

A Critical Race Analysis of Black and Hispanic Female Graduate Students Enrollment Trends from 2012 to 2021

Introduction

Numerous studies and reports highlight a significant gender shift in higher education enrollment patterns. Jacobs (1996), noted that women in the U.S. have surpassed men in higher education enrollment and degrees conferred since 1982. A report by Hussar and Bailey (2020) projected an 18% increase in enrollment in postsecondary institutions from 2003 to 2017, with an additional 3% increase by 2028. According to the 2021 Integrated Postsecondary Education Data System (IPEDS), female graduate enrollment in degree-granting institutions reached 1,967,393, accounting for over 60% of total graduate students (NCES, 2021). Holding a graduate degree can offer substantial job market benefits, with graduates more likely to secure long-term, high-salary employment (NCES, 2023).

Despite this gender shift, Black and Hispanic female students remain systematically disadvantaged. These groups represent only 12% and 11% of total female graduate enrollment, respectively, compared to 50% for white women (NCES, 2021). This study examines Black and Hispanic female graduate enrollment trends over 10 years, analyzing the current legal landscape regarding race in college admissions, introducing critical race theory (CRT) and Latino critical theory (LatCrit) as conceptual frameworks, and investigating potential school reforms to reduce racial and ethnic discrimination in graduate education. The study aims to address the following questions:

1. What is the graduate student enrollment trend for Black female students?
2. What is the graduate student enrollment trend for Hispanic female students?
3. How do Black and Hispanic female graduate student enrollment trends compare to their White counterparts?
4. How can school reforms help reduce racial and ethnic discrimination in access to graduate education?

Literature Review

University Admission and Diversity Policy

University admissions and diversity policies often mask racial realities and racism under the guise of diversity and colorblindness. The Education Trust's 2006 report highlighted how flagship public universities perpetuate systemic inequalities (Gerald & Haycock, 2006). Iverson (2007) found that diversity action plans in U.S. land-grant universities are embedded in a hegemonic system of white supremacy, creating a paradox where these policies, intended to promote diversity, simultaneously exclude racial minorities from full participation.

Harper et al. (2009) emphasized the need for ongoing policy examination to address persistent inequalities, noting significant underrepresentation of African American students at predominantly white institutions (PWIs), funding disparities for Historically Black Colleges and Universities (HBCUs), and challenges from desegregation efforts. Despite decades of policy efforts, systemic barriers and racial disparities in higher education remain, posing unique challenges for Black and Hispanic female graduate students.

Women of Color in Graduate Education

Women of color face various challenges in graduate education, from cultural dissonance to institutional barriers. Lacourt (2003) discussed her experiences as an Indigenous woman in predominantly white institutions, highlighting the clash between cultural ideals and Western academic culture. Margolis and Romero (1998) described graduate programs as entrenched in a

“white, male, conservative” framework, with a “hidden curriculum” that perpetuates societal inequalities.

Eagan et al. (2024) provided a longitudinal perspective, showing an increase in doctorates earned by Black, Latino, and Native American graduates in life and physical sciences from 1980 to 2019. Despite this progress, these groups remain underrepresented in STEM fields. The literature underscores the need for comprehensive support structures and an inclusive academic environment to address the multifaceted challenges faced by women of color in graduate education.

In conclusion, the literature underscores the multifaceted challenges encountered by women of color in graduate education, emphasizing the need for comprehensive support structures and an inclusive academic environment.

Critical Race Theory as Conceptual Framework

Critical Race Theory (CRT) emerged in the 1970s within legal studies, spearheaded by scholars like Derrick Bell, Richard Delgado, and Alan Freeman, to address the slow progress of racial reform and the subtle forms of racism in the American justice system (Crenshaw et al., 1995; Matsuda et al., 1993). CRT has since evolved into a versatile framework for addressing racism across various social systems, including education (Patton et al., 2014).

