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PROMOTING PERSISTENCE: FACULTY OF COLOR AND
THE GRADUATION RATES OF STUDENTS OF COLOR
AT PREDOMINANTLY WHITE INSTITUTIONS

A thesis

Presented to

The School of Social Sciences, Education & Business
Department of Higher Education and Student Development
Taylor University
Upland, Indiana

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Higher Education and Student Development

by

Serena Draper

May 2021

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**Higher Education and Student Development
Taylor University
Upland, Indiana**

CERTIFICATE OF APPROVAL

MASTER'S THESIS

This is to certify that the Thesis of

Serena Marie Draper

entitled

Promoting Persistence: Faculty of Color and
The Graduation Rates of Students of Color
At Predominantly White Institutions

has been approved by the Examining Committee for the thesis requirement for the

Master of Arts degree
in Higher Education and Student Development

May 2021

Kim Case, Ph.D. Date
Thesis Supervisor

Skip Trudeau, Ed.D. Date
Member, Thesis Hearing Committee

Dara Berkhalter, Ed.D. Date
Member, Thesis Hearing Committee

Tim Herrmann, Ph.D. Date
Director, M.A. in Higher Education and Student Development

Abstract

Over the last several decades, access to higher education for students of color has rapidly expanded. Yet while the population of students of color continues to grow in higher education, faculty diversity has not matched pace. This disparity creates curiosity regarding the relationship between faculty representation and persistence in college. In light of this reality, this study examined the relationship between faculty representation and graduation rates by race and ethnicity at predominantly White institutions. This study used publicly available IPEDS data to measure the six-year graduation rates for varying racial groups and the percentage of faculty of those groups at sample institutions. Findings suggest that Latino/a faculty representation is positively related to Latino/a student graduation rates. Findings also point to, though indirectly, the benefits of a more diverse faculty on the graduation rates of all students.

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Chapter 1

Introduction

Today's college and university students are a more diverse group than ever before. Yet, despite growing diversity in the student body, the diversity of faculty has made little progress since the mid-nineties (Benitez et al., 2017). Additionally, while students from varied racial and ethnic backgrounds have increasing access to education, existing literature consistently shows that students of color have lower retention and graduation rates at predominantly White institutions (PWIs) compared to White students (Beadlescomb, 2019; Benitez et al., 2017; Museus & Quaye, 2009). The disparity between the population of students of color and faculty of color invites questions as to the role of faculty of color in the graduation rates of students of color.

Positive interactions with faculty, particularly faculty of color, are especially beneficial for the overall success of students of color (McCoy et al., 2015; McCoy et al., 2017; Pascarella & Terenzini, 2005). Sense of belonging, an indirect promoter of retention, tends to be improved by the presence of faculty of color, an effect which is amplified at PWIs (Benitez et al., 2017; McCoy et al., 2017). The demonstrated benefit of faculty of color and their disproportionate underrepresentation creates curiosity regarding the level of representation needed to positively affect students of color at PWIs. Previous studies suggest a positive relationship between the level of faculty representation and the

persistence of students of color (Hagedorn et al., 2007; Rogers & Molina, 2006; Stout et al., 2018).

Faculty of Color

Faculty of color represent a widely diverse group of people, including a constellation of varied racial, ethnic, and national backgrounds. The range of representation and loosely defined boundaries within the category of faculty of color make the term somewhat ambiguous. Collectively, faculty of color lack a concrete definition in both common vernacular and academia. For the purpose of this study, faculty of color are defined as individuals who self-identify as American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino/a, or Native Hawaiian or Other Pacific Islander, according to the National Center for Education Statistics (NCES) reporting (NCES, n.d.).

Students of Color

Along with faculty of color, students of color are equally varied in their racial, ethnic, and national backgrounds. Defining the term “students of color” brings equal challenges as describing faculty of color. While students and faculty of color face somewhat different challenges, their experiences as underrepresented minorities create shared experience at PWIs. Therefore, identical parameters are appropriate. For the purpose of this study, students of color are defined as individuals who self-identify as American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino/a, or Native Hawaiian or Other Pacific Islander, according to NCES reporting (NCES, n.d.).

Graduation Rates

While student retention and completion rates are broadly pertinent issues for most institutions, the struggle to graduate students of color remains heightened for PWIs. Tinto's (1975) foundational model of student dropout notes that successful faculty interactions contribute to a sense of social integration in students, decreasing the likelihood of attrition. Before examining potential factors influencing graduation rates, a common understanding proves helpful. For the purposes of this study, the six-year graduation rates for first-time, full time, degree-seeking cohorts will be measured (NCES, 2020). Considering previous research regarding faculty's effect on student graduation rates, this study seeks to add to the existing body of literature exploring this topic. This study retrieved graduation rates at selected institutions through the Integrated Postsecondary Education Data System (IPEDS), as this database has a common set of requirements for assessing student outcomes.

