their foreign-born Mexican brothers and sisters, native-born immigrant men from the lowest class quartile (41%) are pushed out more

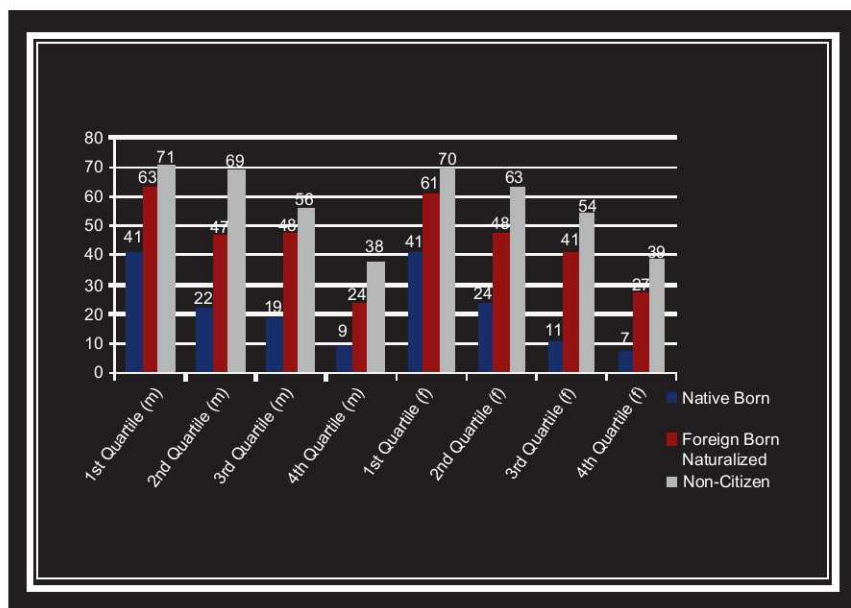


FIGURE 8 Chicano/a high school push-out by class, gender, and citizenship status. (Figure is provided in color online.)

frequently than fourth-quartile noncitizen Mexican-origin women (39%). This type of analysis reveals the complexity of intersectionality, that it does not allow us to essentialize the Chicana/o experience but rather complicates our investigation to expose more multifaceted relationships.

In many of the previous pipelines we saw an overwhelming pattern of Chicanos being outperformed by their Chicana counterparts. However, this intersectional analysis brings to light that this pattern is often disrupted by the intersection of multiple constructs. For instance, if one looks at native-born Mexican-origin men from the first to the fourth quartiles, their push-out rates predictably decrease (first, 41%; second, 22%; third, 19%; and fourth, 9%). Similarly, native-born Mexican-origin women's push-out rates decrease as their family income levels rise (first, 41%; second, 24%; third, 11%; and fourth, 7%). Still, the once predictable pattern of women outperforming men is interrupted. In the lowest quartile, native-born Chicanas and Chicanos are pushed out at the same rates. In the second quartile, U.S.-born Chicanos are pushed out less (22%). Surprisingly, in the third quartile, U.S.-born Chicanos are pushed out at a 73% higher rate (19%) than native-born Chicanas in the same quartile (11%). Returning to the often seen pattern, we find that Chicanos who are U.S. born and who are from the fourth quartile are more

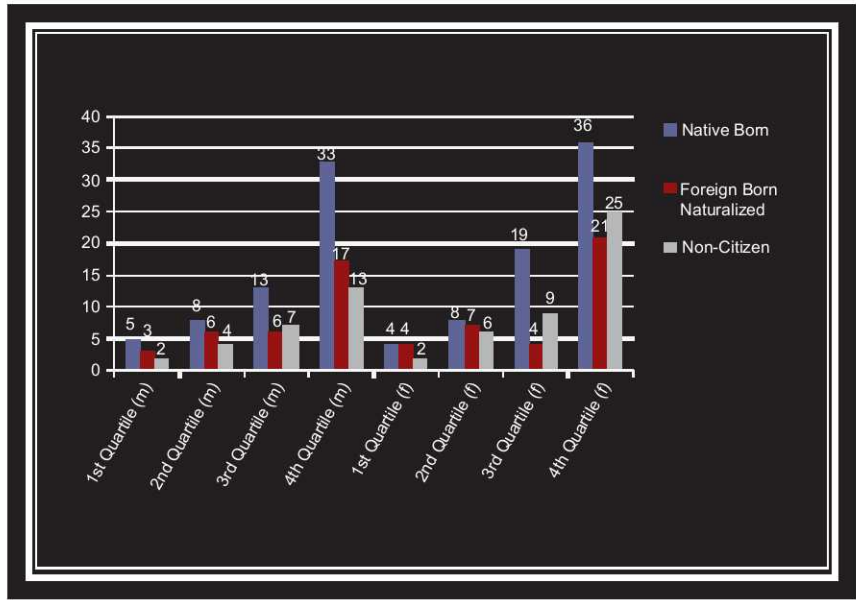


FIGURE 9 Chicano/a baccalaureates by class, gender, and citizenship status. (Figure is provided in color online.)

likely to be pushed out (9%) than U.S.-born female fourth-quartilers of Mexican origin (7%).

