An Evaluation of the Impact of *Hopwood* on Minority Enrollment at the University of Texas at Austin

By:

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Abstract

This explanatory research project evaluates the impact of *Hopwood v. the State of Texas* on minority enrollment at the University of Texas at Austin. *Hopwood* challenged the race-based preferential admissions policies used at the University of Texas at Austin. The successful challenge resulted in changes in admissions policy and legislation that attempted to mitigate the damaging effects the ruling would have on minority enrollment. This research evaluates changes in trends in minority enrollment at the University of Texas at Austin in selected academic disciplines and the relationship between *Hopwood* and minority enrollment. The research hypothesis states that *Hopwood* will have a negative impact on minority enrollment in each academic discipline. An interrupted time series design is used to test the hypotheses. The data collected consist of the percentage of Black and Hispanic student enrollment each semester. The findings suggest that *Hopwood* had an overall negative impact on minority enrollment at the University of Texas at Austin. In addition, policies enacted in response to *Hopwood* may not be successful in maintaining minority enrollment rates that existed before *Hopwood*.

About the Author

Michael Good grew up in Austin and attended the University of Texas at Austin, where he graduated with a Bachelor of Arts in Psychology. His interest in higher education issues came from work experience in student loan programs at the Texas Higher Education Coordinating Board and Texas Guaranteed Student Loan Corporation. The Master of Arts in Public Administration program at Texas State University at San Marcos provided the opportunity to explore these issues further.

While the current research is related to higher education issues, the views expressed are specific to the research project and the author. They are not those of the University of Texas at Austin, Texas State University at San Marcos, The Higher Education Coordinating Board, or Texas Guaranteed Student Loan Corporation. The author may be contacted by e-mail regarding this research at michael.good@sbcglobal.net.

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Chapter 1. Introduction

Cheryl Hopwood became a central figure in the challenge to college admissions policies based on affirmative action programs. Her situation exemplifies the concern that students with greater academic ability are rejected for admission to institutions of higher education in favor of less qualified minority candidates. Cheryl Hopwood was admitted to Princeton University as an undergraduate but could not afford to attend, and instead spent four years at community colleges in Pennsylvania and California (Burka 1996). Her test scores were high enough to put her in the top tier of candidates for admission to the University of Texas at Austin Law School, but "a university official discounted her grades because she had not attended an academically competitive school" (Burka 1996, 113). White students who had been rejected by the University of Texas at Austin were contacted, and Cheryl Hopwood responded (Burka 1996). The resulting lawsuit, *Hopwood v. the State of Texas*, challenged university admissions policies based on affirmative action, and changed policies regarding minority access to higher education in many ways.

Affirmative action programs in college admissions policies have been effective in increasing the number of minority students admitted to institutions of higher education. The editors of the *Journal of Blacks in Higher Education* requested information from universities regarding the percentage of all students who applied to the institutions and were accepted, and the percentage of Black applicants who applied and were accepted (Cohen 1996). Some of the universities refused to supply the data requested, but the institutions that did respond provided acceptance rates for Blacks that were higher than acceptance rates for Whites (Cohen 1996).

Hopwood v. the State of Texas threatened the gains in minority students admitted. The effects of the decision were described as "killing off or modifying affirmative action at one institution of higher education after another," and there was a feeling that "affirmative action as we knew it in higher education was, for better or worse, headed toward extinction" (Caplan, Lincoln, and Friedman 1996, 2). There were predictions of reduced academic opportunities for all minorities (Fernandez 1996).

In fact, affirmative action programs did undergo severe changes following *Hopwood*. In Colorado, the state university system changed the rules to ensure that race could only be one of several criteria considered in admission (Cohen 1996). In Georgia, officials requested an "end to all race-based programs of admissions and financial aid at its 34 campuses" (Caplan, Lincoln, and Friedman 1996, 2). Financial aid programs have also been impacted in Texas, Arizona, Florida, and Colorado, where scholarship and grant programs were eliminated (Caplan, Lincoln, and Friedman 1996). In Texas, the Texas Higher Education Coordinating Board ended the Graduate Opportunity Program and other minority scholarships to assist educationally disadvantaged students (Fernandez 1996).

The impact of *Hopwood* has shifted the focus to admission based on criteria other than ethnicity. The hope was that these types of policies would continue to assist in increasing access to higher education for minority students. However, there is a strong sentiment that other programs based on other factors are not adequate substitutes for race-based programs (Caplan, Lincoln, and Friedman 1996).

Higher education is valued in the United States, and there is a tradition to increase access to higher education. If a person has the desire and ability to participate in higher

education, they should be able to gain access to an institution of higher education. However, some minority groups are underrepresented in higher education. Leaders of institutions of higher education have realized this and adopted preferential admissions policies based on affirmative action to admit more minority students.

One reason higher education is valued is that it creates an educated workforce which benefits society as a whole. It is projected that by 2008, the Texas population will be 40 percent Hispanic, 11 percent Black, 45 percent White, and 4 percent other groups (The Texas Higher Education Coordinating Board 2001). As minority populations increase, it is important to encourage minority participation in higher education to maintain an educated workforce.

Challenges to race-based admissions policies designed to increase access to higher education are based on another value of equal treatment of citizens. However, successful challenges threaten to discourage minority participation and reduce economic growth. Removing existing race-based admissions policies provides the opportunity to evaluate the effectiveness of the policies, and the policies that replace them, in increasing minority enrollment.

Research Purpose

The purpose of this research is to evaluate the impact of removing affirmative action-based programs on access to higher education for minority groups. The study seeks to assess the impact of removing a race-based preferential admissions policy on minority student enrollment at the University of Texas at Austin. The research is important because it offers evidence of the effectiveness of race-based admissions

policies to increase access to higher education. It will also provide insight into the effectiveness of other types of admissions policies used in response to removing race-based admissions policies.

Chapter Summaries

This chapter provides an overview of *Hopwood* and the effects of the ruling, and describes the purpose of the current research. Chapter 2 explores historical trends in access to higher education in the United States, and considers the role of the institution of higher education. Chapter 3 provides a review of the literature, outlining barriers to access to higher education and programs created to reduce the impact of those barriers. This chapter also identifies legal challenges to race-based admissions programs implemented by institutions of higher education. *Hopwood* is presented as one of the legal challenges, and programs implemented in response to *Hopwood* are explored. The chapter concludes with the conceptual framework used in this study.

Chapter 4 presents the operationalization of the conceptual framework and the methods used to address the research question. Possible results of the research are also explored. Chapter 5 presents the results of the research and includes an explanation of the statistical analyses. Chapter 6 provides a summary of conclusions drawn from the results and suggestions for future research.

Chapter 2. Historical Setting

Chapter Purpose

This chapter begins with a review of the literature on the history of higher education in the United States to explore the trend of increasing access to higher education. Benefits associated with higher education are also examined as one reason for increasing access. The role that an institution of higher education plays in increasing access is considered. The historical trend of increasing access to higher education, and the benefits associated with that increase, provide a basis for considering what the role of the institution of higher education is in increasing access and what policies should be implemented.

History of Higher Education in the United States

The first colleges in North America were founded not long after the first British colonies were established. The colleges were intended to be "theological seminaries, with the sole objective of rearing a ministry" (Hofstadter and Smith 1961, 1). The colleges were developed based on a belief that an education was necessary not only for the ministry, but also necessary in order to produce civic leaders (Hofstadter and Smith 1961). Harvard was legally established in Massachusetts in 1636, William and Mary followed in Virginia in 1693, and Yale was established in Connecticut in 1701 (Hofstadter and Smith 1961). Yale's mission was to ensure that the "youth of Connecticut would be instructed in the arts and sciences so as to be fitted for employment both in Church & Civil State" (Hofstadter and Smith 1961, 2). For the most part, the early North American colleges were based on the universities of England. However, they

differed from the English model because established scholars did not control North American colleges. Instead, citizens in the communities controlled the colleges (Hofstadter and Smith 1961). The first three colleges created in the British colonies were established as adjuncts to churches, and their main purpose was to educate ministers, although there was also a strong tie to local government (Geiger 1992).

The control of institutions of higher education through religious affiliations was gradually reduced. Geiger (1992) characterizes the period from 1745 to 1775 as one of toleration of other religions and a move away from the study of religion. More students became lawyers and public officials, and colleges served a broader constituency (Geiger 1992). Early colleges encouraged the values of their religious affiliations and their communities. Colleges found resistance, however, when they enforced specific religious beliefs. In response, Princeton was chartered in New Jersey in 1746 (Hofstadter and Smith 1961). The first interdenominational student body was created at Princeton, although the university was still controlled by the Presbyterian Church (Hofstadter and Smith 1961).

After the American Revolution, the first charters for state universities were granted, and from the Revolutionary War through the first decades of the nineteenth century there was a desire to make American education "more secular and scientific, more general and practical, and to overleap the bounds and limits of the traditional classical colleges with its sectarian sponsorship" (Hofstadter and Smith 1961, 148). Most institutions were small, private colleges still divided into sects based on their religious affiliation, but there was an increasing number of State colleges in the South and West that came to prominence after the Civil War (Hofstadter and Smith 1961).

As colleges continued to evolve, they focused on the role of the institution in society and the task of reforming the curriculum. Geiger (1992) describes the period from 1776 to 1800 as a time when a growing political consciousness was disrupted by the revolution against England and the War for Independence. In response, colleges shifted emphasis in order to instill “selflessness, patriotism, and virtue in the citizens and leaders of the new republic" and to focus on the study of law and sciences (Geiger 1992, 10). Throughout the early nineteenth century, American educators were dissatisfied with the system of higher education and searched for ways to improve it. The period from 1800 to 1830 is characterized as a time with “a declining presence of Enlightenment thought, a dissipation of resources caused by the proliferation of non-viable denominational colleges, and debilitating denominational rivalries" (Geiger 1992, 12).

Yale and Harvard resisted changes and defended the traditional college system that favored a classical curriculum, which consisted mostly of the study of classical languages (Geiger 1992). The Yale Report, published in 1828 by faculty of Yale University, attempted to justify their position and defend the classical curriculum (Hofstadter and Smith 1961). According to the Yale Report, the purpose of any college should be to “provide a liberal education as preparation to the later professional training,” and “its intent was above all to provide the discipline of the mind, and only secondarily the furniture” (Geiger 1992, 13). The objections to the traditional college system included the restrictive subject matter of the classical curriculum that limited freedom of thought, and the control of colleges by religious affiliations which was “one of the most powerful enemies of reform of thought and, hence, of the development of first-rate academic work" (Hofstadter and Smith 1961, 393).

The number and diversity of institutions of higher education continued to increase throughout the United States. In response to the criticisms of restricted freedom of thought in the United States system of higher education, Cornell University was established in New York in 1865. Cornell University benefited from the Morill Act of 1862, which gave federal aid to mechanical, technical, and agricultural colleges (Hofstadter and Smith 1961). According to Geiger (1992), the period from 1830 to 1860 was a time of considerable expansion of institutions of higher education to the Southwest and Midwest of the United States. Western colleges were smaller and more experimental, and "undertook notable experiments such as manual labor colleges and admission of women, and aimed at increasing student access" (Geiger 1992, 14). There was rapid transformation of universities from the 1860s to the end of the century, and support for science attracted more money to the universities, thereby aiding the expansion (Hofstadter and Smith 1961).

The period from 1860 to 1890 was a time when new constituencies entered college: "the industrial classes, African-Americans, and women predominantly through their own separate institutions" (Geiger 1992, 15). These new constituencies provided colleges with additional resources that allowed them to support advanced study and offer inducements to attract scholars (Hofstadter and Smith 1961). There was also support for the idea that "knowledge must be not merely conserved but also advanced in universities" (Hofstadter and Smith 1961, 593). Colleges administrators concentrated on recruiting the highest quality professors regardless of denomination or the university they attended, and universities attempted to provide environments that would attract and retain faculty (Hofstadter and Smith 1961).

As the rapid increase in the number of institutions of higher education began to slow, there was a focus on standardizing a system of colleges. Geiger (1992) describes the period from 1890 to World War I as a time when the number of institutions stabilized with large enrollments. The standard university was formed by 1908: it "admitted only bona fide high school student graduates; provided students with two years of general education and then two years of advanced or specialized courses. It also offered doctoral training in at least five departments" (Geiger 1992, 18).

During this time, the Carnegie Foundation for the Advancement of Teaching and the General Education Board emerged. The Carnegie Foundation for Advancement of Teaching provided pensions for college teachers, and the General Education Board "promoted a comprehensive system of higher education in the United States, by attacking waste and confusion" (Geiger 1992, 19). Into the 1900s, professors gained more control over university policy and curriculum. There were conflicts with the trustees managing the universities as some professors resented being controlled by people who were not scholars (Hofstadter and Smith 1961). Controversies arose over academic ideas (e.g., Darwinism), and the controversies were heightened by violations of a new sense of academic freedom (Hofstadter and Smith 1961).

Although the rate of increase in the number of institutions of higher education may have slowed in the early 1900s, there was still an increased access to higher education. Enrollment doubled during the 1920s due to growth in education for the masses, which included junior colleges, teachers colleges, and service-oriented universities (Geiger 1992). The United States higher education system was going through a transition "from a university system originally designed for small numbers to a

system of mass higher education that threatened to submerge the college and university with uneducable numbers" (Hofstadter and Smith 1961, 894). Elite universities responded by adopting more selective admissions criteria, investing in more and better faculty, and increasing per student funding (Geiger 1992). After World War II, the federal government became more involved in programs that increased access to higher education, which included the GI Bill, need-based financial aid, and support for science and research universities (Geiger 1992).

Benefits of Higher Education

Access to higher education increases in response to demand, and this increased demand is due to the many benefits associated with participation in higher education. There are positive externalities associated with participation in higher education related to economic efficiency. Economic efficiency increases with college education because a highly educated workforce creates a stronger economy, which benefits society as whole (Mcpherson and Shapiro 1991). Aside from economic benefits, participation in higher education also provides social externalities such as "training for citizenship and community citizenship, creation of a group with qualities that may serve as an example to others, providing a mechanism for social mobility, and ensuring the continuation of social and cultural values" (Nerlove 1972, 191).

There are also positive social, private, and economic returns to the individual due to participation in higher education. Social equity increases by providing "access to professions and influential positions in public life" and "opening an individual's personal and intellectual horizons" (Mcpherson and Shapiro 1991, 3). An estimate of the private

returns of college education is found by a comparison of the cost of education with future earnings (Mcpherson and Shapiro 1991). There are "consistent findings of positive net private and social returns to higher education investment" (Mcpherson and Shapiro 1991, 185). An example of the high economic value of education is reflected "in the widening earnings gap between those with less and those with more education" (Mcpherson and Shapiro 1998, 49).

The Role of Institutions of Higher Education

As institutions of higher education evolve there is continuing debate over their role, which will impact those who receive the benefits of participation in higher education. The expansion of academic institutions and demand for higher education have resulted in a variety of institutions of higher education, and caused the role of the institution to be reconsidered. Since the end of World War II, several events have increased the focus on higher education in the United States. Three of those events are; the Cold War, the launch of Sputnik, and the civil rights movement (Newman 1985). In response to these and other events, "new needs of American society, external to higher education, led to changes in the universities and colleges" (Newman 1985, 6).