Predominantly White Institutions

The majority of higher education institutions in the United States are predominantly White institutions (PWI). Yet, PWI is not an official classification in the United States. Rather, PWIs may be considered those institutions that fall outside of the six categories of minority serving institutions (MSI). The Higher Education Act categorizes MSIs by their compositional, historical, or missional elements to serve underrepresented populations (Boland, 2018; Bourke, 2016). Conversely, PWIs could be described as institutions that are historically, compositionally, and culturally predominantly White. It is important to note that while these categories may provide important framework, these classifications are complex and consider more than the

simple ratio of White students to students of color (Bourke, 2016). This study narrows its scope to institutions within the Council of Independent Colleges (CIC) that are historically, compositionally, and culturally predominantly White.

Purpose

The purpose of this study was to examine the potential relationship between the percentage of faculty of color and the graduation rates of students of color at PWIs within the CIC. Students of color consistently display lower graduation rates than White students, particularly at PWIs. Though the overwhelming benefits that faculty of color provide particularly to students of color is well-documented (Benitez et al., 2017; Genheimer, 2016; Guiffrida, 2005; Hagedorn et al., 2007; McClain & Perry, 2017; Madyun et al., 2013; Pascarella & Terenzini, 2005), striking disparities in representation levels among faculty persist (NCES, 2019). Despite the numerous studies exploring faculty of color and students of color, a gap exists in quantifying this relationship in regards to graduation rates at private four-year PWIs. This study sought to fill this gap by exploring the broad concepts of faculty of color and graduation rates in students of color through a quantitative analysis of the former's representation at CIC institutions. Therefore, the research question guiding this study was, "What relationship, if any, exists between the percentage of faculty of color and the graduation rates of students of color at predominantly White institutions within the Council for Independent Colleges?"

Chapter 2

Literature Review

As the United States population continues to diversify across all metrics, the undergraduate student population reflects this shift. Among these societal shifts, increased representation in race and ethnicity is perhaps the most notable. Students of color now account for approximately 47% of all undergraduate students, compared to 17% in 1976 (NCES, 2021). Yet, as the student body diversifies, the professoriate has not kept pace with this increasing diversity. Faculty of color account for a disproportionately small percentage of total faculty, creating disparity in representation for students of color in higher education institutions. Despite the increase in students of color in higher education, students of color continue to drop out at higher rates than their White counterparts, an issue which is exacerbated at predominantly White institutions (PWI) (Allen, 1992; Banks & Dohy, 2019; Benitez et al., 2017; Cabrera et al., 1999; Museus & Quaye, 2009).

Previous literature shows that, in all types of institutions, successful connection with faculty of color is a significant factor promoting the retention and persistence of students of color (Guiffrida, 2005; Hagedorn et al., 2007; McClain & Perry, 2017; Warren, 2006; Watson & Terrill, 2002). This benefit tends to be stronger for students of color at PWIs (Tinto, 1993). However, the lack of representation of faculty of color, particularly at PWIs, continues to be a consistent pattern throughout higher education (Antonio, 2002; Madyun et al., 2013; NCES, 2020; Stout et al., 2018; Tinto, 1993; Watson & Terrill, 2002). This literature review provides a retention framework from

which to guide this study, explores graduation rate disparities facing students of color at PWIs, and reviews prior research studies regarding the effects of faculty of color on students of color at PWIs.

Retention Framework

At the base level, graduation rates reflect the ability of an institution to retain students through degree completion. Therefore, retention theory serves as the underlying framework for understanding institutional graduation rates. Retention is a complex metric influenced by a multitude of overlapping personal, institutional, and environmental factors. The concept of retention remains one of the most widely studied and complex dimensions of higher education since its introduction in the 1960s (Tinto, 2006). As retention's importance has grown in the last several decades, institutions continuously search for the most effective strategies to retain students through graduation.

Graduation rates, arguably the most holistic measure of retention, has serious implications for the financial wellbeing, reputation, and culture of an institution (Gold & Albert, 2006). In the United States, 62% of students who attend four-year institutions will complete their degree within six years (NCES, 2019). A deeper examination of this statistic reveals disparities in graduation rates for different racial and ethnic groups. Black students graduate at a rate of 45.9% at four-year institutions, compared to 55.0% of Latino/a students, 67.2% of White students, and 71.7% of Asian students (Shapiro et al., 2017). Understanding and improving retention, particularly for students of color, remains an issue for many institutions. Two foundational theories have shaped the common understanding of retention: Tinto's Theory of Student Dropout and Sedlacek's

Noncognitive Variables. These theories interact to help explain multiple layers of the retention puzzle.

Tinto's Theory of Student Drop Out

Vincent Tinto's (1975) Theory of Student Dropout provides a helpful framework for understanding the factors that contribute to students' persistence or attrition. Tinto's (1975) theory asserts that student dropout must be viewed primarily as "the outcome of a longitudinal process of interactions between the individual and the institution" across multiple dimensions (p. 103). Among individual and external factors unique to each student, Tinto (1975) posits that a student's levels of integration into an institution's academic and social systems are primary factors preventing dropout. Peer group connection is a vital element to a student's institutional integration. Social integration occurs primarily through peer group connection, such as a student's residence hall or other social subgroups. In fact, peer group integration has been asserted as the primary source of student persistence (Astin, 1993; Pascarella & Terenzini, 2005).