Latino Critical Theory (LatCrit), a branch of CRT, emphasizes the complex identities of Latinas/Latinos and addresses intersecting forms of oppression such as racism, sexism, and classism (Solorzano & Bernal, 2001). LatCrit complements CRT rather than competes with it, offering additional insights into the unique challenges faced by Latina/Latino populations (Valdes, 1996). Both CRT and LatCrit challenge dominant narratives on race and racism in education, focusing on how educational practices contribute to the marginalization of students of color (Crenshaw et al., 1995; Matsuda et al., 1993; Solorzano & Bernal, 2001).

CRT and LatCrit frameworks are built on five key themes: (1) the centrality of race and racism and their intersection with other forms of subordination, (2) challenging dominant ideologies in education, (3) a commitment to social justice, (4) valuing experiential knowledge, and (5) a transdisciplinary perspective (Solorzano, 1997, 1998; Solorzano & Bernal, 2001; Solorzano & Yosso, 2000). This study focuses on two CRT tenets: intersectionality and interest convergence.

Intersectionality

Kimberlé Crenshaw's concept of intersectionality (Crenshaw, 1989, 1991) provides a framework for understanding how overlapping identities—such as gender, race, and social class—create unique experiences of oppression. Crenshaw (1989) argued that both feminist and antiracist movements have overlooked the specific issues faced by Black women, leading to their marginalization within these movements. This “theoretical erasure” occurs when the unique challenges of individuals with multiple minoritized identities are ignored.

Crenshaw (1991) described three forms of intersectionality: structural, political, and representational. Structural intersectionality examines how race and gender intersect to create different experiences in areas like employment, education, and healthcare. Political intersectionality explores how the political strategies of antiracist and feminist movements can silence the concerns of women of color when these concerns do not align with broader group interests. Representational intersectionality addresses how women of color are depicted in social discourse.

In this study, structural intersectionality will be used to highlight differences in graduate education enrollment between white women and women of color. The discussion will also employ

intersectionality to understand the specific challenges faced by Black and Hispanic women in accessing graduate education.

Interest Convergence

Derrick Bell's (1980) principle of interest convergence posits that significant advances in racial justice for people of color occur when these advances align with the interests of white individuals. Bell (2000) argued that the landmark *Brown v. Board of Education* decision was driven not by white morality but by the alignment of outcomes with the interests of influential white elites.

Subsequent analyses by scholars like Harris et al. (2015) and Milner (2008) have supported Bell's theory, demonstrating that equity-oriented reforms often maintain the status quo or serve the interests of dominant groups. For example, diversity and inclusion initiatives in predominantly white settings are often designed to enhance the racial climate without threatening the social status or material advantage of white individuals (Hikido & Murray, 2016; Lewis & Shah, 2021).

This paper uses the concept of interest convergence to analyze Black and Hispanic female graduate enrollment trends, exploring how whiteness and white supremacy influence higher education admissions and diversity policies.

Data and Methods

The research questions were informed by CRT insights and a review of studies on Black and Hispanic female graduate students. Traditionally, critical studies use qualitative approaches to capture marginalized individuals' experiences, but QuantCrit has expanded this to include quantitative methods (Campbell, 2020; Covarrubias & Vélez, 2013; Gillborn et al., 2018). Covarrubias & Vélez (2013) introduced Critical Race Quantitative Intersectionality (CRQI) to use quantitative methods to understand the material impact of race and racism in conjunction with other forms of subordination, aiming for social justice (p. 276). Gillborn et al. (2018) further explored on "QuantCrit", emphasizing five principles to guide the QuantCrit studies: the centrality of racism, interrogation of numbers, critical evaluation of categories, the importance of voice and insight, and the role of statistical analyses in social justice.

Using 2012-2021 data from the Integrated Postsecondary Education Data System (IPEDS), this paper examines women's graduate enrollment trends by race/ethnicity at degree-granting institutions, the University of California (UC) system, and UCLA. IPEDS data cover 12 academic years, from fall 2010 to fall 2021.

In 2021-2022, the U.S. had 3,542 degree-granting postsecondary institutions, including 99 HBCUs and 516 HSIs (NCES, 2023). The UC system comprises ten campuses, with female graduate enrollment accounting for 48.5% of the total graduate enrollment in fall 2021. White students constituted 30.1% of the total graduate enrollment, while African American and Hispanic/Latino(a) students made up 5.0% and 11.8%, respectively (UC, 2023). At UCLA, African American and Hispanic/Latino(a) students accounted for 6.9% and 12.1% of graduate enrollment in the same year.