Multiple purposes of institutions of higher education have been identified. One purpose of universities is to pursue "learning and research for its own sake, which benefits society by advances in basic knowledge and education of students" (Bok 1982, 66). A second purpose is to provide "services, training programs, and expert advice" (Bok 1982, 66). A third purpose is to actively participate in reform and social change by encouraging certain programs (Bok 1982).

Many values are considered when determining the role an institution of higher education should pursue. These values are identified as "the preservation of academic freedom, the maintenance of high intellectual standards, and the protection of academic pursuits from outside interference" (Bok 1982, 88). Additional values are "the rights of individuals affected by the university not to be harmed, and the needs of those who benefit from intellectual services that a university can perform" (Bok 1982, 88). The role a university should take is tested because the purposes and values may conflict. When an institution determines its role, it must consider factors that influence access to higher education.

Chapter Summary

This chapter presented evidence of increasing access to higher education in America. The chapter also provided examples of the benefits of higher education as reasons for increasing access, and considered the role of the higher education institution in impacting access. The next chapter examines barriers in access to higher education, programs designed to reduce those barriers, and legal challenges to the programs. The chapter concludes with the hypothesis of the current research.

Chapter 3. Literature Review

Chapter Purpose

This chapter explores the literature on barriers in access to institutions of higher education, which include the cost of higher education and the effects of racial discrimination. Programs designed to reduce the impact of those barriers are financial aid and affirmative action. Affirmative action programs are explored and related to university admissions through race-based preferential admissions policies. The chapter reviews legal challenges to race-based admissions policies and specifically addresses *Hopwood* and policies implemented in response to *Hopwood*. The chapter concludes with a hypothesis relating minority enrollment to *Hopwood*.

Barriers in Access to Higher Education

Cost of Higher Education

One barrier in access to higher education is the cost to the student of attending such an institution. There are many reasons why this cost is increasing, and even as federal support and financial aid remain constant, state support for institutions of higher education is decreasing. Historically, the main sources of revenue for public education were "appropriations from state and local governments, which have served principally to keep tuition low for all students in public higher education" (Mcpherson and Shapiro 1991, 4). However, state support has dropped. Institutions of higher education have increased tuition and fees to make up the difference, and tuition has replaced government appropriations as the primary method of funding (Mcpherson and Shapiro 1998).

Financial problems arise for public institutions due to their "dismal experience with their principal revenue source, state and local appropriations" (Mcpherson and Shapiro 1998, 76). According to Travis and Davis (2000), two factors that directly increase the financial burdens of colleges and universities are the growth in administration and the increase in energy costs of older buildings. The increased costs have also been explained as a factor of improved economic conditions, and "as economic productivity increases, the real income of workers increases, and college workers' salaries have to increase to keep them competitive" (Folge 1971, 10).

The rise in cost impacts access to higher education, and "as a result of wavering taxpayer support for public colleges in the 1990s, tuition charges increased faster than inflation," which has contributed to "an erosion in access to higher education, especially access to 4-year colleges" (St. John, Hu, and Weber 2001, 401). Overall enrollment rates tend to increase even as costs increase because the enrollment of lower-income students is impacted more severely than the enrollment of higher-income students, and lower-income students participate in higher education at a lower rate (Mcpherson and Shapiro 1998). The greater impact on enrollment for low-income students is exemplified by "increases in net cost over time, leading to decreases in enrollment rates for lower-income students" and "states with higher tuition at public universities having lower college entry rates for lower-income students" (Mcpherson and Shapiro 1998, 39-40).

Funding also regulates access to higher education from the perspective of the student. Consideration of the amount of state contributions and the amount of student contributions impacts the type of institution of higher education in which a student can enroll; if the cost of higher education continues to increase, the economic benefit to the

student is reduced (Johnstone 1997). Students then consider cost as a factor, and seek alternatives to universities, which could impact the ability of lower-income students to participate in higher education in the university sector (Johnstone 1997). Mcpherson and Shapiro (1998, 49) concur, and assert that "higher net prices for college education have produced a widening gap in enrollments of more and less affluent students, and that low-income students are increasingly rare at four-year colleges and universities."

Effects of Racial Discrimination

Another barrier to access to higher education is the effect of racial discrimination. Such effects can be the results of existing discriminatory practices or past discrimination, and can cause the enrollment of some minority groups to fall behind other groups. African-American and Hispanic students are "underrepresented among students enrolled in post-secondary institutions nationally and in the state of California" (Conrad and Sharpe 1996, 16).

The underrepresentation of minorities is due to "the racial disparity in elementary and secondary education" and "a smaller percentage of African-Americans and Hispanics graduating from high school" (Conrad and Sharpe 1996, 16). Additional factors include the "relatively smaller numbers of African Americans and Hispanics taking the college entrance examinations, and fewer file applications to post-secondary institutions" (Conrad and Sharpe 1996, 17). All of these factors can be considered effects of current or past discriminatory practices, and in order to increase Black and Hispanic student representation, the effects of racial discrimination must be reduced (Conrad and Sharpe 1996).

Policies that order institutions to "to cease and desist practices of racial discrimination may not be sufficient to undo the harm already done" (Sowell 1976, 48). It may be necessary to take specific actions to remedy the effects of past discrimination. Thus, affirmative action was developed as a way to "reduce persisting racial inequalities, to right past wrongs, and to create social equality" (Becker, Sowell, and Vonnegut Jr 1982, 149). Becker, Sowell, and Vonnegut Jr (1982) assert that affirmative action programs were created to recognize the impropriety of racial discrimination, to increase opportunities for those discriminated against, and to correct the present situations produced by discrimination. The public has recognized the impact of barriers in access to higher education, and legislation has been passed to address the problems.

Legislation Impacting Access to Higher Education

Two pieces of federal legislation enacted to reduce barriers to access to higher education are the Higher Education Act of 1965 and the Civil Rights Act of 1964. As originally passed, Title IV of the Higher Education Act of 1965 provided work-study programs, scholarships, and student loans to assist low-income students to obtain the benefits of higher education (House of Representatives 1965). The legislation addressing discrimination and equal opportunity is the Civil Rights Act of 1964. Title VI of that act "prohibits discrimination against any person on the grounds of race, color, or national origin in programs receiving federal funds" and "prohibits discrimination on the basis of race in student admissions" (Swanson 1981, 25).

Sowell (1990) asserts that the Civil Rights Act of 1964 does not require group preferences and employers are not required to give preference to a certain group, but

some preferential policies persist. Following the Civil Rights Act of 1964, Executive Order 11246 provided the basis for developing affirmative action programs. Affirmative action is based on the idea that "unless positive action is undertaken to overcome the effects of discrimination, practices that allow discrimination will continue" (Swanson 1981, 27). Affirmative action programs have been controversial, and there are differing assessments of the outcomes associated with such programs.

Assessments of Affirmative Action

Positive Impact of Affirmative Action

One study of the impact of affirmative action programs states that there are benefits to the individuals participating in terms of effort, output, and persistence. Schotter and Weigelt (1992) found that affirmative action programs "may lead to an increase in the effort expended" (511). The effects of affirmative action programs on output, however, "depend on the degree of discrimination" (589). Schotter and Weigelt (1992) also found that affirmative action programs benefit the disadvantaged group and discourage members of that group from dropping out.

The way that affirmative action programs are implemented can also positively impact the participants. Self-supportive implementation of affirmative action programs is associated with positive outcomes for participants, and includes "highlighting caring and concern for the recipient, confirming societal norms and values, and including indications of future success" (Turner and Pratkanis 1994, 61).

Swanson (1981) argues in support of affirmative action programs related to admission to institutions of higher education based on fair competition in student

admissions and overcoming past discrimination. Conrad and Sharpe (1996) provide additional support for the use of affirmative action programs in admissions policies because they can act as reparations for past discrimination and increase diversity in the student body, which improves the quality of education.

There are also positive externalities associated with the results of affirmative action programs in admissions policies. Holzer and Neumark (2000) identify those externalities as expanded service to minority communities, mentoring and role-model effects, and benefits associated with diversity of the student population. The community benefits from diversity because minority medical students are more likely to serve minority patients, and a diverse student body positively impacts interracial and intercultural relations (Holzer and Neumark 2000).

Bok (1982) refutes the argument that acceptance of a minority student in an affirmative action program "stamps them as second rate and thereby lowers self-confidence and diminishes the respect accorded them by their white peers" (102). Evidence does not support this conclusion, and suggests that the opposite is true (Bok 1982). Even as advantages of affirmative action programs are found, there are also criticisms.

Criticism of Affirmative Action

Criticisms of affirmative action programs focus on the impact on the recipients, traditional value systems, and the quality of education provided to all students. Unfortunately, affirmative action programs can "create the impressions that the hard-won achievements of these groups are conferred benefits" (Sowell 1976, 63). Becker, Sowell,

and Vonnegut Jr (1982) agree that affirmative action programs can harm the participants because "competent individuals can be deprived of ever clearly knowing whether their social position was achieved because of their own merit or the benevolence of others" (160). Additionally, the programs harm the incompetent person because "individuals will be encouraged to accept new positions and statuses for which they may not be qualified. When such self-deception is discovered, the damage to self-concept can be considerable" (Becker, Sowell, and Vonnegut Jr 1982, 161).

Swanson (1981) also provides arguments against the use of affirmative action programs. These arguments are based on requiring quotas, favoring race over standards of excellence, stigmatizing minorities because they are hired based on group membership instead of ability, and challenging traditional values of equal opportunity based on merit. The way affirmative action programs are implemented can also have a negative impact on participants. Self-threatening affirmative action implies that the recipient lacks qualifications and self-reliance, and this type of program does not provide for the future success of the participant (Turner and Pratkanis 1994).

Arguments against including affirmative action programs in the admissions policies of institutions of higher education are based on a reduced quality of education. Chan and Eyster (2003) assert that the practice can reduce the quality of the education received by all students by rejecting better-qualified students in favor of less-qualified minority applicants. If minority students are less academically prepared than other students, then increasing diversity can lead to lowering the quality of education (Chan and Eyster 2003). An example given by Holzer and Neumark (2000) is "minority

medical students performing less well in school and are less likely to achieve high levels of expertise" (553).

Holzer and Neumark (2000) also argue that increasing diversity does not necessarily result in a better education. Conrad and Sharpe (1996) agree, and suggest that affirmative action programs change what could be a race-neutral decision to one that discriminates against Whites and Asian-Americans, force resources to be used for students who may be more likely to fail, and "reduce the quality of education for all students" (19). Conrad and Sharpe (1996) also argue that affirmative action programs produce "reduced incentives for academic achievement, mismatches of students with institutions, and stigmatization of minority students" (20).

According to Roth (1990), one reason for resistance to affirmative action programs is that the naïve public does not understand the difficulties that minorities experience in trying to achieve equality. Roth (1990) provides another reason for the resistance based on symbolic racism, which allows agreement with traditional values to provide a cover for the expression of prejudice. A third explanation provided by Roth (1990) is realistic group-conflict theory, which involves a real racial threat to Whites and a challenge to their status or position. While positive and negative aspects of affirmative action programs have been identified, determining the results of the programs has proven difficult.

Results of Affirmative Action

Results of affirmative action programs have been mixed. Early research following the initial implementation of affirmative action programs showed that the

employment of Blacks in academic fields had improved. The American Council on Education (ACE) data show that from 1968 to 1969, Blacks were 2.1 percent of those employed in academic fields with a Ph.D., and from 1972 to 1973 the figure rose to 2.9 percent (Sowell 1976). There was also a $640 difference between the salary of Black and White academic employees for academic year 1972-1973 in favor of Whites. However, "Blacks earned slightly more by field, which is similar to results before affirmative action" (Sowell 1976, 57). Additional findings are that "during the 1960s, before affirmative action, Black incomes rose at a higher rate than White incomes" (Sowell 1976, 63).

Minority enrollment also increased, and black student admissions to institutions of higher education expanded in the 1960s. In 1960, "there were 200,000 Black students attending college and by 1970 the number had more than doubled, with an increasing majority going to traditionally White institutions of higher education" (Sowell 1986, 130). Additionally, between 1988 and 1995, "overall Black student enrollment increased by more than 30 percent, and Hispanic student enrollment increased by over 50 percent" (Ball 2000, 202).

There have also been increases in test scores, graduation rates, and degrees earned. From 1976 to 1989, average Scholastic Aptitude Test (SAT) scores of Black students rose 68 points, which is a proportionally "larger gain than for White students" (Bowen and Bok 1998, 289). In addition, the "overall black graduation rate rose to 79 percent, and enrollment in graduate and professional schools has continued to increase" (Bowen and Bok 1998, 289). During the period from 1988 to 1995, bachelors degrees earned by

Black students increased by 34 percent and masters degrees increased by 40 percent (Ball 2000, 202).

The controversy surrounding affirmative action has surfaced in admission to institutions of higher education. The conflict centers on the use of race-based preferential admissions policies and challenges to their use at institutions of higher education.

Admissions Policies and Challenges

Admissions Policies

Factors considered in admissions policies differ among institutions of higher education. When making admissions decisions, admissions officers give weight to certain factors. If admissions policies incorporate affirmative action, race is one of the factors that can be considered. Other factors may include the number of students who will excel in studies, the institution's need for students with diverse backgrounds, the need for students who will use their education to make contributions to professions and society, and consideration of the importance of institutional loyalties and traditions (Bowen and Bok 1998).

Admissions officers in most colleges rely on prior grades and standardized test scores because such criteria "provide a moderately strong basis for predicting a student's grades in the first year following admission" (Bok 1982, 95). Grades and test scores, however, are "less helpful in deciding whom to admit from a large number of well-qualified applicants, and they do not show improvement in powers of analysis and self-expression, emotional maturity, ethical sensitivity, or creativity" (Bok 1982, 95).

Some institutions of higher education employ preferential admissions policies. There are many types of preferential admissions policies, ranging from favoring one group when all other things are equal to a requiring a fixed number of students admitted regardless of an individual's qualifications (O'neil 1975). Other examples of preferential admissions policies include adding points to test scores, discounting or disregarding test scores, admitting one group based on a certain qualification, and using the same criteria but weighing or ranking it differently (O'neil 1975, 54).

Preferential admissions policies have been used to give an advantage based on ethnicity. The argument for sensitivity to race as a factor in making admissions decisions comes from "disparities in pre-collegiate academic achievements for Black and White students" (Bowen and Bok 1998, 50). Manning, Willingham, and Breland (1977) argues in support of considering race as a factor in admissions decisions because of the associated benefits such as increasing diversity, professional service to all citizens, and the number of minorities in leadership positions. Considering race as a factor in admissions can also provide reparations for past discrimination, reduce bias in admissions policies, and increase the fair treatment of applicants by considering multiple factors (Manning, Willingham, and Breland 1977).

O'neil (1975) provides further arguments for the use of race-based preferential admissions policies that include increasing the number of minority students in order to have better educated members of the minority community, and reducing the impact of exclusionary impact of traditional entrance and admissions criteria. Race-based admissions policies can also be used to compensate for the effects of past segregation in

institutions of higher education, and to prepare students to function in society by more closely resembling it (O'neil 1975).