Beyond peer group integration, faculty and staff at an institution contribute to the overall campus culture and are important factors in a student's integration process. Tinto (1975, 1993) notes that a student's congruence with either the dominant campus culture or a campus subculture promotes persistence. Social integration is much easier for students who are closer in congruence with the dominant campus culture, or who find congruence with a significant campus subculture. Students who fail to find a supportive group or subculture tend to withdraw at higher rates than those who succeed. Difficulty integrating into a supportive subgroup proves to be a contributing factor for higher dropout rates in students of color than in White students (Allen, 1992; Cabrera et al.,

1999; Heisserer & Parette, 2002; Morgane-Patterson & Barnett, 2017). Conversely, research suggests that a more diverse campus may be positively correlated, though perhaps indirectly, with student integration and persistence (Pascarella & Terenzini, 2005). At many PWIs, ethnic organizations, clubs, and theme houses assist in the social subgroup integration and creation of a safe space for students of color (Museus, 2008; Pascarella & Terenzini, 2005).

Additionally, academic integration is a necessary factor in student persistence, measured primarily by grade performance and intellectual development throughout college (Tinto, 1975). Faculty are the main contributors to a student's academic congruence. In addition to grade performance, informal interactions with faculty and staff outside of regular class time serve as key components in promoting student persistence (Baker, 2013). Successful encounters between students and faculty are among the most important factors in a student's decision to remain in college (O'Keefe, 2013; Pascarella & Terenzini, 2005; Tinto, 1975; Tinto, 1993; Watson & Terrill, 2002). Thus, faculty play a unique dual role in the integration process, as they are able to foster social and academic connection for students through formal classroom interactions and informal interactions outside of the classroom.

Sedlacek's Noncognitive Variables

While Tinto's (1975) theory provides much helpful framework for retention and eventual completion, some scholars have criticized the theory's lack of applicability to racial minority students. In order to address the shortcomings of Tinto's (1975) theory, William Sedlacek presents several noncognitive variables that promote higher rates of persistence for students of color, particularly at PWIs. These eight attributes are: positive

self-concept; realistic self-appraisal; understanding of and navigation of the system and racism; preference for long-range goals over immediate, short-term needs; availability of a strong support person; successful leadership experience; demonstrated community service; and knowledge acquired in or about a field (Sedlacek, 2017; Tracey & Sedlacek, 1986). While these variables help predict persistence for students of all backgrounds, noncognitive skills prove to be highly related to the persistence of students of color (Sedlacek, 2017; Tracey & Sedlacek, 1986).

The eight dimensions carry widespread implications for institutions. Nearly every facet of an institution—including admissions, residence life, classroom teaching, and multicultural programs—benefit from deep understanding of the noncognitive variables (Sedlacek, 2017). Sedlacek (2017) specifically designed the noncognitive variables with retention programs in mind, as they allow individual assessment of students' strengths and weaknesses. Each of the variables predicts retention and student success in varying degrees depending on the student's race and gender.

Students of Color at PWIs

With an understanding of the need for academic and social integration in tandem with each student's noncognitive abilities, institutions must then consider how to remove barriers and open pathways for student success. At PWIs, students of color tend to have more difficulty integrating into the school's academic and social cultures (Allen, 1992; Cabrera et al., 1999; Heisserer & Parette, 2002; Morgane-Patterson & Barnett, 2017;). Heisserer and Parette (2002) note that ethnic minorities and students from lower socioeconomic statuses tend to be at significantly higher risk for dropout due to a lack of congruence with institutional culture. For students of color, who often lack representation

and therefore are less likely to find comfort or familiarity within campus culture, retention through graduation becomes increasingly difficult due to feelings of marginalization and isolation (Etzkowitz et al., 1994; Laden & Hagedorn, 2000).

Feelings of isolation stem from difficulty integrating with the dominant White campus culture (Allen, 1992; Banks & Dohy, 2019; Cabrera et al., 1999; Pascarella & Terenzini, 2005; Watson & Terrill, 2002). For students of color, tokenism and discrimination often fuel feelings of isolation. Students of color are often expected to speak on behalf of their entire racial group and may be treated as the token minority for all racial minority groups (Genheimer, 2016; Watson & Terrill, 2002). In addition to tokenism, students of color share an abundance of stories recounting racism, alienation, and discriminatory practices from peers, faculty, and administration (McCoy et al., 2017; Watson & Terrill., 2002). Faculty of color, however, act as exceptions to these experiences through counteracting negative stereotypes, mentoring, and promoting a sense of belonging for students of color (Benitez et al., 2017; Genheimer, 2016; Guiffrida, 2005; Hagedorn, 2007; Madyun et al., 2013; McClain & Perry, 2017).

The experiences and climate of discrimination felt by students of color at PWIs create negative effects on their persistence and retention decisions (Cabrera et al., 1999; McClain & Perry, 2017; Pascarella & Terenzini, 2005). Even when controlling for grade point average, a key predictor of retention, students of color consistently have lower retention and graduation rates than their White counterparts (Banks & Dohy, 2019; Benitez et al., 2017; Cabrera et al., 1999; Museus & Quaye, 2009). Isolation, tokenism, and discrimination contribute to decreased sense of belonging, subsequently decreasing retention for the individuals who share these experiences. Ability to navigate institutional

and individual racism is highly predictive of both grades and retention for students of color (Sedlacek, 2017).