This study examines enrollment data as percentages, with lower percentages indicating less representation. It investigates Black and Hispanic female graduate student enrollment trends at three levels: degree-granting institutions, the UC system, and UCLA. A linear regression of enrollment numbers and time (2012-2021) explores the longitudinal relationship between graduate school enrollment and time. The study concludes with a discussion on how school reform can reduce racial and ethnic discrimination in graduate education.

Findings

Figure 1 shows female graduate enrollment trends from 2012 to 2021. Panels (A) to (D) depict trends for all women, white women, Black women, and Hispanic women, respectively. The overall trend shows an increase in female graduate enrollment at the UC system and UCLA from 45% to about 50%, lower than the national level.

Hispanic/Latino(a) populations have grown significantly in California, comprising 40.3% of the population in 2022 (U.S. Census, 2022). This growth is reflected in graduate school enrollment. UC and UCLA have higher percentages of Hispanic female graduate enrollment than the national average. At UCLA, Hispanic female enrollment increased from 5.5% in 2012 to 8.5% in 2021, but this is still below the 15-20% enrollment of white counterparts.

Black women, representing 13.6% of the U.S. population but only 6.5% in California, have lower graduate school enrollment rates in California. As seen in Panel (C), the UC system has not seen a significant increase in Black female graduate students over the last decade, with their enrollment at about 2% by 2021.

Linear regression analysis (Table 1) shows a significant positive trend in Hispanic female graduate enrollment in all three models (degree-granting university, UC System, and UCLA). At UCLA, the enrollment percentage of Hispanic females increased by 0.380% annually, with a strong model fit ($R^2 = 0.952$). For Black females, the regression data indicate minimal growth in the UC System and UCLA, with annual increases of 0.051% and 0.063%, respectively. The R^2 values for Black females are lower, suggesting other variables, possibly systemic barriers, could be influencing their enrollment trends.

White women show a significant declining trend in graduate enrollment in the UC system and UCLA but no significant change at the degree-granting university level. The proportion of white women decreases by 0.384% and 0.462% annually in the UC system and UCLA, respectively, but their starting percentage is much higher.

These patterns reveal significant disparities among racial and gender groups within California's higher education system. The rise in Hispanic female students, especially at UCLA, contrasts with the slower increase for Black female students, suggesting that diversity efforts may not equally address the needs of all groups.

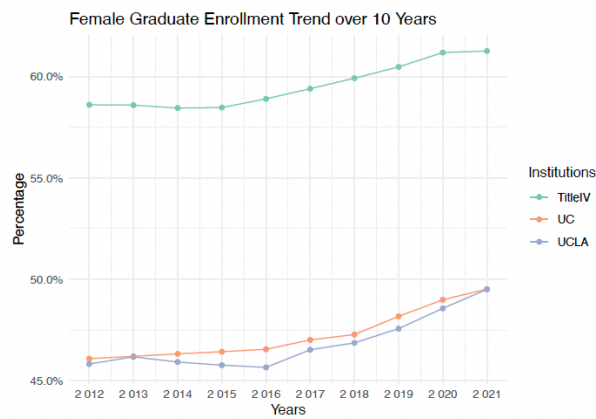
Conclusion and Significance

The study highlights significant underrepresentation of Black and Hispanic female students in graduate enrollment at national, UC system, and UCLA levels. While Hispanic female enrollment has increased notably, especially at UCLA, Black female enrollment has remained relatively stable. The findings underscore the importance of considering intersectionality, interest convergence, and LatCrit to understand the unique challenges faced by these groups.