Arguments against race-based preferential admissions policies rely on the idea that racial classifications are inherently divisive. The policies "undermine the concept of fairness of government in dealing with citizens, abandon a commitment to merit and ability in selecting students, may lead to quotas, and can displace nonminority groups" (O'neil 1975, 130-36). Additional arguments against race-based preferential admissions policies are that students admitted under such programs create an additional cost that reduces funds for improving academic institutions, and that minority students may be stigmatized if it becomes known that they know they were admitted under a preferential admissions program (O'neil 1975). O'neil (1975) also asserts that minority students might also be poorly prepared, resulting in lower academic requirements used for their admission. Minority students may also be put in socially difficult positions (O'neil 1975). While race-based preferential admissions policies have benefited some students, others have been negatively impacted. Those who have felt disadvantaged by the use of race-based preferential admissions polices have challenged the policies.

Challenges to Preferential Admission Policies

There have been several legal cases that challenged race-based preferential admissions policies. *Defunis v. Charles Odegaard* (1974) at the University of Washington and *Bakke v. the Regents of the University of California* (1978) are the earliest examples. More recent challenges to admissions programs include *Gratz v.*

Bollinger (1997) and *Grutter v. Bollinger* (1997) at the University of Michigan and *Hopwood v. the State of Texas* (1996) at the University of Texas at Austin.

Marco Defunis applied to the University of Washington Law School (UWLS) in 1970 and 1971, and his applications were rejected (Ball 2000). The admissions policy used at UWLS considered "the applicant's social or ethnic background, as one factor in the admission committee's assessment of the likelihood of the applicant's successfully graduating from law school" (Ball 2000, 23). Another factor in the admissions policy was the use of the predicted first year average score (PFYA). This score is based on "the undergraduate grade point average, the quality of the undergraduate institution attended, grades in difficult courses, and grades in junior-senior year" (Ball 2000, 23).

One of the ways race was given consideration was that special minority candidates' files were evaluated differently and less weight was given to their PFYA scores (Ball 2000). Defunis challenged the admission policy based on a violation of the Equal Protection Clause of the Fourteenth Amendment (Ball 2000). The Washington Superior Court for King County upheld Defunis' claim and he was admitted to UWLS (Ball 2000). In 1974, the U.S. Supreme Court announced its decision not to hear the Defunis case; the Court determined the case was moot based on the fact that Defunis had been admitted under a lower court decision and would soon graduate (Ball 2000).

Allan Bakke applied to the University of California at Davis Medical School (UCDMS) in 1973 and 1974, and his applications were also rejected (Ball 2000). The admissions policy involved a special committee to review files of minority groups. In the review by the committee, the standards for admission were lower and a certain number of places were held specifically for minority applicants (Ball 2000). Challenges to this

policy were also based on the Equal Protection Clause of the Fourteenth Amendment and Title VI of the Civil Rights Act of 1964 (Ball 2000). The California Supreme Court ruled that UCDMS must show that Allan Bakke would not have been admitted without the use of the preferential admission policy; however, school administrators could not demonstrate this, and Allan Bakke was admitted (Ball 2000). The United States Supreme Court did hear this case and ruled that Allan Bakke should be admitted because the admission policy used by the UCDMS was unlawful, but at the same time, the ruling allowed for the consideration of race in admissions policies used at academic institutions (Ball 2000).

On October 14, 1997, Jennifer Gratz and Patrick Hamacher filed suit claiming that the University of Michigan discriminated against them based on consideration of race in undergraduate admissions (Stohr 2004). In December of that year Barbara Grutter filed suit against the University of Michigan Law School for similar reasons (Stohr 2004). The United States District Court upheld part of the undergraduate admissions system, but the court also struck down the law school admissions plan (Stohr 2004). The Sixth Circuit Court upheld the law school admissions plan and took no action on the undergraduate case. On July 23, 2003, the United States Supreme Court ruled on *Grutter v. Bollinger* and *Gratz v. Bollinger*, upholding the law school policy and striking down the undergraduate admissions plan (Stohr 2004).

Cheryl Hopwood began legal proceedings against the University of Texas at Austin Law School (UTALS) in 1992. The system of evaluation used at UTALS "evaluated minority candidates under separate processes and with different standards than those used for white applicants" (Ball 2000, 190). The admissions policy used by

UTALS involved a minority subcommittee that evaluated minority applicants separately from other applicants, a process very similar to the one used at UCDMS in the *Bakke* case (Fullinwilder and Lichtenberg 2004). The preferential admissions policy used at UTALS "granted preferential treatment to minorities in evaluation of grade point averages and test scores" (Holzer and Neumark 2000, 488). The goals of the UTALS policy were to admit 10 percent Hispanic and 5 percent Black students by using the preferential admissions policy (Ball 2000).

Hopwood v. State of Texas (1996) resulted in the federal court district judge upholding the goals of the preferential admissions plan, but invalidating the specific procedures used in the admission policy, and the students filing the suit were not admitted to the university (Ball 2000). The U.S. Court of Appeals for the Fifth Circuit subsequently invalidated the entire law school's preferential admissions program (Ball 2000), ruling that "the law school could not even use race as a plus in its admissions program" (Fullinwilder and Lichtenberg 2004, 167). The case was remanded to federal district court for a second trial, and an injunction was granted banning the use of all racial preferences in admissions policies (Ball 2000).

Responses to *Hopwood*

Recent changes in admissions policies confirm that admissions offices respond to bans on affirmative action by altering their admissions standards in ways favorable to minority candidates (Chan and Eyster 2003). Changes to admissions policies at the University of Texas at Austin arose from within the university and through legislation passed by the Texas legislature.

The University of Texas at Austin admissions office provided information about admissions practices before and after *Hopwood*. During the years immediately preceding the *Hopwood* decision, the University of Texas at Austin "admissions decisions were made after distributing students in descending order based on a predicted freshman grade point average" (University of Texas at Austin 2005, 2). The prediction formula relied on the combined scores on standardized tests and high school class rank. However, in order to enroll a freshman class that was more representative of the state, affirmative action programs were utilized in the admissions policy (University of Texas at Austin 2005). This policy was in place until *Hopwood*, and "the last freshman class admitted to the University of Texas at Austin under this model was in the summer and fall semesters of 1996" (University of Texas at Austin 2005).

With the entering class of 1997, the admissions policy at the University of Texas at Austin was expanded and included an academic index and a personal achievement index. The academic index consisted of the "high school record, class rank, completion of required high school curriculum, the extent to which students exceed the UT required units, and SAT or ACT score" (University of Texas at Austin 2005, 2). The personal achievement index consisted of "scores on two essays, leadership, extracurricular activities, awards and honors, work experience, and service to school or community" (University of Texas at Austin 2005, 2). Special circumstances were also considered as part of the personal achievement index, including the "socio-economic status of the family, single parent homes, language spoken at home, family responsibilities, the socio-economic status of the high school attended, and the average SAT or ACT score of the

high school attended in relation to the student's own score" (University of Texas at Austin 2005, 2).

Another example of changing admission policies is the passage of House Bill 588, often referred to as the Texas top ten percent law. Texas' ban on affirmative action was implemented in 1997, and later that year a law was passed that changed admissions requirements for the University of Texas system (Chan and Eyster 2003). The Texas legislature passed the top ten percent law in the hope of neutralizing the impact of *Hopwood* on undergraduate minority enrollment (Ball 2000). Under this plan, seniors graduating in the top ten percent of their high school class were guaranteed admission to Texas public universities (Ball 2000). The legislation admitted all students in the top ten percent of their high school class, and did not consider test scores (Holzer and Neumark 2000). Bowen and Bok (1998, 272) assert that the Texas top ten percent law would give students from high schools with a large minority population an advantage, however, the success of the law could depend on advice from guidance counselors and the cost of attending an institution of higher education.

Criticisms of the Texas top ten percent law are that it may damage the academic profile of the overall class of students, and could lower minority graduation rates by admitting students who are not prepared (Bowen and Bok 1998). Ball (2000) further criticizes the ability of the Texas top ten percent law to improve access to higher education because there is still a need for financial aid in order to assist disadvantaged minority students. In addition, students from more academically challenging and competitive high schools that are below ten percent would have a difficult time being admitted, and only undergraduate students are impacted (Ball 2000). A central concern

to the success of this policy is the "extent to which such policies will still target groups that may have received preferential treatment in the past" (Holzer and Neumark 2000, 492).

Research Purpose

The purpose of this research project is to evaluate the impact of *Hopwood* on minority enrollment at the six largest colleges at the University of Texas at Austin. The impact of *Hopwood*, which banned race-based preferential admissions programs, should reduce minority enrollment over time. Results from this research may also indicate the effectiveness of responses to *Hopwood* that are designed to reduce the expected decrease in minority enrollment. If minority enrollment at the University of Texas at Austin after *Hopwood* was not negatively impacted, it may suggest that the Texas top ten percent law and other changes to admissions polices were effective in mitigating the impact of *Hopwood* on minority enrollment.

Conceptual Framework

The conceptual framework for this research is formal hypothesis. The research tests the hypothesis that *Hopwood* will have a negative impact on the percentage of traditionally underrepresented minority students enrolled at the University of Texas at Austin. The enrollment trends in six academic disciplines (business administration, communication, education, engineering, liberal arts, and natural sciences) are examined. Table 3.1 illustrates the hypothesis and sources used to support the expectation.

TABLE 3.1
Conceptual framework and supporting literature

Hypothesis	Supporting Literature
Hopwood will have a negative impact on the percentage of traditionally underrepresented minority students enrolled at the University of Texas at Austin in colleges of business administration, communication, education, engineering, liberal arts, and natural sciences.	Sowell 1990 Bowen 1998 Conrad 1996 Holzer 2000 Chan 2003 Fullinwilder 2004

There have been various attempts to adopt admissions policies designed to increase the enrollment of minority students. Sowell (1990) asserts that higher education has implemented policies in an attempt to get a student body with greater minority representation. Unfortunately, there is not a sufficient supply of minority applicants; in response, universities reduce admissions standards. Consequently, removal of preferential admissions policies can be detrimental to attempts to increase minority enrollment.

Conrad and Sharpe (1996) assert that "elimination of race as a criteria in the admissions decision is likely to reduce the number of African-American, Mexican-American, and Native-Americans enrolled in the University of California system, and to increase the number of Asian-Americans and Whites" (30). Bowen and Bok (1998) agree that the adoption of a race-neutral standard would reduce Black student enrollment at some academically selective colleges and universities, and the most selective schools would be impacted the most severely. Fullinwilder and Lichtenberg (2004) found that before the Board of Regents stopped allowing universities to consider race and ethnicity in admissions decisions in 1998, "Black student enrollment ranged between 6 and 7 percent of each freshman class, and in 1998 it plunged to 3.3 percent" at the University of California at Berkeley (147).

One indirect effect of banning race-based preferential admissions programs is to allow more qualified nonminority students to enroll. Simple bans on race-based admissions programs, however, may not increase nonminority enrollment. Chan and Eyster (2003) assert that "banning affirmative action does not simply replace minority candidates who would be admitted through affirmative action with better qualified majority candidates" (858) because institutions that value diversity may change their admissions policies in other ways. While under a ban on affirmative action an admissions office may adopt an admissions rule that partially ignores candidates' qualifications (Chan and Eyster 2003).

Some responses to bans on affirmative action are class based or income based. Bowen and Bok (1998) assert that class-based policies cannot be substituted for race-based policies to enroll a class that is academically excellent and diverse. Holzer and Neumark (2000) address income- and class-based admission policies and assert that since there are many nonminorities in lower income groups or lower class groups, policies based on these factors would reduce the proportion of minorities benefiting from them. These policies also ignore other benefits of affirmative action programs in "countering discrimination and other disadvantages faced by women and minorities" (Holzer and Neumark 2000, 561).

Chapter Summary

This chapter provided information about barriers in access to higher education that included the cost of higher education and the effects of racial discrimination. Government interventions to reduce barriers to access were explored with a detailed

discussion of affirmative action programs relating to admissions policies at institutions of higher education. Legal challenges to race-based admissions policies were examined focusing on *Hopwood* at the University of Texas at Austin. The purpose of the research was explained and the conceptual framework was presented along with the formal hypothesis. The next chapter describes the methodology used to carry out the research, and includes operationalization of the variables and information about data collection and statistical analysis.

Chapter 4. Methodology

Chapter Purpose

The purpose of this chapter is to describe the data collected and methods utilized to test the research hypothesis, and includes the operationalization of the identified variables and the design and statistics used to address the research question. This chapter also discusses possible outcomes of this research based on assumptions about the impact of the *Hopwood* ruling and the top ten percent program.

Operationalization

The research hypothesis states that the *Hopwood* ruling will have a negative impact on traditionally underrepresented minority enrollment at the University of Texas at Austin. In order to test the hypothesis, the trends in the percentage of minority enrollment before and after the impact of the *Hopwood* ruling are identified and compared.

The dependent variables are the enrollment rates of traditionally underrepresented minority students in the colleges of business administration, communication, education, engineering, liberal arts, and natural sciences at the University of Texas at Austin. The independent variables that impact enrollment are the *Hopwood* ruling and the time periods when enrollment data were recorded. The trend before the *Hopwood* ruling, the immediate impact of the *Hopwood* ruling, and the trend after the *Hopwood* ruling are assessed using the dependent and independent variables. A list of individual hypotheses for each academic discipline that were used to test the research hypothesis is presented

below. Table 4.1 operationalizes the necessary variables for the hypotheses presented for each academic discipline.

Hypotheses:

H1: *Hopwood* will have a negative impact on the percentage of traditionally underrepresented minority students enrolled at the University of Texas at Austin in the college of business administration.

H2: *Hopwood* will have a negative impact on the percentage of traditionally underrepresented minority students enrolled at the University of Texas at Austin in the college of communication.

H3: *Hopwood* will have a negative impact on the percentage of traditionally underrepresented minority students enrolled at the University of Texas at Austin in the college of education.

H4: *Hopwood* will have a negative impact on the percentage of traditionally underrepresented minority students enrolled at the University of Texas at Austin in the college of engineering.

H5: *Hopwood* will have a negative impact on the percentage of traditionally underrepresented minority students enrolled at the University of Texas at Austin in the college of liberal arts.

H6: *Hopwood* will have a negative impact on the percentage of traditionally underrepresented minority students enrolled at the University of Texas at Austin in the college of natural sciences.