Faculty of Color Effects on Students of Color

Though there are a variety of factors at work which influence a student's integration, establishing a quality relationship with faculty is one of the most beneficial. In the United States, faculty of color comprise 24% of total faculty, with White faculty comprising 76% of total faculty (NCES, 2019). Students of color represent 43% of students at four-year institutions (NCES, 2019). Despite the number of students of color consistently increasing, the percentage of faculty of color has not seen a proportionate growth.

Representation

For students of color, seeing themselves reflected in faculty has proven especially beneficial for promoting integration and sense of belonging (Benitez et al., 2017; Genheimer, 2016; Guiffrida, 2005; Hagedorn et al., 2007; McClain & Perry, 2017; Tinto, 1993; Warren, 2006; Watson & Terrill., 2002). McClain and Perry (2017) assert that structural diversity—including students, faculty, and staff—at an institution is key to promoting the retention of students of color. The presence of faculty of color in “white spaces” contributes to a sense of safety for students of color and plays an important role in meeting their needs (Madyun et al., 2013, p. 66).

Faculty of color are key to building a socially and academically supportive environment and conferring cultural capital to students of color in often unwelcoming spaces (Madyun et al., 2013; Rogers & Molina, 2006). As students of color seek to navigate the system and racism within their institution, faculty of color prove to be an

invaluable resource (Genheimer, 2016; Sedlacek, 2017). Faculty of color share their cultural capital with students of color through promoting intercultural competence among all students (Madyun et al., 2013), by acting as a counter to negative stereotypes (Benitez et al., 2017; Guiffrida, 2005), and by connecting students of color with their own resources (Guiffrida, 2005; McCoy et al., 2017). Faculty of color provide easier access to knowledge in or about a field, which students of color tend to find more difficult to acquire from White faculty than from faculty of color (Benitez et al., 2017, Guiffrida, 2005; McCoy et al., 2015; McCoy et al., 2017).

A significant facet of faculty of color's role at PWIs consists of mentorship, particularly for students of color (Genheimer, 2016). Mentorship provided by faculty of color meets three of Sedlacek's (2017) noncognitive variables by providing a strong support person and by fostering positive self-concept and realistic self-appraisal for students of color. At a PWI, faculty of color may more easily become a strong support person for students of color than White faculty (McCoy et al., 2015; McCoy et al., 2017; Sedlacek, 2017). The continued disparity between faculty of color and White faculty leads to a disproportionately low number of culturally similar mentors for students of color (Banks & Dohy, 2019; Tinto, 1993). Faculty of color often participate in mentoring or "othermothering" students of color on predominantly White campuses (Guiffrida, 2005, p. 703). When acting as othermothers, professors move beyond their explicit responsibilities as educators to help students succeed by providing additional resources and support (Guiffrida, 2005). Students of color often report feeling more supported by faculty of color while, conversely, often feeling neglected, unheard, or underestimated by White faculty (Benitez et al., 2017; McCoy et al., 2015; McCoy et al., 2017; Rogers &

Molina, 2006; Sedlacek, 1987). While these differences are certainly not the rule, students at PWIs consistently experience faculty of color to be more supportive. Scholars attribute this support as a primary reason why historically Black colleges and universities (HBCUs) graduate higher proportions of Black graduates than PWIs, due to the culture of inclusion, structural diversity, and representation (Allen, 1992; McClain & Perry, 2017).

Considering the importance of representation and mentorship, some studies have sought to quantify the effect of faculty of color on students of color at PWIs (Hagedorn et al., 2007; Rogers & Molina, 2006; Stout et al., 2018). Hagedorn et al. (2007) explored faculty representation in community colleges, discovering that the proportional representation of Latino/a faculty had a positive impact on overall success for Latino/a students, indirectly promoting retention. Rogers and Molina (2006) found that psychology graduate programs with the highest recruitment and retention of students of color employed a critical mass of faculty of color, among other strategies. Anecdotal responses from participants in the same study also suggested that these institutions maintain a higher graduation rate for students of color (Rogers & Molina, 2006). These studies show a relationship between proportionate representation of faculty of color to students of color, though the research narrowly focused on student success in community colleges and retention rates in graduate programs, respectively.

In a broader examination of graduation rates for underrepresented minority students, Stout et al. (2018) found significant, positive correlations for graduation rates between students and faculty of the same racial group. This study also found that a more diverse faculty increased graduation rates for students of color as a whole (Stout et al., 2018). While the study by Stout et al. (2018) does much to quantify the relationship

between a diverse faculty and graduation rates for students of color, gaps remain regarding the findings' applicability to small- to midsize private universities, specifically. Recognizing the importance of representation in promoting the graduation of students of color, this study sought to examine a potential relationship between faculty of color and graduation rates of students of color at PWIs within the Council for Independent Colleges (CIC).