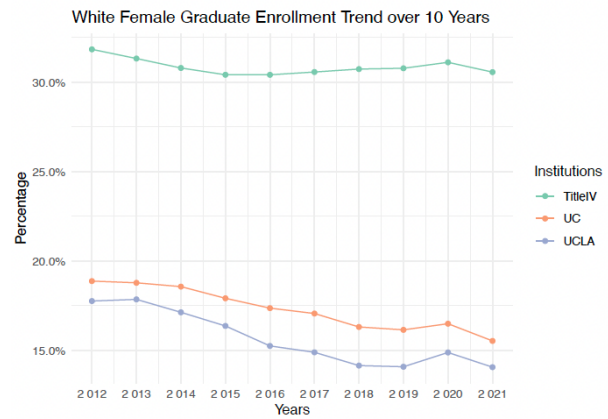
The study calls for a continued commitment to equity in higher education, emphasizing the need for universities to critically evaluate their admission and diversity policies through an intersectional lens. Policies should aim to break down barriers preventing Black and Hispanic women from fully engaging in graduate education. Sustained efforts, including providing resources, fostering an inclusive campus climate, and ensuring representation in curricula and faculty, are essential for achieving true equity in graduate education.

Appendix

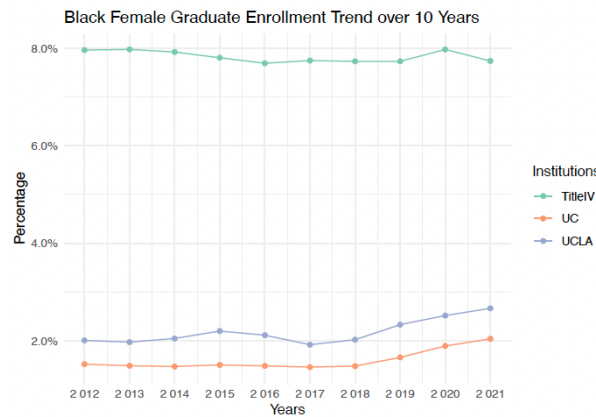
Figure 1 2012-2021 Female Graduate Enrollment Trend in Total and by Race



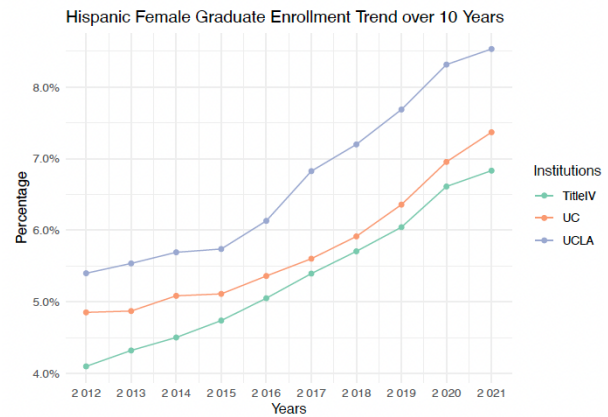
Panel (A)



Panel (B)



Panel (C)



Panel (D)

Table 1 Regression Analysis for Female Graduate Enrollment Percentage

Degree-granting university				
	Estimate	S.E.	T-value	Pr(> t)
White Female				
(Intercept)	31.176	0.246	126.806	1.67e-14 ***
Year	-0.072	0.046	-1.568	0.155
Black Female				
(Intercept)	7.915	0.063	125.138	1.86e-14 ***
Year	-0.019	0.012	-1.601	0.148
Hispanic Female				
(Intercept)	3.921	0.077	51.10	2.38e-11 ***
Year	0.313	0.014	21.76	2.10e-08 ***
UC System				
White Female				
(Intercept)	19.031	0.168	113.4	4.09e-14 **
Year	-0.384	0.031	-12.2	1.89e-06 ***
Black Female				
(Intercept)	1.372	0.084	16.348	1.97e-07 ***
Year	0.051	0.016	3.221	0.0122 *
Hispanic Female				
(Intercept)	4.485	0.160	28.100	2.78e-09 ***
Year	0.280	0.030	9.379	1.37e-05 ***
UCLA				
White Female				
(Intercept)	17.725	0.354	50.023	2.82e-11 ***
Year	-0.462	0.066	-6.966	0.000117 ***
Black Female				
(Intercept)	1.895	0.100	18.982	6.14e-08 ***
Year	0.063	0.019	3.379	0.00966 **
Hispanic Female				
(Intercept)	4.995	0.161	30.97	1.29e-09 ***
Year	0.380	0.030	12.58	1.49e-06 ***

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