TABLE 4.1
Operationalization of the Hypotheses

Variables	Definition	Unit of Measure
Dependent		
H1: The enrollment of traditionally underrepresented minority students in the college of business administration at the University of Texas at Austin.	The percentage of Black and Hispanic students enrolled each semester.	The percentage of total Black and Hispanic students, percentage of Black students, and percentage of Hispanic students enrolled each spring, summer, and fall semester.
H2: The enrollment of traditionally underrepresented minority students in the college of communication at the University of Texas at Austin.	The percentage of Black and Hispanic students enrolled each semester.	The percentage of total Black and Hispanic students, percentage of Black students, and percentage of Hispanic students enrolled each spring, summer, and fall semester.
H3: The enrollment of traditionally underrepresented minority students in the college of education at the University of Texas at Austin.	The percentage of Black and Hispanic students enrolled each semester.	The percentage of total Black and Hispanic students, percentage of Black students, and percentage of Hispanic students enrolled each spring, summer, and fall semester.
H4: The enrollment of traditionally underrepresented minority students in the college of engineering at the University of Texas at Austin.	The percentage of Black and Hispanic students enrolled each semester.	The percentage of total Black and Hispanic students, percentage of Black students, and percentage of Hispanic students enrolled each spring, summer, and fall semester.
H5: The enrollment of traditionally underrepresented minority students in the college of liberal arts at the University of Texas at Austin.	The percentage of Black and Hispanic students enrolled each semester.	The percentage of total Black and Hispanic students, percentage of Black students, and percentage of Hispanic students enrolled each spring, summer, and fall semester.
H6: The enrollment of traditionally underrepresented minority students in the college of natural sciences at the University of Texas at Austin.	The percentage of Black and Hispanic students enrolled each semester.	The percentage of total Black and Hispanic students, percentage of Black students, and percentage of Hispanic students enrolled each spring, summer, and fall semester.
Independent		
H1-H6: Slope before *Hopwood*	A counter variable which measures the presence of trends.	1-50
H1-H6: Immediate impact of *Hopwood*	A variable which measures the magnitude of the abrupt change in the slope after the *Hopwood* ruling.	0 before fall 1997 1 from fall 1997 to summer 2005
H1-H6: Change after *Hopwood*	A variable that measures changes in slope after the program.	0 before fall 1997 1-23 from fall 1997 to summer 2005

Data Source: University of Texas at Austin, Office of Admissions Research Enrollment Reports from Spring 1989 to Summer 2005.

Data Collection

The Office of Institutional Research at the University of Texas at Austin maintains the initial data used for this research. These data were presented by the Office of Institutional Research in twelfth class day enrollment reports for spring and fall

semesters, and fourth class day enrollment reports for summer semesters. Table III in each twelfth class day and forth class day enrollment report provided the number of students enrolled by academic discipline, classification, and ethnicity. Appendix A shows fourth class day data for the summer 2005 semester.

The data collected from the enrollment reports included the number of students enrolled in the colleges of business administration, communication, education, engineering, liberal arts, and natural sciences during each semester from spring 1989 to summer 2005. The initial data consisted of the number of Black and Hispanic students enrolled each semester in each academic discipline, and the total number of all students enrolled each semester in each academic discipline. Those data were converted into percentages to yield the percentage of total Black and Hispanic students, Black students, and Hispanic students for each academic discipline. The fall 1997 semester was the first semester that admissions procedures were implemented in response to the *Hopwood* ruling. For purpose of the current research, the fall 1997 semester was identified as the first semester impacted by the *Hopwood* ruling.

Design

The research design used to evaluate the data is an interrupted time series design. This quasi-experimental design allows trends to be evaluated before and after an event. Quasi-experimental designs have weaknesses when compared to experimental designs because an experimental treatment is given, but randomized control is lacking (Anderson 2001). Time series analysis consists of a succession of observations on a single case or situation (Anderson 2001). The interrupted time series design evaluates trends in data

and is therefore superior to simple before-and-after designs (Bingham and Felbinger 2002). The ability to evaluate trends strengthens the design because it reduces bias that may occur from a single observation (Bingham and Felbinger 2002).

There are specific situations for which an interrupted time series is typically utilized. It has been used to analyze the effects of interventions on social systems (McCleary and Hay 1980). The time series design can also provide evidence of the effectiveness of laws and regulations (Anderson 2001). Examples of this design include measuring the impacts of new traffic laws, decriminalization, gun control laws, air pollution control laws, and political realignment (McCleary and Hay1980). This design is appropriate for the current research because it allows an assessment of the impact of the *Hopwood* ruling on the enrollment of Black and Hispanic students at the University of Texas at Austin, and also allows the data to be analyzed utilizing statistical procedures.

Statistics

The statistical technique used to analyze the data is a regression analysis. The regression analysis can assess the impact of the independent variables on the dependent variables, and in the current research can determine if there is a relationship between the *Hopwood* ruling and minority enrollment at the University of Texas at Austin. The regression analysis yields unstandardized coefficients that will measure the change in the dependent variable for every unit of change in the independent variable.

In the current research, unstandardized coefficients are calculated for the trend before the *Hopwood* ruling, the immediate impact of the *Hopwood* ruling, and the trend after the *Hopwood* ruling when compared to the trend before the *Hopwood* ruling. The

unstandardized coefficient for the trend before the *Hopwood* ruling indicates the amount of the change in the percentage of Black and Hispanic student enrollment each semester before the *Hopwood* ruling. The unstandardized coefficient for the immediate impact of the *Hopwood* ruling indicates the magnitude of the change in Black and Hispanic enrollment following the *Hopwood* ruling. The unstandardized coefficient for the trend after the *Hopwood* ruling indicates amount of the change in the percentage of Black and Hispanic student enrollment after the *Hopwood* ruling each semester when compared to the trend before the *Hopwood* ruling.

Human Subjects

As described above, the current research utilized data collected by the University of Texas at Austin that consisted only of the recorded number of students enrolled. Therefore, human subjects were not impacted through the course of the research. The Texas State University at San Marcos, Office of Sponsored Programs declared this research exempt from full or expedited review by the Institutional Review Board on October 2, 2006.

Possible Results

It is difficult to isolate the impact of the *Hopwood* ruling on minority enrollment at the University of Texas at Austin because of another program that was created by the Texas legislature. The top ten percent program was implemented the year following the *Hopwood* ruling. This program provides automatic admission to the university for students who are in the top ten percent of their high school class. It was assumed that

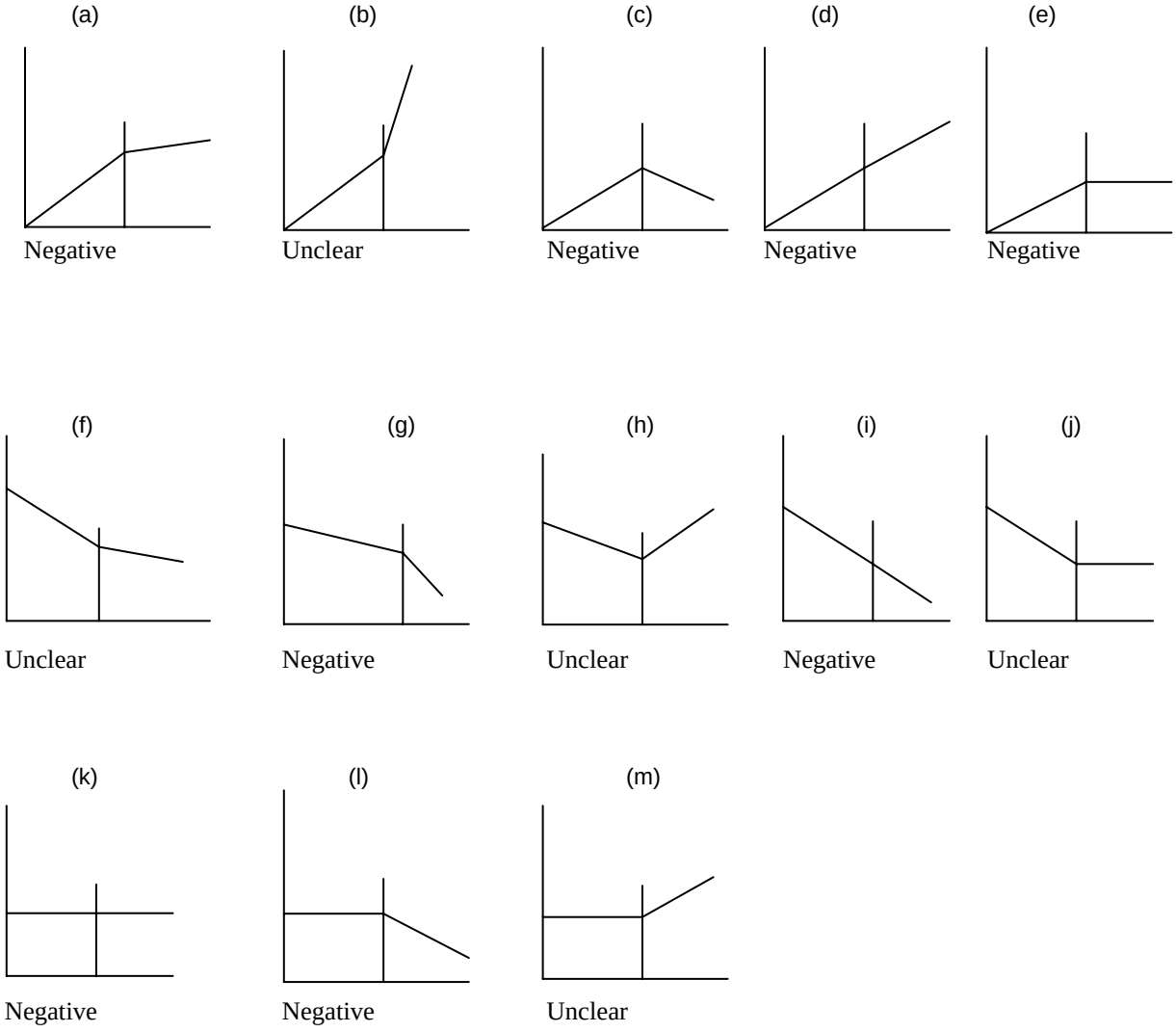
minority enrollment would increase because additional students from high schools with large minority populations would be able to enroll at the University of Texas at Austin. The top ten percent program was created to increase minority enrollment and mitigate the impact of any decrease in minority enrollment brought on by the *Hopwood* ruling.

In order to accurately assess the impact of the *Hopwood* ruling, an assumption must be made that implementation of the top ten percent program would result in an increase in minority enrollment. The magnitude of that increase is not known, but some type of increase is expected. This increase is the based on more students enrolling from schools that have a high number of minority students (The University of Texas at Austin 2001). Therefore, based on an expected increase in minority enrollment due to the top ten percent program, a lack of an observed increase in minority enrollment or a decrease in minority enrollment after the *Hopwood* ruling can be interpreted as a negative impact of the *Hopwood* ruling.

Given the combined possible impact of the top ten percent program and the *Hopwood* ruling, the outcomes can take several possible forms. Figure 4.1 is a graphic representation of thirteen possible outcomes. The figure represents individual relationships between trends before and after the *Hopwood* ruling, with the vertical line indicating implementation of admissions policies after the *Hopwood* ruling. Figures 4.1(a), (b), (c), (d), and (e) depict minority enrollment increasing before the *Hopwood* ruling. In Figure 4.1(a), minority enrollment increases at a lower rate following the *Hopwood* ruling. In Figure 4.1(c), minority enrollment decreases following the *Hopwood* ruling. Figure 4.1(e) depicts minority enrollment maintaining a constant rate neither increasing nor decreasing, following the *Hopwood* ruling. The preceding outcomes

indicate a decline in minority enrollment when compared to the trend before the *Hopwood* ruling. These hypothetical trends indicate a strong negative impact of the *Hopwood* ruling considering the positive impact expected with the top ten percent program. In Figure 4.1(d), minority enrollment increases at the same rate following the *Hopwood* ruling. This result also indicates a negative impact of the *Hopwood* ruling because the expected increase in minority enrollment due to the top ten percent program is not present and has been negated by the impact of the *Hopwood* ruling. In Figure 4.1(b), minority enrollment increases at a higher rate following the *Hopwood* ruling. The impact of the *Hopwood* ruling in this situation is not clear because the result could be due to a strong impact of the top ten percent program compensating for a negative impact of *Hopwood*, or there may be no impact of the *Hopwood* ruling.

FIGURE 4.1
Possible Impact of the *Hopwood* Ruling on Minority Enrollment



Figures 4.1(f), (g), (h), (i), and (j) depict minority enrollment decreasing before the *Hopwood* ruling. In Figure 4.1(g), minority enrollment decreases at a higher rate following the *Hopwood* ruling. In Figure 4.1(i), minority enrollment decreases at the same rate following the *Hopwood* ruling. These possible results are examples of negative impacts of the *Hopwood* ruling: minority enrollment has either decreased from the level before the Hopwood ruling, or failed to show the expected increase following implementation of the top ten percent program.

In Figure 4.1(f), minority enrollment decreases at a lower rate following the *Hopwood* ruling. In Figure 4.1(h), minority enrollment increases following the *Hopwood* ruling. In Figure 4.1(j), minority enrollment maintaines a constant rate, neither increasing nor decreasing, following the *Hopwood* ruling. The impact of the *Hopwood* ruling in these cases is unclear because enrollment shows an increase when compared to the trend before the *Hopwood* ruling. It is uncertain whether the increase in enrollment is due only to the top ten percent program, or if it is also compensating for the negative impact of the *Hopwood* ruling.

Figures 4.1(k), (l), and (m) show minority enrollment at a constant rate before the *Hopwood* ruling. In Figure 4.1(k), minority enrollment continues at a constant rate following the *Hopwood* ruling. In Figure 4.1(l), minority enrollment decreases following the *Hopwood* ruling. Both of these results are examples of negative impacts of the *Hopwood* ruling: minority enrollment either failed to show an increase or declined from the level before *Hopwood*, even though there was a positive impact expected from implementation of the top ten percent program. Figure 4.1(m) shows minority enrollment increasing following the *Hopwood* ruling. This figure does reflect a negative impact of the *Hopwood* ruling because enrollment increased with implementation of the top ten percent program. Therefore, it is unclear whether the increasing enrollment is due to the strong impact of the top ten percent program alone, or whether the top ten percent program is mitigating the negative effects of the *Hopwood* ruling.

Chapter Summary

The chapter discussed the methods used to perform the research and address the research question. The chapter began by identifying and operationalizing the dependent and independent variables identified from the hypothesis. The chapter further explained how the data reflecting minority enrollment at the University of Texas at Austin were collected. The chapter also explored the interrupted time series design and regression analysis used to analyze the data.

The chapter concluded with an explanation of possible effects of the *Hopwood* ruling on minority enrollment. The potential effects were explained in terms of the interaction between the *Hopwood* ruling and the top ten percent program. The next chapter presents the results of the statistical analyses of the enrollment data.