Chapter 3

Methodology

Institutions across the United States struggle with subpar graduation rates. Nationwide, the six-year graduation rate for undergraduate students at four-year institutions is 62% (NCES, 2019). Black and Latino/a students consistently graduate at much lower rates than their White counterparts—45.9% and 55.0% compared to 76.2%, respectively—reflecting ongoing disparities in retention (Shapiro et al., 2017). Retaining students through graduation remains a challenging puzzle for many institutions. Retention is a complex measure resulting from the combination of multiple known and unknown variables. One of the variables affecting the consistently lower retention and graduation rates of students of color may be a paucity of faculty of color, particularly at PWIs. The representation disparity is well documented, and some research has shown a relationship between more proportionate representation among faculty and persistence among students of color (Hagedorn et al., 2007; Rogers & Molina, 2006; Stout et al., 2018).

Despite these studies, a gap remains regarding how faculty of color may influence the graduation rates of students of color at four-year, small- to midsize PWIs. Therefore, this study sought to answer the question, “What relationship, if any, exists between the percentage of faculty of color and the graduation rates of students of color at predominantly White institutions within the Council for Independent Colleges?”

Positionality

When researching a topic with as tangled a history as race in higher education, it was appropriate as a researcher to disclose my positionality regarding this topic. I identify as a White woman and as such fall outside of the groups of faculty and students of color. My intent was not to speak for these groups, but rather to better understand disparities present in the US higher education system. In this study, the terms faculty and students of color represented several racial and ethnic groups. The use of these terms acted as a unifier for these groups who have been historically and systematically underrepresented and was used with the understanding that each group within this umbrella term represented largely varied and unique experiences. Some scholars and activists have begun using the term BIPOC (Black, Indigenous, and People of Color) in place of POC (people of color) (Garcia, 2020). This shift is intended to highlight the unique experience of Black peoples and to counteract Native erasure (The BIPOC Project, 2020). The choice to use the terms faculty and students of color reflected current and previous literature with an understanding that this term may eventually become outdated, as have many other terms referring to race and ethnicity.

Design

The quantitative research available regarding faculty of color and graduation of students of color is presently limited, and this study sought to add to the growing body of quantitative literature on the topic. According to Creswell (2008), quantitative designs best serve research seeking to explore relationships between variables. In order to most effectively examine the potential relationship between faculty of color and the graduation rates of students of color at PWIs, this study utilized a quantitative analysis. This study

used publicly accessible data from the Integrated Postsecondary Education Data System (IPEDS) to analyze a possible correlation between multiple variables: the various racial and ethnic groups of faculty and the graduation rates for students of those groups at sample institutions.

Procedures

Sampling

This study utilized a random sample of institutions from the Council for Independent Colleges (CIC). The CIC consists of 657 small- and midsize private liberal arts colleges and universities predominantly within the United States (CIC, n.d.). According to the CIC's membership requirements, small- to midsize institutions are those that range in full-time undergraduate enrollment from less than 300 students to over 5,000 (CIC, n.d.). Considering the range of institutional size represented in the CIC, simple random sampling was the most appropriate method for this study. Simple random sampling is "the most popular and rigorous form of probability sampling" and ensures a representative, unbiased, and evenly distributed sample from the population (Creswell, 2008, p. 153). Of the total population of 657 institutions, a simple random sample of 50 institutions was selected, then the institutions were checked against the list of official minority serving institutions (MSI) presented by the Rutgers Center for Minority Serving Institutions. As this study specifically examined PWIs, all MSIs were removed from the sample to ensure that each institution included in this study was a PWI. After removing MSIs, the final list of institutions included in this study was a random sample of 39 small- to midsize PWIs in the US.

Data Collection

In order to maintain the most consistent reporting across institutions, this study used IPEDS data, which provide standardized definitions and guidance for institutions' reporting, establishing comparability between institutions. The data associated with determining the representation of faculty of color and graduation rates for students of color were collected utilizing IPEDS's historic reported data. The race and ethnicity categories selected to encompass both faculty and students of color were American Indian or Alaska Native, Asian, Black or African American, and Hispanic or Latino/a. For comparison purposes, this study also examined the graduation rate for White students. Race/ethnicity unknown, Two or more races, and Nonresident alien categories were excluded from the study due to the ambiguity of these terms. Native Hawaiian or Other Pacific Islander groups were removed from this study due to lack of data. Faculty data was narrowed to include only full, associate, and assistant professors. Only undergraduate students were included in this study.

In this study, graduation rates represented the percentage of undergraduate students who began at an institution and completed their degree at the same institution within 150% time of an expected four-year degree (i.e., six years). The six-year graduation rates were gathered from the final release data for each of the five most recent available academic years within IPEDS: 2019, 2018, 2017, 2016, and 2015. For example, the 2019 graduation rates represent those students who began their degree in 2013 and had completed their degree by 2019. Therefore, each year included in this study represented discrete cohorts of students who graduated within six years of beginning their degree. Choosing a longitudinal view was appropriate for this study as it mitigated year-

to-year variations. As the most recently published data was from 2019, the results of this study are unaffected by the COVID-19 pandemic.

Data Analysis

The six-year graduation rates for American Indian or Alaska Native, Asian, Black or African American, and Hispanic or Latino/a students for each year were compiled for each respective group. The same procedure was completed for faculty data. Correlation tests were then run for each race/ethnicity group. The results of these correlation tests were combined into a matrix, which allowed for comparison between graduation rates and faculty representation of the same racial group and for comparison between differing groups. In addition to correlation tests, descriptive statistics were run to further inform comparison.