Another clear benefit of quantitative intersectionality is the ability to uncover often concealed anomalies that may require further investigation, including qualitative intersectional analyses. Figure 8 unravels several noteworthy comparisons that raise more questions for investigation. Quartile 3 is the location of a couple of these: Both foreign-born naturalized (48%) and U.S.-born (19%) Mexican-origin men from the third quartile are pushed out at dramatically higher rates than their female counterparts (41% and 11%, respectively). These findings beg the question of why there is such a pronounced gender difference in push-out rates in this third quartile that seemingly disproportionately impacts Chicano citizen men. Another equally intriguing disparity is exposed within the second quartile, in which noncitizen Mexican-descent men (69%) are much more likely to be pushed out than noncitizen Mexican-descent women (63%) in the same quartile. These obvious patterns require that we hear from the people most impacted by these outcomes, those living with their implications. They require that we qualitatively investigate the stories of those at the “bottom of the well” (Bell, 1992) and provide the rich counternarratives (Yosso, 2006) that can help us make sense of these patterns.

However, these patterns would have been nearly impossible to capture had a quantitative intersectional approach not been utilized. Figure 9 provides more evidence of the utility of this approach.

Figure 9 shows an intersectional analysis of how race, class, gender, and citizenship status impact baccalaureate degree attainment for Mexican-origin people residing in the United States. Evident are the expected patterns: The greater one's income, the greater the likelihood of attaining a bachelor's degree; citizenship is more strongly associated with baccalaureate attainment than noncitizenship; and Mexican-origin women generally outperform Mexican-origin men. Though these findings are important, an intersectional analysis puts this portrait more in focus, revealing many of the details lost in general investigations using singular analytical lenses (i.e., race, class, gender, or citizenship). A case in point is an analysis of the third quartile, in which we find that 13% of U.S.-born men of Mexican origin earn a bachelor's degree compared to 19% of U.S.-born women of Mexican origin. This intersection reveals a distinct effect that leads to a significant difference in baccalaureate attainment between men and women within such conditions. There is an even more fascinating discovery in the fourth quartile, in which noncitizen Chicanas earn bachelor's degrees at more than 100% the rate of noncitizen Chicanos. This finding demonstrates a never before captured pattern that challenges deficit-based perspectives of immigrant women. It also compels researchers to investigate further this important disparity, as this group of noncitizen women outperforms both men and women of all quartiles and all citizens with the exception of U.S. native-born Chicanas/os of the fourth quartile. It challenges us to explore the cultural assets that these women share that make them persevere despite adverse conditions.

CONCLUSIONS

Latinas/os, two thirds of whom are of Mexican origin, have been the largest minority group in the United States for more than a decade, yet they continue to be the most poorly served by American educational institutions. We have found here what others have found elsewhere, that at all levels of the educational pipeline Chicana/o educational outcome rates are alarming (Valencia, 2002; Yosso & Solorzano, 2006). Indeed, Chicanas/os are pushed out before completing their high school diploma at much higher rates, and they earn fewer baccalaureate, graduate, professional, and doctoral degrees than any other major racialized group in the United States (Covarrubias, Solorzano, & Velez, 2010). Still, these trends conceal within-group patterns that tell of the distinct impact of various forms of subordinations. Lost is often the impact of gender-based discrimination, patriarchy, class inequality, nativist racism, and their interconnected effects. This study has demonstrated that, undeniably, there exists an intersectional effect that leads to

disparate within-group educational outcomes. Armed with this information, gathered only through a quantitative intersectional analysis, practitioners, researchers, policymakers, and families can begin to make intentional and concerted efforts to understand and address the impact of these power relations, especially where they intersect.

Clearly, this methodological approach warrants further exploration as it unmistakably produces elusive quantitative patterns at the intersection of race, class, gender, and citizenship status. Notwithstanding this fact, there remains the need to expand intersectional analyses to capture the impact of other forms of subordination, including those related to disability, sexuality, language and others, at their intersection with those explored here. We must also explore how these intersections impact other racialized groups historically so as to capture and understand the historically nuanced ways in which diverse Americans have experienced various intersections. Lastly, findings from any research are only as good as the data source. Without a doubt, Census data are the most widely available data, used regularly to record trends and predict patterns throughout the country. However, Census Current Population Survey data, which are gathered monthly, although more comprehensive, have a much lower completion rate than decennial Census data. Therefore, there remains a need to capture more educational data at smaller geographic levels in order to have greater control and more precise predictability.

Critical race theorists and others before them have long made the case for telling our own stories to counter the often prescriptively destructive grand narratives about our communities, especially for those most impacted by injustice (Delgado, 1999; Yosso, 2006). Many of us have done so, relying on qualitative research to richly detail the particulars of our experiences. These often vivid depictions are capable of peeling back the layers of injustice, capturing the distinct and interconnected nature of various forms of subordination. However, the method used in this study can provide us with an alternative way of telling our collective stories by uncovering the specific and intersectional effects of the multiple constructs that help shape our realities, especially as they relate to our educational experiences and outcomes across the Chicana and Chicano educational pipelines.

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