Chapter 5. Results

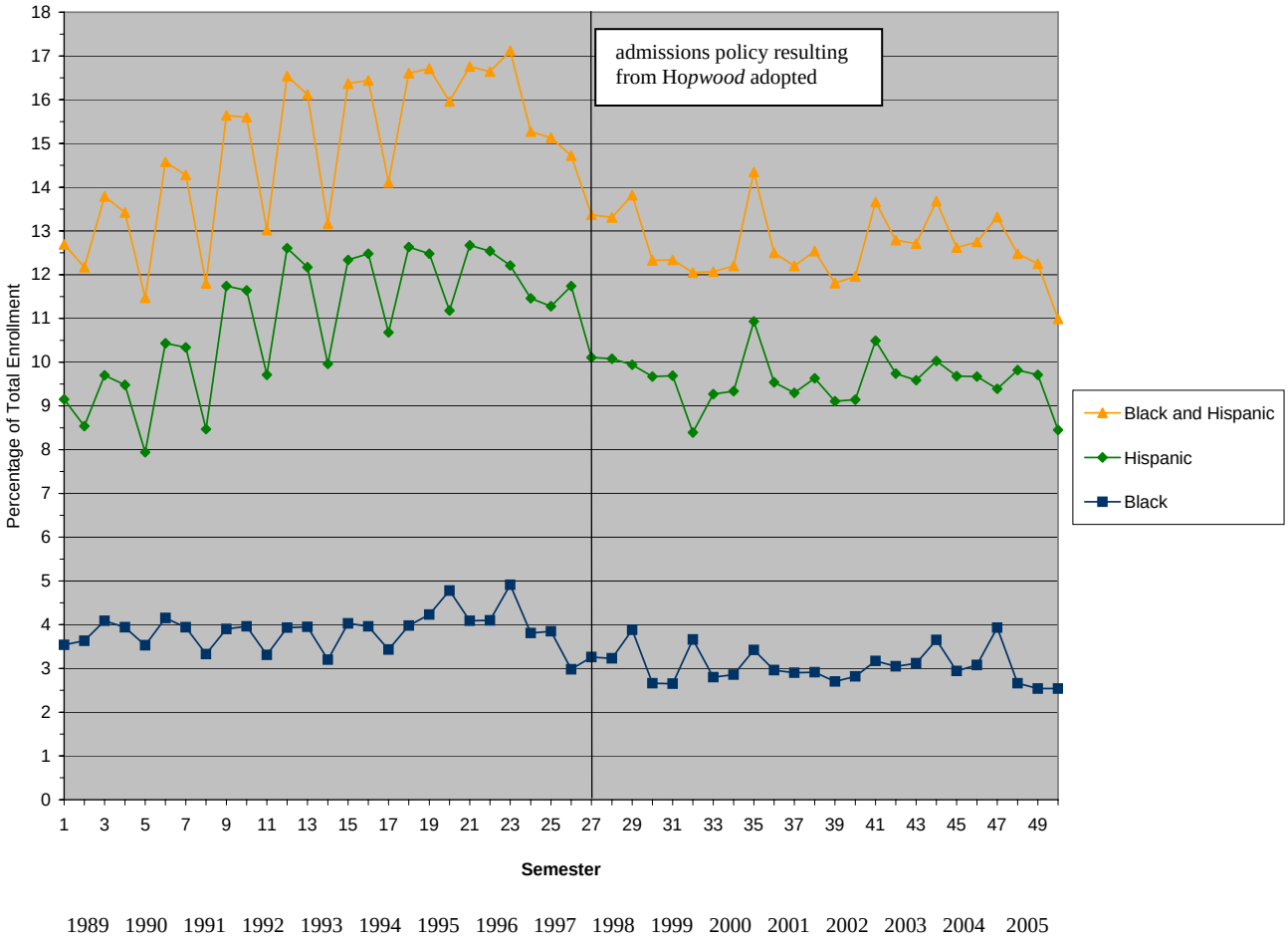
Purpose

The purpose of this chapter is to explain the impact of the *Hopwood* ruling on minority enrollment at the University of Texas at Austin. The research project examined enrollment trends of Black and Hispanic students in six academic disciplines using the interrupted time series design. This chapter provides the results of the statistical analyses and illustrates the relationship between trends in minority enrollment and the *Hopwood* ruling. Statistical results are presented for total Black and Hispanic student enrollment, Black student enrollment, and Hispanic student enrollment for each of the six academic discipline.

College of Business Administration

Enrollment data for Black and Hispanic students in the college of business administration are presented in figure 5.1. The data represent the total percentage of Black and Hispanic students, the percentage of Black students, and the percentage of Hispanic students enrolled each semester from spring 1989 to summer 2005. A summary of the regression results is presented in table 5.1. The individual regression analyses are presented in Appendix B.

FIGURE 5.1
Black and Hispanic Enrollment in the College of Business Administration



Statistical Results

Table 5.1 presents an analysis of total Black and Hispanic student enrollment, Black student enrollment, and Hispanic student enrollment in the college of business administration. The total enrollment for Black and Hispanic students before the *Hopwood* ruling is significantly rising, and enrollment was increasing by .15% each

semester. The immediate impact of *Hopwood* was significant: total Black and Hispanic student enrollment dropped by 3.7% after the ruling. The enrollment trend after the *Hopwood* ruling significantly declined: total Black and Hispanic student enrollment decreased by .17% each semester when compared to the enrollment trend before the *Hopwood* ruling. The total Black and Hispanic student enrollment results are similar to the possible results depicted in figure 4.1(c), suggesting that enrollment was increasing before the *Hopwood* ruling and decreasing following the *Hopwood* ruling. The *Hopwood* ruling had a negative impact in this case because the expected increase in total Black and Hispanic enrollment due to the implementation of the top ten percent program did not occur. Instead, total Black and Hispanic enrollment actually decreased when compared to the enrollment trend before the *Hopwood* ruling.

TABLE 5.1
Black and Hispanic Students Enrolled in the College of Business Administration

	Unstandardized Coefficients		
	Total	Black	Hispanic
Constant	12.873**	3.715**	9.158**
Slope before the *Hopwood* ruling	.147**	.011	.135**
Immediate impact of the *Hopwood* ruling	-3.705**	-.810**	-2.895**
Change of slope after the *Hopwood* ruling	-.171**	-.023	-.148**
Adjusted r square	.602	.481	.570

* Significant at α <.05
**Significant at α < .01

Hispanic student enrollment followed the same pattern as total Black and Hispanic student enrollment. Hispanic student enrollment was increasing by .14% each semester before the *Hopwood* ruling. The immediate impact of the *Hopwood* ruling indicates a 2.9% drop in Hispanic enrollment. The enrollment of Hispanic students after

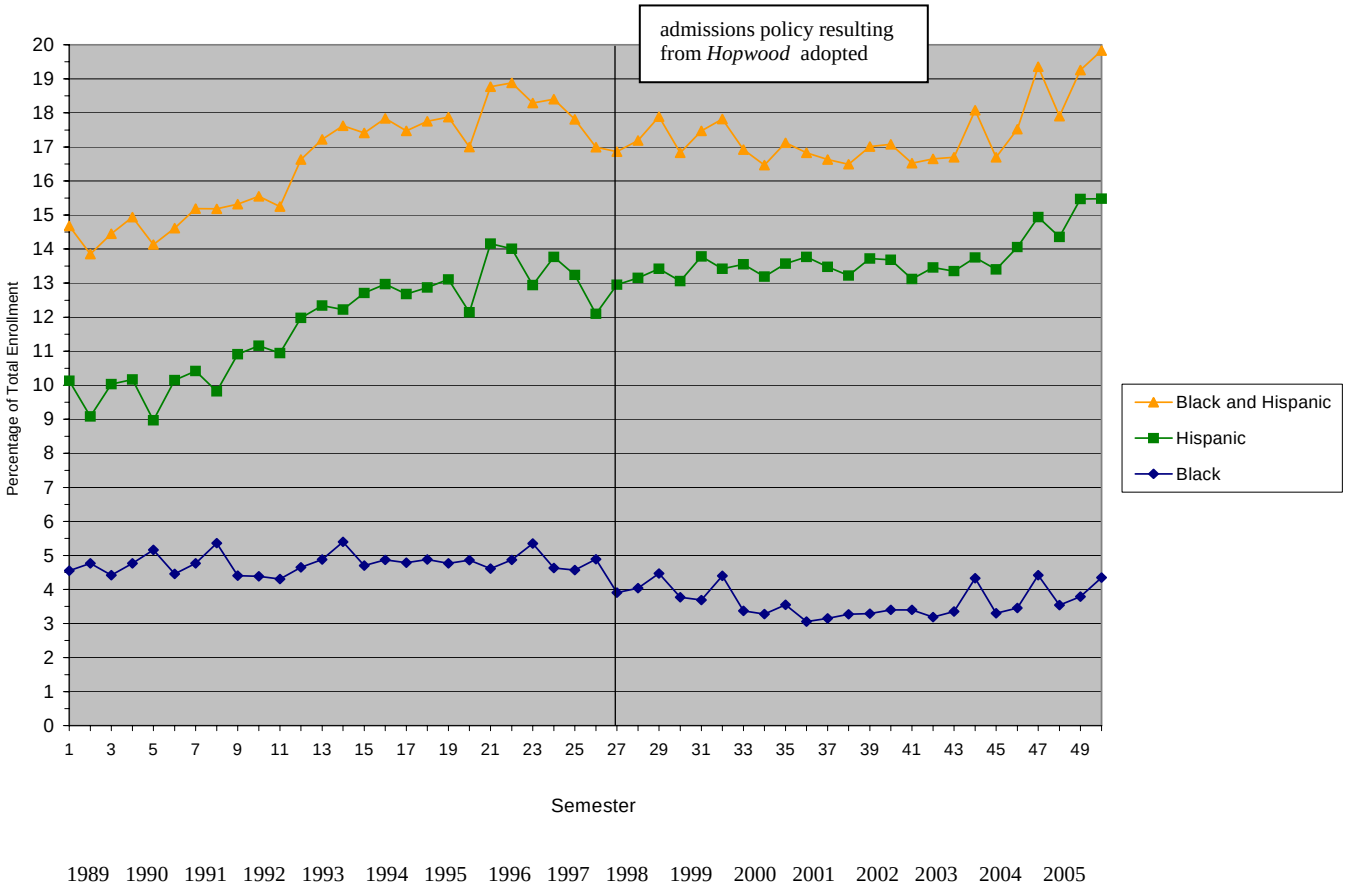
the *Hopwood* ruling decreased by .15% each semester when compared to the trend before the ruling. The results for Hispanic student enrollment are also similar to the possible results in figure 4.1(c). This is an example of a negative impact of the *Hopwood* ruling.

Black student enrollment trends are different than those found for total Black and Hispanic enrollment and Hispanic enrollment. The enrollment trend for Black students before the *Hopwood* ruling was not statistically significant, suggesting a consistent level of Black student enrollment that was not increasing or decreasing. The immediate impact of the *Hopwood* ruling was statistically significant: Black student enrollment dropped by .81% after the *Hopwood* ruling. The enrollment trend after the *Hopwood* ruling is not statistically significant, which suggests constant Black student enrollment that is maintaining the same rate as before the *Hopwood* ruling. The results for Black student enrollment are similar to the possible results shown in figure 4.1(k), suggesting that enrollment maintained a constant level before and after the *Hopwood* ruling. This suggests a negative impact of the *Hopwood* ruling because the expected increase in Black student enrollment due to the top ten percent program did not occur.

College of Communication

Enrollment data for Black and Hispanic students in the college of communication are presented in figure 5.2. The data represent the total percentage of Black and Hispanic students, the percentage of Black students, and the percentage of Hispanic students enrolled each semester from spring 1989 to summer 2005. A summary of the regression results is presented in table 5.2. The individual regression analyses are presented in Appendix B.

FIGURE 5.2
Black and Hispanic Enrollment in the College of Communication



Statistical Results

Table 5.2 presents an analysis of total Black and Hispanic student enrollment, Black student enrollment, and Hispanic student enrollment in the college of communication. The total enrollment before the *Hopwood* ruling was statistically significant: total Black and Hispanic student enrollment was increasing by .19% each semester. The immediate impact of *Hopwood* was also significant: total Black and

Hispanic student enrollment dropped by 2.28% after the ruling. The enrollment trend after the *Hopwood* ruling is significant: total Black and Hispanic student enrollment decreased by .12% each semester when compared to the trend before the *Hopwood* ruling. The results for total Black and Hispanic student enrollment are similar to the possible results depicted in figure 4.1(a), suggesting that enrollment was increasing before the *Hopwood* ruling and increased at a lower rate after the *Hopwood* ruling. This is another example of a negative impact of the *Hopwood* ruling because total Black and Hispanic student enrollment decreased from the level it was before the *Hopwood* ruling even though there was an expectation of increasing enrollment due to the implementation of the top ten percent program.

TABLE 5.2
Black and Hispanic Students Enrolled in the College of Communication

	Unstandardized Coefficients		
	Total	Black	Hispanic
Constant	13.999**	4.672**	9.327**
Slope before the *Hopwood* ruling	.186**	.007	.178**
Immediate impact of the *Hopwood* ruling	-2.275**	-1.163**	-1.112**
Change of slope after the *Hopwood* ruling	-.119**	-.011	-.108**
Adjusted r square	.686	.677	.843

* Significant at α <.05
**Significant at α < .01

Hispanic student enrollment in the college of communication is similar to total Black and Hispanic student enrollment. Hispanic student enrollment before the *Hopwood* ruling was increasing by .18% each semester. Enrollment then dropped by 1.11% after the *Hopwood* ruling. Hispanic student enrollment decreased by .11% each semester

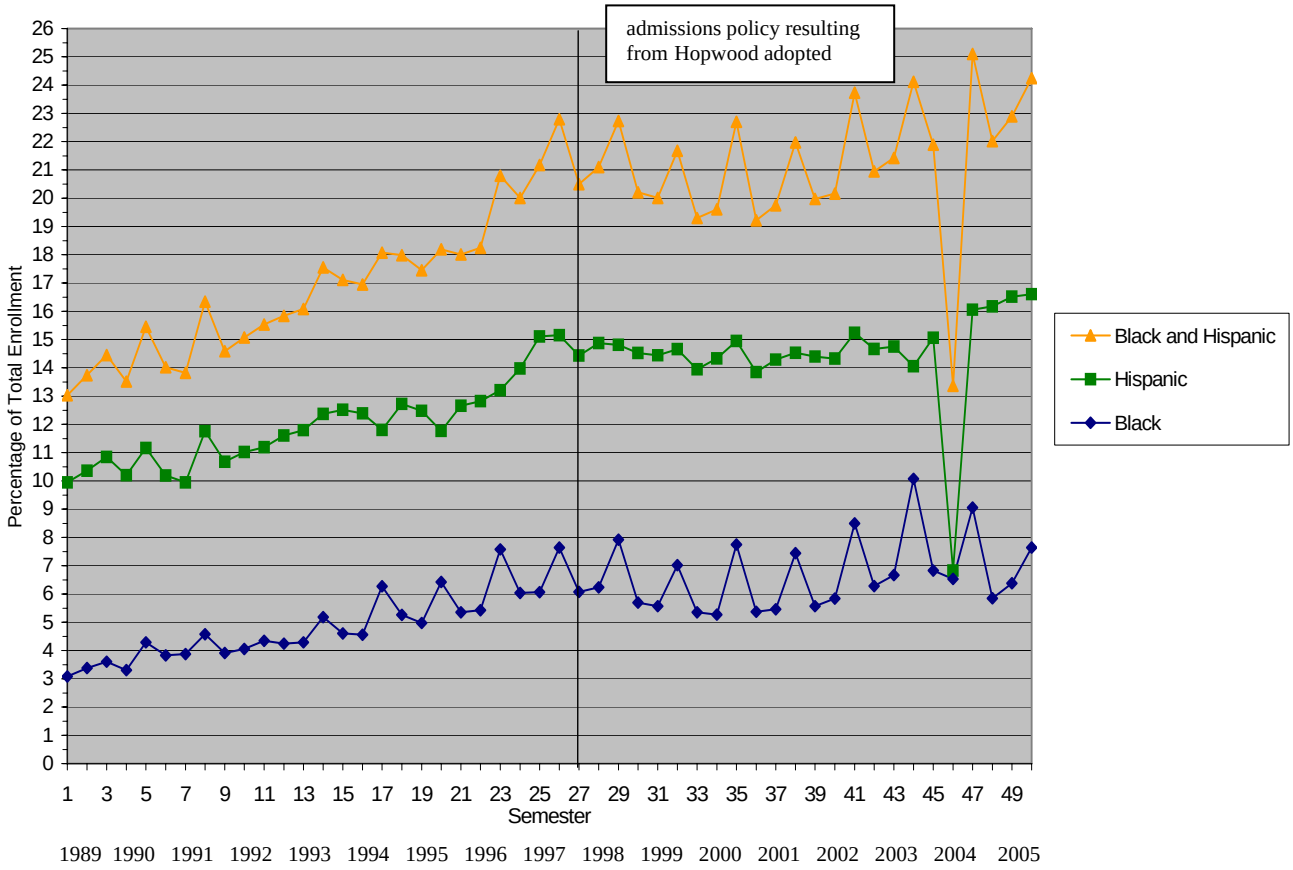
when compared to the enrollment trend before the *Hopwood* ruling. The results for Hispanic enrollment are similar to the possible results depicted in figure 4.1(a). This is an example of a negative impact of the *Hopwood* ruling.