The ambiguity of racial group identity and the complexity of graduation outcomes created a need for shared measurements when seeking to answer this study's guiding question. A quantitative approach that used IPEDS data for institutions within the CIC gave the needed standardization. The results of this methodology are discussed in the next chapter.

Chapter 4

Results

This study performed a longitudinal quantitative correlation analysis to answer the question, “What relationship, if any, exists between the percentage of faculty of color and the graduation rates of students of color at predominantly White institutions within the Council for Independent Colleges?” The analysis included an examination of six-year graduation rates for cohorts of graduates from 2015 to 2019 at 39 randomly sampled small- to midsize institutions within the United States. Existing literature shows disparities in graduation rates for students from varying racial and ethnic backgrounds. Nationally, the six-year graduation rate for White students at four-year institutions is 67.2%, and the graduation rates for Asian, Black, and Latino/a students are 71.7%, 45.9% and 55.0%, respectively (Shapiro et al., 2017). Differences between racial and ethnic groups similarly exist among faculty representation. Nationally, White faculty comprise 76% of total faculty. Black and Latino/a faculty each represent 6%, while American Indian or Alaska Native professors represent less than 1% of total faculty. Of faculty of color, Asian faculty are the most represented, comprising 12% of total faculty (NCES, 2019). Considering the varying levels of both graduation rates and faculty representation among racial and ethnic groups, this study explored a potential relationship between these factors within the context of CIC institutions.

Descriptive Statistics

Students of varying racial and ethnic groups in this study displayed similar graduation rates. Black students experienced the lowest graduation rates, with mean of 43.09%. Latino/a students graduated at a mean rate of 45.81%. The mean graduation rate for Asian students over this period was 51.83%, while the mean graduation rate for American Indian or Alaskan Native students was 47.22%. White students experienced the highest levels of graduation, with a mean of 59.14%.

Considering faculty race and ethnicity, the representation among faculty of color was lower than White faculty, who represented a mean of 88.53% of faculty in sample institutions. American Indian or Alaska Native faculty were the lowest represented group, with a mean of 0.35%. Hispanic or Latino/a faculty represented a mean of 2.22% of faculty, while Black or African American faculty were slightly more represented with a mean of 3.51%. Of faculty of color examined in this study, Asian faculty were the most represented with a mean of 5.09%. Graduation rates and faculty representation by race and ethnicity are shown in Table 1.

Table 1

Graduation Rates and Faculty Representation by Race and Ethnicity

Race / Ethnicity	Graduation Rates	Faculty Representation
American Indian or Alaska Native	47.22%	0.35%
Asian	51.83%	5.09%
Black or African American	43.09%	3.51%
Hispanic or Latino	45.81%	2.22%
White	59.14%	88.53%

Results

In addition to analyzing a possible relationship between faculty representation and the graduation rates of students from the same racial or ethnic group, this study also explored whether relationships exist between faculty and students of differing groups.

Table 2 reflects the results of the correlation matrix.

Table 2

Correlations Between Faculty Race/Ethnicity and Graduation Rates by Race/Ethnicity

Graduation Rates	Faculty Representation				
	American Indian or Alaska Native	Asian	Black or African American	Hispanic or Latino	White
American Indian or Alaska Native	-.058	-.026	-.061	.139	.061
Asian	.007	.142	-.117	-.017	.051
Black or African American	-.036	.126	-.005	.016	-.001
Hispanic or Latino	-.005	-.023	.036	.344**	.096
White	.009	.041	.062	-.005	-.213*

* $p < .01$. ** $p < .001$.

American Indian or Alaska Native students exhibited no significant relationship between their graduation rates and the level of faculty representation. Asian students' graduation rates appear to have no significant relationship with faculty overall, though there is a slightly higher positive correlation with Asian faculty. Similar to Asian students, the graduation rates of Black students did not reflect a significant relationship

with various faculty groups. Hispanic and Latino/a students' graduation rates, however, did show a significant, positive slight to moderate relationship with Hispanic and Latino/a faculty. Hispanic and Latino/a students did not show a relationship between graduation rates and other faculty groups. White students displayed a significant, negative slight correlation with White faculty and no significant relationship with faculty of other groups.

Conclusion

Among sample institutions, few relationships were shown between the six-year graduation rates of students and faculty representation. One significant, positive relationship emerged between Hispanic or Latino/a students and Hispanic and Latino/a faculty. Conversely, one significant, negative relationship emerged between White students and White faculty. No significant relationship emerged between other student and faculty group pairings. Given the amount of literature that speaks to the importance and impact of faculty representation on the graduation rates of students of color, further discussion is needed.

Chapter 5

Discussion

This study sought to explore the question, “What relationship, if any, exists between the percentage of faculty of color and the graduation rates of students of color at predominantly White institutions within the Council of Independent Colleges?” The results of this study found few relationships between student graduation rates and faculty representation by race and ethnicity at sample institutions. Previous research demonstrates a relationship between faculty representation and graduation rates of students, particularly between faculty and students of color at PWIs. The following discussion explores the findings of this study, implications for practice, limitations of this study, and opportunities for future research.