Black student enrollment in the college of communication before the *Hopwood* ruling was not statistically significant, suggesting consistent enrollment that is not increasing or decreasing. The immediate impact was significant: Black student enrollment dropped by 1.16% after the *Hopwood* ruling. The enrollment trend after the *Hopwood* ruling is also not significant, suggesting that Black student enrollment is constant and not increasing or decreasing. The results for Black student enrollment are similar to the possible results shown in figure 4.1(k), suggesting that enrollment maintained a constant level before and after the *Hopwood* ruling. This finding suggests a negative impact of the *Hopwood* ruling because the expected increase in Black student enrollment due to the top ten percent program did not occur.

College of Education

Enrollment data for Black and Hispanic students in the college of education are presented in figure 5.3. The data represent the total percentage of Black and Hispanic students, the percentage of Black students, and the percentage of Hispanic students enrolled each semester from spring 1989 to summer 2005. A summary of the regression analyses performed on the enrollment trends is presented in table 5.3. The individual regression analyses are presented in Appendix B.

FIGURE 5.3
Black and Hispanic Enrollment in the College of Education



Statistical Results

Table 5.3 presents an analysis of total Black and Hispanic student enrollment, Black student enrollment, and Hispanic student enrollment in the college of education. The enrollment trend before the *Hopwood* ruling indicates that total Black and Hispanic student enrollment was statistically significant and increasing by .31% each semester. The immediate impact is not statistically significant, which suggests that there was no

immediate effect of the *Hopwood* ruling on total Black and Hispanic student enrollment. The enrollment trend after the *Hopwood* ruling showed a significant decline: total Black and Hispanic student enrollment is decreased by .24% each semester when compared to the enrollment trend before the ruling. The results for total Black and Hispanic student enrollment are similar to the possible results shown in figure 4.1(a), suggesting that enrollment was increasing before the *Hopwood* ruling and increasing at a lower rate following the *Hopwood* ruling. This is an example of a negative impact of the *Hopwood* ruling, because the expected increase from implementation of the top ten percent program did not occur and enrollment decreased from the level before the *Hopwood* ruling.

TABLE 5.3
Black and Hispanic Students Enrolled in the College of Education

	Unstandardized Coefficients		
	Total	Black	Hispanic
Constant	12.560**	2.921**	9.640**
Slope before the *Hopwood* ruling	.311**	.143**	.168**
Immediate impact of the *Hopwood* ruling	-.410	-.707	.298
Change of slope after the *Hopwood* ruling	-.235**	-.083*	-.152**
Adjusted r square	.720	.626	.575

* Significant at α <.05
**Significant at α< .01

Hispanic student enrollment trends in the college of education are similar to the trends in total Black and Hispanic student enrollment. Hispanic student enrollment was increasing by .17% each semester before the *Hopwood* ruling. The immediate impact was not statistically significant, which suggests that there was no immediate effect of the *Hopwood* ruling on Hispanic student enrollment. The enrollment trend after the *Hopwood* ruling decreased by .15% each semester when compared to the enrollment

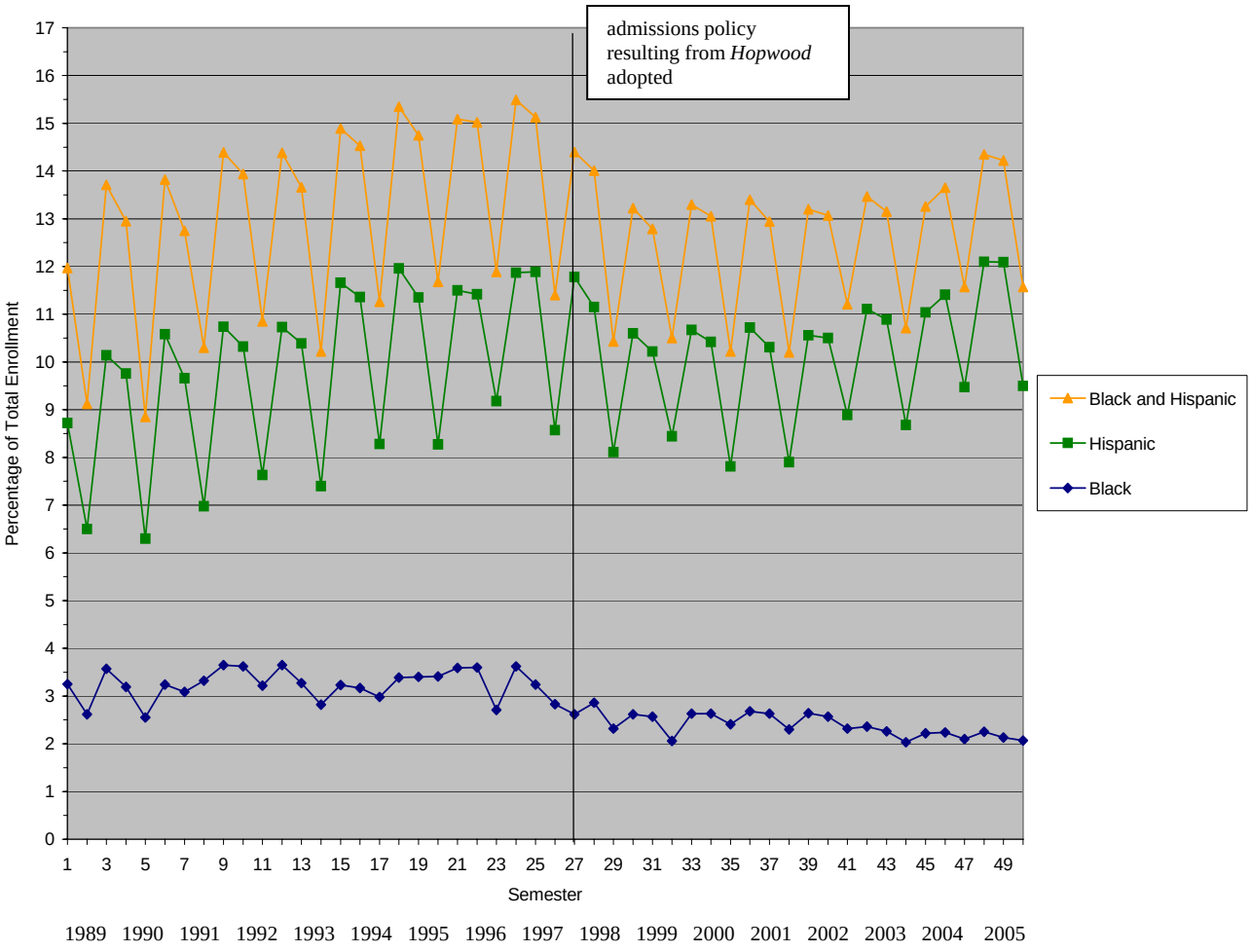
trend before the *Hopwood* ruling. The results for Hispanic student enrollment are also similar to the possible results shown in figure 4.1(a), and suggest a negative impact of the *Hopwood* ruling.

Black student enrollment trends are also similar to total Black and Hispanic enrollment trends in the college of education before the *Hopwood* ruling. Black student enrollment was increasing by .14% each semester. The immediate impact was not statistically significant. The enrollment trend after the *Hopwood* ruling is significant: Black student enrollment decreased by .08% each semester compared to the trend before the *Hopwood* ruling. These results are similar to the possible results shown in figure 4.1(a), suggesting that enrollment was increasing at a lower rate following the *Hopwood* ruling. This is an example of a negative impact of the *Hopwood* ruling because the expected increase from implementation of the top ten percent program did not occur and enrollment decreased from the level before the *Hopwood* ruling.

College of Engineering

Enrollment data for Black and Hispanic students in the college of engineering are presented in figure 5.4. The data represents the total percentage of Black and Hispanic students, the percentage of Black students, and the percentage of Hispanic students enrolled each semester from spring 1989 to summer 2005. A summary of the regression results is presented in Table 5.4. The individual regression analyses are presented in Appendix B.

FIGURE 5.4
Black and Hispanic Enrollment in the College of Engineering



Statistical Results

Table 5.4 presents an analysis of total Black and Hispanic student enrollment, Black student enrollment, and Hispanic student enrollment in the college of engineering. The enrollment trend before *Hopwood* is statistically significant and indicates that the total Black and Hispanic student enrollment was increasing by .11% each semester. The immediate impact of the *Hopwood* ruling and the enrollment trend after the ruling were

not statistically significant, indicating that there was no immediate change in enrollment after the *Hopwood* ruling and that enrollment continued to increase at the same rate as it did before the ruling. The results for total Black and Hispanic student enrollment are similar to the possible results shown in figure 4.1(d), suggesting that enrollment was increasing before the *Hopwood* ruling and continued to increase at the same rate after the ruling. This is an example of a negative impact of the *Hopwood* ruling because any expected increase in total Black and Hispanic student enrollment did not occur.

TABLE 5.4
Black and Hispanic Students Enrolled in the College of Engineering

	Unstandardized Coefficients		
	Total	Black	Hispanic
Constant	11.562**	3.170**	8.391**
Slope before the *Hopwood* ruling	.105*	.005	.100*
Immediate impact of the *Hopwood* ruling	-1.828	-.62**	-1.209
Change of slope after the *Hopwood* ruling	-.095	-.028*	-.067
Adjusted r square	.066	.725	.096

* Significant at α <.05
**Significant at α < .01

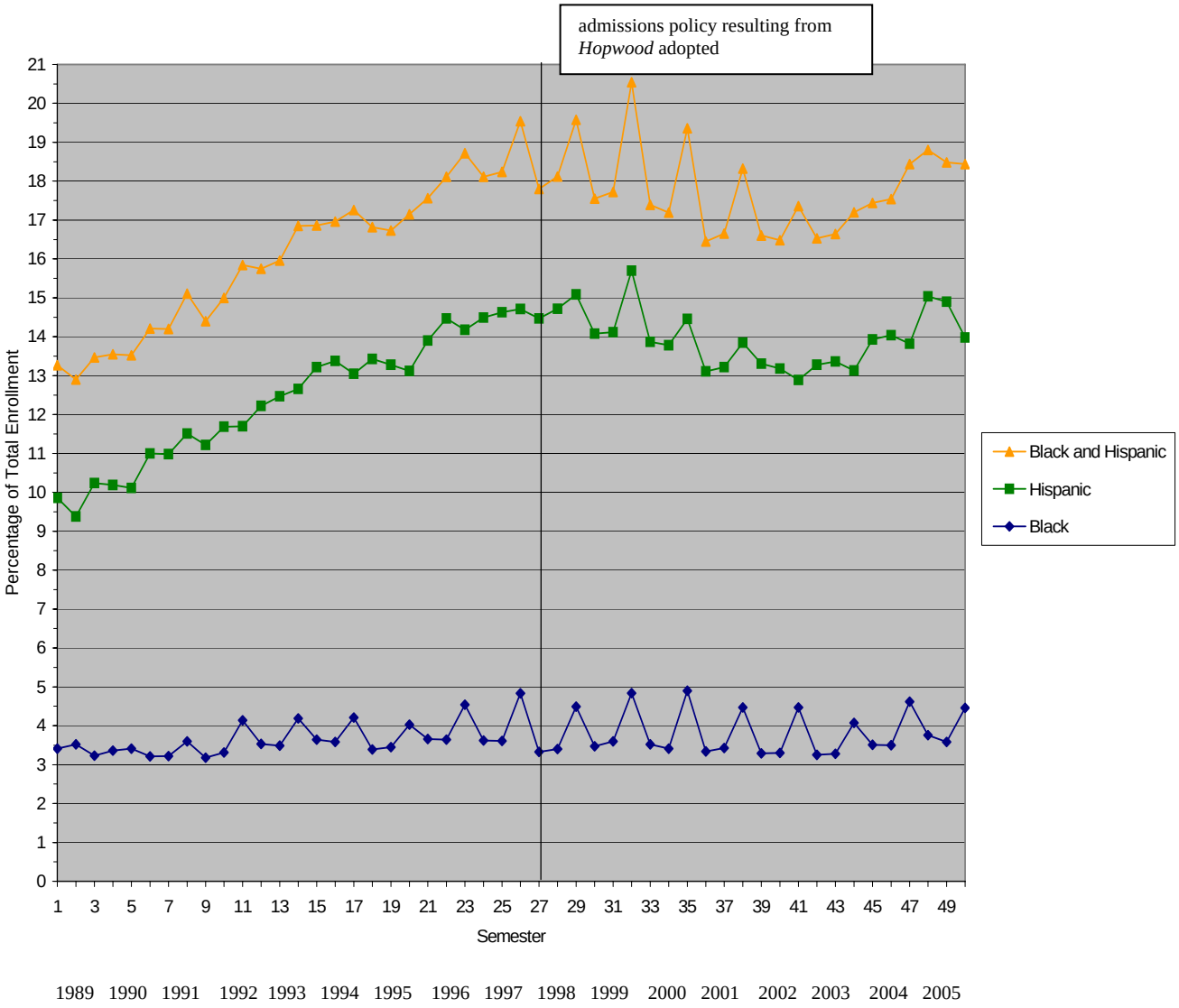
Hispanic student enrollment trends in the school of engineering are similar to total Black and Hispanic student enrollment trends. Hispanic student enrollment before the *Hopwood* ruling was increasing by .1% each semester, and there was no immediate change in enrollment after the *Hopwood* ruling. Hispanic enrollment after the *Hopwood* ruling increased at the same rate as before the *Hopwood* ruling. The results for Hispanic student enrollment are also similar to the possible results shown in figure 4.1(d), and are an example of a negative impact of the *Hopwood* ruling.

Black student enrollment trends in the college of engineering are different than total Black and Hispanic enrollment and Hispanic enrollment trends. The enrollment trend before the *Hopwood* ruling is not statistically significant, which indicates consistent Black student enrollment that is not increasing or decreasing. The immediate impact was significant: Black student enrollment dropped by .62% after the *Hopwood* ruling. The enrollment trend after the *Hopwood* ruling is significant, indicating that Black student enrollment decreased by .03% each semester. The results for Black student enrollment are similar to the possible results shown in figure 4.1(l), suggesting that enrollment maintained a constant level before the *Hopwood* ruling and decreased following the ruling. The results suggest a negative impact of the *Hopwood* ruling because Black student enrollment did not increase with the implementation of the top ten percent program, and decreased when compared to the enrollment trend before the *Hopwood* ruling.

College of Liberal Arts

Enrollment data for Black and Hispanic students in the college of liberal arts are presented in figure 5.5. The data represent the total percentage of Black and Hispanic students, the percentage of Black students, and the percentage of Hispanic students enrolled each semester from spring 1989 to summer 2005. A summary of the regression results is presented in table 5.5. The individual regression analyses are presented in Appendix B.