It is important to note the similarities and differences in graduation rates of students at sample institutions and the national graduation rates. Nationally, the graduation rates for Black students is 45.9%, compared to 43.09% among sample institutions. This study found that Latino/a students graduated at a rate of 45.81%, nearly 10 percentage points lower than the national rate of 55.0%. Asian students graduated at a rate of 51.83%, much lower than the national rate of 71.7%. American Indian or Alaska Native students in this study graduated at 47.22%, similar to the national rate of 49%. While White students graduated at the highest rates both nationally and in this study, the graduation rate for White students at sample institutions was significantly lower at 59.14% compared to the national rate of 76.2%. This finding is consistent with prior

research in that students of color at PWIs persist through graduation at lower rates than their White counterparts.

This study's findings are unique, however, considering the large gaps in graduation rates for Latino/a, Asian, and White students compared to the national average. Lower graduation rates among these populations creates curiosity around the reasons underlying the disparity, as persistence is the result of a complex web of influences. The low graduation rates across all groups may imply institutional factors outside the scope of this study that hinder graduation rates of all students. A potential contributing factor may be institutional size. For students of color in particular, integrating with either the dominant campus culture or a subculture is a strong predictor of retention (Tinto, 1975; Tinto, 1993); the sample institutions in this study may not have a critical mass of culturally similar students to foster such integration.

Outside of other students, culturally similar faculty may help foster a sense of integration (Benitez et al., 2017; McClain & Perry, 2017). Therefore, it is important to note the similarities and differences in faculty representation between this study and national rates. Nationally and in this study, American Indian or Alaska Native faculty comprise less than 1% of the faculty population. In this study, Black and Latino/a faculty were underrepresented at 3.51% and 2.22% respectively in sample institutions compared to both groups each comprising 6% of total faculty nationally. Similarly, while Asian faculty were the most represented group among faculty of color in this study at 5.09%, they were still underrepresented compared to the national level of 12%. The underrepresentation of faculty of color in sample institutions lends itself to the theory that students of color graduated at lower rates due to a lack of integration. White faculty,

conversely, were overrepresented at 88.53% compared to 76% nationally. Though White faculty were overrepresented, White students at sample institutions still graduated at approximately 17% less than the national rate. This finding suggests other institutional factors influencing graduation rates that are outside the scope of this study.

In considering the relationship between faculty representation and graduation rates by race and ethnicity, some findings of this study are consistent with existing literature. The positive relationship between Latino/a faculty representation and Latino/a graduation rates reflects the findings of Stout et al (2018) and Hagedorn (2007). Both of these studies found a positive relationship between the percentage of Latino/a faculty and the overall success of Latino/a students, including graduation rates. The study by Stout et al. (2018), however, also found significant, positive relationships between same and differing groups of faculty and graduation rates by race and ethnicity. This study did not find other significant, positive relationships between same or varying faculty and student groups. The other significant finding in this study was a negative relationship between White students and White faculty. In sample institutions, as the percentage of White faculty increased, the graduation rate of White students decreased. This finding contradicts the findings of Stout et al., which indicated a positive relationship between White students and White faculty (2018). This finding may, however, point to the benefits of a more racially and ethnically diverse faculty for the success and persistence of all students (Madyun et al., 2013; Pascarella & Terenzini, 2005). Antonio (2002) found that, compared to White faculty, faculty of color at four-year institutions are more likely to view their teaching as holistic education, encompassing students' emotional and

ethical development as well as intellectual. To explore the benefits of a more diverse faculty for all students, further research should be conducted.

Implications for Practice

The findings of this study alongside previous research provide helpful context with which to influence future practice. The key finding of this study is the significant positive relationship between the percentage of Latino/a faculty and the graduation rates of Latino/a students. Hagedorn (2007) and Stout et al. (2018) both found a similar relationship, lending quantitative credibility to the importance of faculty representation for the success of Latino/a students. With this finding, institutions must consider long-term strategies to recruit and retain faculty who represent their students, in particular those of Latino/a identity (Benitez et al., 2017; Rogers & Molina, 2006; Stout et al., 2018). While persistence through graduation is the product of a complex network of factors, the importance of faculty representation for Latino/a students holds unique importance.

The underrepresentation of faculty of color in this study creates implications for sample institutions to consider best practices for supporting both students and faculty of color on their campuses. Faculty of color at PWIs often face similar challenges of integration and retention as students of color, and institutions must work to ensure a safe and supportive work environment (Benitez et al., 2017; Genheimer, 2016). In seeking representation, institutions must remain highly cautious not to tokenize faculty of color (Genheimer, 2016) or to treat them as quotas to be met. A supportive environment at PWIs should recognize the unique contributions of faculty of color according to Yosso's (2005) theory of Community Cultural Wealth. A faculty support system focusing on the

depth of aspirational, navigational, and social capital (Yosso, 2005) brought by faculty of color would help facilitate Sedlacek's (2017) noncognitive variables in all students, particularly students of color. In addition, the promotion and tenure of underrepresented faculty must become a priority to create lasting institutional change. The underrepresentation of faculty of color in this study, according to previous research, likely contributed to lower graduation rates for students of color. Therefore, institutions should implement robust plans to recruit, retain, and support faculty of color.