FIGURE 5.5
Black and Hispanic Enrollment in the College of Liberal Arts



Statistical Results

Table 5.5 presents an analysis of total Black and Hispanic student enrollment in the college of liberal arts. The enrollment trend before the *Hopwood* ruling was statistically significant and enrollment is increasing by .24% each semester. The immediate impact was significant: total Black and Hispanic student enrollment dropped

by 1.0% after the *Hopwood* ruling. The enrollment trend after the *Hopwood* ruling is significantly declining, indicating that total Black and Hispanic student enrollment decreased by .26% each semester when compared to the enrollment trend before the ruling. The results for total Black and Hispanic student enrollment are similar to the possible results shown in figure 4.1(c), suggesting that enrollment was increasing before the *Hopwood* ruling and decreasing following the ruling. This is an example of a negative impact of the *Hopwood* ruling because total Black and Hispanic student enrollment dropped following the *Hopwood* ruling and decreased when compared to the enrollment trend before the *Hopwood* ruling. In addition, total Black and Hispanic enrollment did not increase with the implementation of the top ten percent program.

TABLE 5.5
Black and Hispanic Students Enrolled in the College of Liberal Arts

	Unstandardized Coefficients		
	Total	Black	Hispanic
Constant	12.740**	3.219**	9.521**
Slope before the Hopwood ruling	.242**	.032*	.210**
Immediate impact of the Hopwood ruling	-1.005*	-.329	-.676*
Change of slope after the Hopwood ruling	-.261**	-.026	-.235**
Adjusted r square	.795	.098	.868

* Significant at α<.05
**Significant at α< .01

The Hispanic student enrollment trend in the college of liberal arts is similar to the enrollment trend for total Black and Hispanic enrollment. The enrollment trend before the *Hopwood* ruling was increasing by .21% each semester. Hispanic student enrollment then dropped by .68% following the *Hopwood* ruling. The enrollment trend

after the *Hopwood* ruling declined by .24% each semester when compared to the enrollment trend before the ruling. The results for Hispanic student enrollment are similar to the possible results shown in figure 4.1(c), and are an example of a negative impact of the *Hopwood* ruling

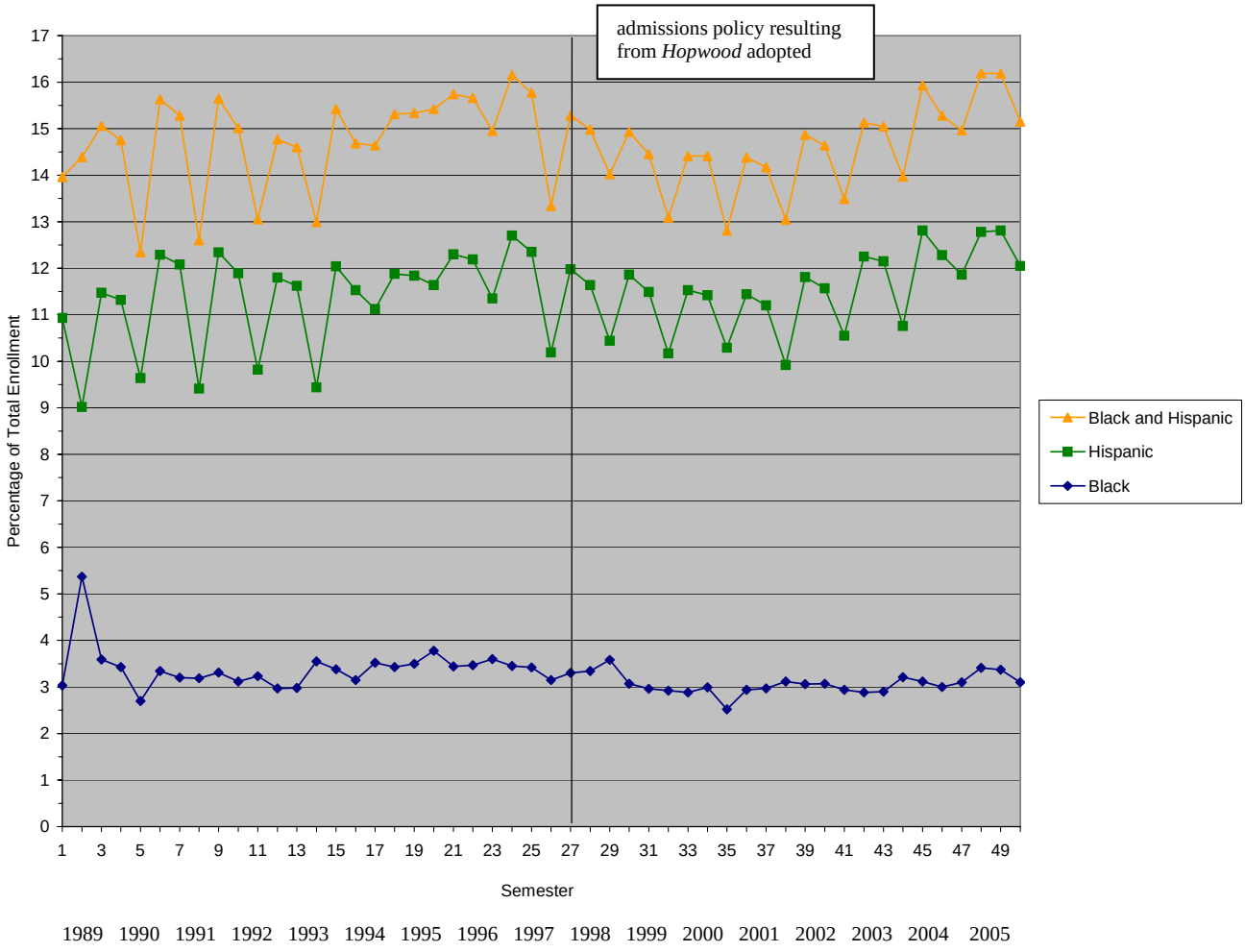
The Black student enrollment trends in the college of liberal arts are different than total Black and Hispanic and Hispanic enrollment trends. The enrollment trend before the *Hopwood* ruling indicates that Black student enrollment was increasing by .03% each semester. The immediate impact was not statistically significant: there was no immediate change in Black student enrollment following the *Hopwood* ruling. The enrollment trend after the *Hopwood* ruling is not significant, which suggests the trend after the *Hopwood* ruling is the same as the trend before the ruling. The results for Black student enrollment are similar to the possible results shown in figure 4.1(d), suggesting that enrollment was increasing before the *Hopwood* ruling and continued increasing at the same rate after the ruling. This is an example of a negative impact of the *Hopwood* ruling because the expected increase in Black student enrollment did not occur with implementation of the top ten percent plan.

College of Natural Sciences

Enrollment data for Black and Hispanic students in the college of natural sciences are presented in figure 5.6. The data represent the total percentage of Black and Hispanic students, the percentage of Black students, and the percentage of Hispanic students enrolled each semester from spring 1989 to summer 2005. A summary of the regression

results is presented in table 5.6. The individual regression analyses are presented in Appendix B.

FIGURE 5.6
Black and Hispanic Enrollment in the College of Natural Sciences



Statistical Results

Table 5.6 presents an analysis of total Black and Hispanic student enrollment, Black student enrollment, and Hispanic student enrollment in the college of natural sciences. The enrollment trend before the *Hopwood* ruling for total Black and Hispanic

student enrollment was not statistically significant, indicating a constant enrollment tha is neither increasing or decreasing. The immediate impact is statistically significant: total Black and Hispanic student enrollment dropped by 1.38% after the *Hopwood* ruling. The enrollment trend after the *Hopwood* ruling is not significant, which suggests that total Black and Hispanic student enrollment was at the same rate that it was before the Hopwood ruling. The results for total Black and Hispanic student enrollment are similar to the possible results shown in figure 4.1 (k), suggesting that enrollment was maintaining a constant level before the *Hopwood* ruling and maintained a constant level following the ruling. This is an example of a negative impact of the *Hopwood* ruling because Black student enrollment did not increase with the implementation of the top ten percent program.

TABLE 5.6
Black and Hispanic Students Enrolled in the College of Natural Sciences

	Unstandardized Coefficients		
	Total	Black	Hispanic
Constant	14.085**	3.446**	10.639**
Slope before the *Hopwood* ruling	.046	-.004	.050*
Immediate impact of the *Hopwood* ruling	-1.377*	-.289	-1.089*
Change of slope after the *Hopwood* ruling	.010	.005	.005
Adjusted r square	.092	.114	.121

* Significant at α<.05
**Significant at α< .01

Hispanic student enrollment trends in the college of natural sciences are different thatn the enrollment trends in total Black and Hispanic enrollment trends. Hispanic student enrollment before the *Hopwood* ruling was statistically significant and increasing

by .05% each semester. The immediate impact was significant: Hispanic student enrollment dropped by 1.01% after the *Hopwood* ruling. Enrollment after the *Hopwood* ruling continued to increase at the same rate that it was before the ruling. The results for Hispanic student enrollment are similar to the possible results shown in figure 4.1(d), suggesting that enrollment was increasing before the *Hopwood* ruling and continued to increase at the same rate following the ruling. This is an example of a negative impact of the *Hopwood* ruling because total Black and Hispanic student enrollment dropped following the *Hopwood* ruling. Furthermore, total Black and Hispanic enrollment also did not increase with the implementation of the top ten percent program.

Black student enrollment trends in the school of natural sciences before the *Hopwood* ruling was not statistically significant, which suggests constant Black student enrollment that was neither increasing nor decreasing. The immediate impact was not significant, which indicates that there was not an immediate impact of the *Hopwood* ruling on Black student enrollment. The enrollment trend after the *Hopwood* ruling suggests consistent Black student enrollment that was neither increasing nor decreasing.

Chapter Summary

The chapter provided descriptive statistics and results of regression analyses for Black and Hispanic student enrollment at the University of Texas at Austin. The data were analyzed for total Black and Hispanic student enrollment, Black student enrollment, and Hispanic student enrollment in the colleges of business administration, communication, education, engineering, liberal arts, and natural sciences.

Total Black and Hispanic Student Enrollment

The total percentage of Black and Hispanic student enrollment for each academic discipline showed negative impacts of the *Hopwood* ruling. However, the impact was demonstrated in different ways. The total percentage of Black and Hispanic student enrollment was increasing before the *Hopwood* ruling in the majority of the academic disciplines excluding the college of natural sciences, which was at a constant level. The total percentage of Black and Hispanic student enrollment showed an immediate drop after the *Hopwood* ruling for the majority of the academic disciplines excluding the colleges of education and engineering. The total percentage of Black and Hispanic student enrollment was increasing after the *Hopwood* ruling in the colleges of communication and education, but at a lower rate than before the ruling. The total percentage of Black and Hispanic enrollment was increasing at the same rate after the *Hopwood* ruling in the colleges of engineering and natural sciences. This trend was decreasing in the colleges of business administration and liberal arts after the *Hopwood* ruling.

Black Student Enrollment and Hispanic Student Enrollment

There were also differences between Black and Hispanic student enrollment. Hispanic enrollment was more likely to be increasing before the *Hopwood* ruling than Black student enrollment. Hispanic student enrollment was increasing in all of the academic disciplines, while Black student enrollment was increasing only in the colleges of education and liberal arts. Black enrollment in the other academic disciplines maintained a constant level, neither increasing nor decreasing, before the *Hopwood*

ruling.

Hispanic student enrollment was more likely than Black student enrollment to show an immediate impact of the *Hopwood* ruling. Hispanic enrollment reflected an immediate drop in the colleges of business administration, communication, liberal arts, and natural sciences. Black student enrollment reflected an immediate drop in the colleges of business administration, communication, and engineering.

Black student enrollment was more likely to be constant, neither increasing nor decreasing after the *Hopwood* ruling. This was the case in the colleges of business administration, communication, and natural sciences. After the *Hopwood* ruling, Black student enrollment was increasing at a the same rate as before the ruling in the college of liberal arts, increasing at a lower rate than before the *Hopwood* ruling in the college of education, and decreasing in the college of engineering.

Hispanic enrollment after the *Hopwood* ruling showed a variety of enrollment trends. Enrollment increased at a lower rate than before the ruling in the colleges of communication and education. The enrollment trends increased at a rate similar to the trend before the *Hopwood* ruling in the colleges of engineering and natural sciences, and decreased in the colleges of business administration and liberal arts.

The next chapter summarizes the findings of this research and discusses conclusions relating to the hypothesis that the *Hopwood* ruling will have a negative impact on the enrollment of traditionally underrepresented minority students.

Chapter 6. Conclusions

Research Summary

The purpose of this research was to assess the impact of the *Hopwood* ruling on minority enrollment at the University of Texas at Austin. Chapter 1 introduced the purpose of the research. Chapter 2 provided historical context for exploring the trend of increasing access to higher education and the role that an institution of higher education can play in impacting access to higher education.

Chapter 3 provided a review of the literature on how the cost and the effects of racial discrimination influence access to higher education. This chapter explored admissions policies based on affirmative action programs and the results of legal challenges to the policies. This chapter also provided information about the policies used at the University of Texas at Austin, and introduced the conceptual framework and research hypothesis of the research.

Chapter 4 operationalized the hypothesis, described the data and research design used to analyze the variables, and provided possible results. Chapter 5 presented an interpretation of the results of the statistical procedures, and related the actual results to the possible results presented in Chapter 4.

Assessment of Findings

The findings of this research support the hypothesis that traditionally underrepresented minority enrollment at the University of Texas at Austin was negatively impacted by the *Hopwood* ruling. Table 6.1 summarizes the findings and indicates whether enrollment trends were increasing (+), decreasing (-), or constant before the

Hopwood ruling and whether there was an immediate impact of the *Hopwood* ruling. Before the *Hopwood* ruling, total Black and Hispanic student enrollment was either increasing or constant in all of the academic disciplines examined in this research. Following *Hopwood*, there was an immediate drop in minority enrollment in four of the six academic disciplines. Table 6.1 also indicates whether the enrollment trend after the *Hopwood* ruling is decreasing (-) or shows no change when compared to enrollment before the ruling. Total Black and Hispanic enrollment after the *Hopwood* ruling was either increasing at the same rate as before the *Hopwood* ruling, increasing at a lower rate than before the *Hopwood* ruling, or decreasing.

TABLE 6.1
Summary of Results

College	Enrollment	Slope before *Hopwood*	Immediate impact of *Hopwood*	Change after *Hopwood*
Business Administration	Black and Hispanic	(+)	drop	(-)
	Black	constant	drop	no change
	Hispanic	(+)	drop	(-)
Communication	Black and Hispanic	(+)	drop	(-)
	Black	constant	drop	no change
	Hispanic	(+)	drop	(-)
Education	Black and Hispanic	(+)	no impact	(-)
	Black	(+)	no impact	(-)
	Hispanic	(+)	no impact	(-)
Engineering	Black and Hispanic	(+)	no impact	no change
	Black	constant	drop	(-)
	Hispanic	(+)	no impact	no change
Liberal Arts	Black and Hispanic	(+)	drop	(-)
	Black	(+)	no impact	no change
	Hispanic	(+)	drop	(-)
Natural Sciences	Black and Hispanic	constant	drop	no change
	Black	constant	no impact	no change
	Hispanic	(+)	drop	no change

These results seem to indicate that total Black and Hispanic student enrollment did not maintain the levels that were experienced before the *Hopwood* ruling. The results, combined with assumption that the impact of the top ten percent program would increase

minority enrollment, suggest that there was a negative impact of the *Hopwood* ruling on traditionally underrepresented minority enrollment at the University of Texas at Austin. It also suggests that the top ten percent program was not effective in eliminating the negative impact of the *Hopwood* ruling, because enrollment did not increase as expected with the implementation of the program. While there are interesting findings from this research, there are limitations to their application.