Another implication emerging from this study's findings is the need for sample institutions to improve low graduation rates for students across all racial and ethnic groups. Persistence through graduation is the result of many overlapping factors, including institutional, personal, and environmental. Tinto (1993) asserts that integrating students socially and academically into an institution are key for promoting retention. Sedlacek (2017) focuses on the importance of noncognitive variables such as a strong support person, learning to navigate a system and racism, and developing a positive self-concept for success and retention, particularly for students of color. Beyond these foundational theories lie other institutional factors that promote retention and graduation. Funding, academic support, disability services, career centers, and the quality of physical facilities all contribute to a meaningful learning environment that promotes student persistence (Lau, 2003). As institutions create a supportive environment for students and faculty of color, they may increase persistence to graduation by improving students' social and academic integration, noncognitive variables, and other institutional factors.

It is important to note that, while this study found a significant, positive relationship between Latino/a faculty and Latino/a graduation rates, numbers only tell

part of the story. The retention and graduation of students of color is the result of a constellation of variables, of which faculty of color are a part. Institutional culture, not just the percentage of faculty of color, is important in promoting the holistic success of students of color. Outside of Latino/a students and faculty, this study did not find a quantitative difference in faculty of color representation on graduation rates for students of color, yet the qualitative difference faculty of color have on the experiences of students of color at PWIs is consistently affirmed by previous research. Faculty of color contribute much more to an institution than potentially improving graduation rates for students of color; they are not merely tokens to achieve a desired end. Therefore, PWIs must still prioritize the hiring and retention of faculty of color in order to best serve their students of color (Genheimer, 2016; Madyun et al., 2013).

Future Research

While this study adds to the body of existing literature, significant gaps remain regarding this topic, creating opportunities for future research. There is a need to conduct further longitudinal studies to explore the factors influencing graduation rates for students of color. Few such studies exist in the literature. In comparison to single-year studies (Hagedorn et al., 2007; Stout et al., 2018), longitudinal studies help mitigate year-to-year fluctuations and may allow new trends to emerge. Secondly, there is a general lack of quantitative studies regarding the impact of faculty of color on the graduation of students of color. As higher education institutions seek to promote the success for students of color, further quantitative research would benefit this mission. Subsequently, there is notable opportunity for this study to be replicated among other types of institutions, including large, two-year, and public institutions. Replicating this study among other

types of institutions may yield more broadly generalizable results, which may further inform institutional practice and inclusivity.

Limitations

A few limitations are present in this study, in particular considering the characteristics of the sample institutions. The first limitation considers the low levels of representation among faculty of color. As faculty of color were underrepresented in this study, a question arises if there was a critical mass of faculty of color present at sample institutions to provide accurate results. In each study showing a relationship between faculty representation and graduation rates, there was a critical mass of faculty of color (Hagedorn et al., 2007; Rogers & Molina, 2006; Stout et al., 2018). The second limitation is that of institution type. As each institution studied was a PWI, there is a potential that the structural and cultural Whiteness predominant at the institution may also affect the graduation rates of students of color. Predominant Whiteness of an institution refers to the ongoing social practices, history of racism and exclusion, and the power structures within an institution (Bourke, 2016). The third limitation present is the overall low graduation rates present at these institutions. For every group studied, graduation rates were lower than the national rate, particularly in the case of Asian and White students. These overall graduation rates suggest a variety of institutional and other factors influencing persistence for all students.

Given the issues facing higher education in the United States, retaining students through graduation continues to be a predominant focus for many institutions. Independent colleges and universities will likely be most affected by these challenges, and therefore benefit the most from retention improvement. This assertion is certainly

true with sample institutions in this study, as they displayed comparatively low graduation rates for students of all racial groups. Further, as racial and ethnic minority students continue to comprise an increasing portion of undergraduate students, and as the majority of students of color attend PWIs, institutions need to implement best practices to care for, retain, and graduate these students (McClain & Perry, 2017). This study demonstrated the benefits of a more diverse faculty for the graduation rates of students. Despite this study and other literature's findings promoting the benefits of a more diverse faculty, faculty of color continue to be underrepresented in the professoriate. This underrepresentation was consistent with this study's sample institutions. Finally, given the lack of research quantifying the relationship between faculty of color and graduation rates of students of color, this study adds to the growing body of literature illuminating this topic.

Conclusion

This study sought to explore the question, "What relationship, if any, exists between faculty of color and the graduation rates of students of color at predominantly White institutions within the Council for Independent Colleges?" This study demonstrated that increased Latino/a faculty representation is related to increased Latino/a graduation rates. In addition, some findings may point to the benefits of a more diverse faculty for all students. Finally, beyond the quantitative results of faculty relationship to graduation rates, the qualitative difference that faculty of color have in the experience of students of color should not be underestimated. The findings of this study create ample room for future research to continue learning how to promote student success and persistence through graduation. Moving forward, higher education must seek

to care best for all students, to create pathways to student success, and to be welcoming, safe environments in which all students can succeed.

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