Limitations of Research

One limitation of this research is that there was not a control group against which to measure the changes in enrollment. The use of a control group could provide stronger results because it would allow a comparison of minority enrollment at an institution of higher education that did use traditional race-based admissions polices during the same time period. A second limitation of the research is the narrow scope of the findings. Since this study only involved data from the University of Texas at Austin, the results cannot be generalized to other institutions of higher education or other programs based on affirmative action. A final limitation is the inability to isolate the exact impact of the top ten percent plan.

Recommendations for Future Research

The current research addressed six academic disciplines at the University of Texas at Austin. Future research could examine other academic disciplines. In addition, ethnic groups other than Black and Hispanic students can be examined. A second suggestion for future research is to explore minority enrollment at other institutions of

higher education within the state of Texas or in other states that have experienced bans on race-based admissions programs.

Suggestions for Policymakers

Higher education can serve many purposes. It can provide an educated workforce to better the economic situation for individuals as well as society as a whole. It is valued for improving the interaction of its citizens by exposing them to each other and proving an exchange of ideas. Individuals also may value higher education as a means to acquiring knowledge. Through policy decisions, policymakers can influence the role of higher education in society.

If the goal of policymakers is to provide institutions of higher education where students who already have an interest in higher education can earn degrees, then increasing access to higher education for minority groups may not be a specific concern. However, if the goal of policymakers is to increase access to new students who may not normally consider attending and institution of higher education, then admissions policies need to be considered.

Removing race-based admissions policies and replacing them with other policies based on other criteria does not appear to be an effective way to expand access to higher education for traditionally underrepresented minority groups. In addition, there seems to be some variation in the ways minority groups are impacted by admissions policies. Even before the *Hopwood* ruling, there were differences in Black and Hispanic enrollment suggesting that Hispanic enrollment was increasing more than Black enrollment. This should be taken into consideration when forming admissions policies at

the institutional level or creating legislation that will impact admission to institutions of higher education. If the trend of increasing access to higher education is to continue, policymakers need to take the time to determine what the role of the institution should be, and how the interests of minority students can best be served.

Appendix A

Table III of the 4th Class Day Enrollment Report

The University of Texas at Austin
Office of Institutional Research

Headcount by Discipline, Classification, Ethnicity and Gender
SUMMER 2005

DISCIPLINE / Classification	White			American Indian			African American			Asian American			Hispanic			Foreign			Unknown			Grand Total		
	Men	Wome	Total	Men	Wome	Total	Men	Wome	Total	Men	Wome	Total	Men	Wome	Total	Men	Wome	Total	Men	Wome	Total	Men	Wome	Total
ARCHITECTURE																								
Freshman														1	1								1	1
Sophomore	1	1	2							1		1	1		1		1	1				3	2	5
Junior	4	8	12							1	2	3					1	1				5	11	16
Senior	6	8	14								5	5	6	2	8					1	1	12	16	28
Undergraduate	11	17	28							2	7	9	7	3	10		2	2		1	1	20	30	50
Master's	37	38	75					1	1		1	1	2	2	4	6	7	13	2	7	9	47	56	103
Doctoral		2	2																				2	2
Graduate	37	40	77					1	1		1	1	2	2	4	6	7	13	2	7	9	47	58	105
Total	48	57	105					1	1	2	8	10	9	5	14	6	9	15	2	8	10	67	88	155
BUSINESS ADMINISTRATION																								
Freshman	6	8	14				1	2	3	4	5	9	4	3	7		1	1				15	19	34
Sophomore	12	17	29				2	1	3	9	6	15	4	2	6		2	2				27	28	55
Junior	74	47	121	1		1	5	3	8	16	26	42	8	10	18	1	1	2				105	87	192
Senior	185	150	335	2	5	7	6	10	16	80	92	172	30	37	67	11	12	23				314	306	620
Undergraduate	277	222	499	3	5	8	14	16	30	109	129	238	46	52	98	12	16	28				461	440	901
MBA/MPA	163	71	234	2		2	5	2	7	46	30	76	16	8	24	62	27	89	11	3	14	305	141	446
Master's	4		4							1	1	2				2	1	3				7	2	9
Doctoral	22	15	37							2	1	3		1	1	36	20	56	1	1	2	61	38	99
Graduate	189	86	275	2		2	5	2	7	49	32	81	16	9	25	100	48	148	12	4	16	373	181	554
Total	466	308	774	5	5	10	19	18	37	158	161	319	62	61	123	112	64	176	12	4	16	834	621	1,455
COMMUNICATION																								
Freshman		3	3								3	3	2	7	9							2	13	15
Sophomore	16	32	48		1	1	2	4	6	2	6	8	9	9	18		1	1				29	53	82
Junior	66	144	210				5	9	14	7	20	27	13	32	45	1	4	5		1	1	92	210	302
Senior	182	316	498		1	1	15	17	32	24	58	82	43	74	117	1	6	7	1		1	266	472	738
Undergraduate	264	495	759		2	2	22	30	52	33	87	120	67	122	189	2	11	13	1	1	2	389	748	1,137
Master's	12	65	77	2		2		4	4	2	5	7	2	11	13	3	12	15	3	6	9	24	103	127
Doctoral	21	32	53		1	1	1	2	3	1	3	4	3	5	8	7	15	22		2	2	33	60	93
Graduate	33	97	130	2	1	3	1	6	7	3	8	11	5	16	21	10	27	37	3	8	11	57	163	220
Total	297	592	889	2	3	5	23	36	59	36	95	131	72	138	210	12	38	50	4	9	13	446	911	1,357
EDUCATION																								
Freshman	4	4	8				6	2	8		1	1		6	6							10	13	23
Sophomore	8	20	28				15	3	18		3	3	6	3	9							29	29	58
Junior	38	75	113				12	6	18	3	10	13	4	22	26	1	1	2	1	1	2	59	115	174
Senior	101	224	325	1		1	14	14	28	20	29	49	30	65	95	1	4	5				167	336	503
Undergraduate	151	323	474	1		1	47	25	72	23	43	66	40	96	136	2	5	7	1	1	2	265	493	758
Master's	59	184	243		1	1	7	10	17	2	12	14	19	36	55	2	23	25	2	1	3	91	267	358
Doctoral	76	193	269	2	2	4	10	22	32	4	13	17	23	49	72	22	38	60	5	9	14	142	326	468
Graduate	135	377	512	2	3	5	17	32	49	6	25	31	42	85	127	24	61	85	7	10	17	233	593	826
Total	286	700	986	3	3	6	64	57	121	29	68	97	82	181	263	26	66	92	8	11	19	498	1,086	1,584

DISCIPLINE / Classification	White			American Indian			African American			Asian American			Hispanic			Foreign			Unknown			Grand Total		
	Men	Wome	Total	Men	Wome	Total	Men	Wome	Total	Men	Wome	Total	Men	Wome	Total	Men	Wome	Total	Men	Wome	Total	Men	Wome	Total
ENGINEERING																								
Freshman	28	11	39				3	2	5	10	4	14	15	5	20	5	1	6	1		1	62	23	85
Sophomore	59	23	82		1	1	6	3	9	29	9	38	24	8	32	5	2	7	1		1	124	46	170
Junior	136	36	172	1		1	9	3	12	66	19	85	35	7	42	7	11	18				254	76	330
Senior	308	73	381	3		3	11	8	19	160	49	209	70	28	98	37	15	52	3	3	6	592	176	768
Undergraduate	531	143	674	4	1	5	29	16	45	265	81	346	144	48	192	54	29	83	5	3	8	1,032	321	1,353
Master's	119	41	160				1		1	17	4	21	10	5	15	72	21	93	4	1	5	223	72	295
Doctoral	181	47	228	1		1	3	1	4	25	7	32	15	8	23	389	90	479	6		6	620	153	773
Graduate	300	88	388	1		1	4	1	5	42	11	53	25	13	38	461	111	572	10	1	11	843	225	1,068
Total	831	231	1,062	5	1	6	33	17	50	307	92	399	169	61	230	515	140	655	15	4	19	1,875	546	2,421
FINE ARTS																								
Freshman	5	4	9											1	1							5	5	10
Sophomore	7	9	16				1		1	1		1	1		1		1	1				10	10	20
Junior	19	41	60				1		1	2	6	8	4	5	9							26	52	78
Senior	55	107	162	1	4	5	3	4	7	5	15	20	11	15	26		4	4		1	1	75	150	225
Undergraduate	86	161	247	1	4	5	5	4	9	8	21	29	16	21	37		5	5		1	1	116	217	333
Master's	20	23	43				1	3	4	3	4	7	4		4	2	4	6	1	2	3	31	36	67
Doctoral	26	34	60								1	1	7	1	8	5	8	13	1	1	2	39	45	84
Graduate	46	57	103				1	3	4	3	5	8	11	1	12	7	12	19	2	3	5	70	81	151
Total	132	218	350	1	4	5	6	7	13	11	26	37	27	22	49	7	17	24	2	4	6	186	298	484
INFORMATION																								
Master's	21	99	120	1	3	4		1	1		6	6	2	8	10	1	7	8	2	4	6	27	128	155
Doctoral	4	8	12							1		1	1		1	2	1	3				8	9	17
Graduate	25	107	132	1	3	4		1	1	1	6	7	3	8	11	3	8	11	2	4	6	35	137	172
Total	25	107	132	1	3	4		1	1	1	6	7	3	8	11	3	8	11	2	4	6	35	137	172
LAW																								
Law/Professional	111	80	191	2	1	3	3	8	11	6	8	14	33	19	52		1	1	15	3	18	170	120	290
Total	111	80	191	2	1	3	3	8	11	6	8	14	33	19	52		1	1	15	3	18	170	120	290
LIBERAL ARTS																								
Freshman	239	190	429	1		1	28	23	51	27	48	75	51	54	105	10	4	14		1	1	356	320	676
Sophomore	122	128	250	3	1	4	17	19	36	22	15	37	32	25	57	6	5	11	1	1	2	203	194	397
Junior	286	301	587		2	2	11	23	34	48	48	96	55	68	123	6	12	18	4	2	6	410	456	866
Senior	614	595	1,209	7	1	8	25	38	63	135	107	242	134	138	272	23	32	55	3	3	6	941	914	1,855
Undergraduate	1,261	1,214	2,475	11	4	15	81	103	184	232	218	450	272	285	557	45	53	98	8	7	15	1,910	1,884	3,794
Master's	30	46	76				2	2	4	1	3	4	8	10	18	2	6	8	1	1	2	44	68	112
Doctoral	131	132	263		2	2	2	4	6	6	7	13	13	20	33	64	52	116	5	4	9	221	221	442
Graduate	161	178	339		2	2	4	6	10	7	10	17	21	30	51	66	58	124	6	5	11	265	289	554
Total	1,422	1,392	2,814	11	6	17	85	109	194	239	228	467	293	315	608	111	111	222	14	12	26	2,175	2,173	4,348

DISCIPLINE/ Classification	White			American Indian			African American			Asian American			Hispanic			Foreign			Unknown			Grand Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
NATURAL SCIENCES																								
Freshman	116	126	242	1	1	2	14	15	29	51	41	92	39	41	80	3	4	7				224	228	452
Sophomore	57	75	132	1	1	2	4	9	13	39	45	84	21	19	40	3	5	8	1	1	2	126	155	281
Junior	143	136	279	1		1	6	15	21	80	75	155	36	37	73	10	7	17	3	2	5	279	272	551
Senior	371	416	787	3	7	10	17	35	52	165	197	362	130	114	244	36	25	61	2	5	7	724	799	1,523
Undergraduate	687	753	1,440	6	9	15	41	74	115	335	358	693	226	211	437	52	41	93	6	8	14	1,353	1,454	2,807
Master's	65	47	112				1	1	2	9	3	12	6	8	14	46	22	68	4	1	5	131	82	213
Doctoral	278	145	423				2	4	6	18	16	34	19	8	27	304	128	432	16	10	26	637	311	948
Graduate	343	192	535				3	5	8	27	19	46	25	16	41	350	150	500	20	11	31	768	393	1,161
Total	1,030	945	1,975	6	9	15	44	79	123	362	377	739	251	227	478	402	191	593	26	19	45	2,121	1,847	3,968
NURSING																								
Freshman								2	2					2	2								4	4
Sophomore		8	8				2	1	3	1	2	3		6	6		2	2				3	19	22
Junior	4	33	37					2	2	3	4	7		3	3		1	1				7	43	50
Senior	5	78	83				1	5	6	4	11	15	2	13	15	1	2	3				13	109	122
Undergraduate	9	119	128				3	10	13	8	17	25	2	24	26	1	5	6				23	175	198
Master's	16	115	131	1	1	2		8	8	1	11	12		11	11		3	3	1	2	3	19	151	170
Doctoral	1	10	11					2	2		2	2	1	4	5		10	10				2	28	30
Graduate	17	125	142	1	1	2		10	10	1	13	14	1	15	16		13	13	1	2	3	21	179	200
Total	26	244	270	1	1	2	3	20	23	9	30	39	3	39	42	1	18	19	1	2	3	44	354	398
PHARMACY																								
Junior											1	1	1		1							1	1	2
Senior	24	48	72		1	1		4	4	6	36	42	10	15	25							40	104	144
Undergraduate	24	48	72		1	1		4	4	6	37	43	11	15	26							41	105	146
Master's	3	8	11							2	2	4	2	1	3							7	11	18
Doctoral	15	7	22				3		3		8	8	4	1	5	16	19	35				38	35	73
Graduate	18	15	33				3		3	2	10	12	6	2	8	16	19	35				45	46	91
Pharm.D.	12	58	70					1	1	6	25	31	7	12	19		1	1		1	1	25	98	123
Special Professic	12	58	70					1	1	6	25	31	7	12	19		1	1		1	1	25	98	123
Total	54	121	175		1	1	3	5	8	14	72	86	24	29	53	16	20	36		1	1	111	249	360
PUBLIC AFFAIRS																								
Master's	38	39	77		1	1	1	7	8	3	3	6	4	14	18	8	11	19	1	1	2	55	76	131
Doctoral		1	1					1	1				2		2	2	4	6				4	6	10
Graduate	38	40	78		1	1	1	8	9	3	3	6	6	14	20	10	15	25	1	1	2	59	82	141
Total	38	40	78		1	1	1	8	9	3	3	6	6	14	20	10	15	25	1	1	2	59	82	141

DISCIPLINE / Classification	White			American Indian			African American			Asian American			Hispanic			Foreign			Unknown			Grand Total		
	Men	Wome	Total	Men	Wome	Total	Men	Wome	Total	Men	Wome	Total	Men	Wome	Total	Men	Wome	Total	Men	Wome	Total	Men	Wome	Total
SOCIAL WORK																								
Freshman		1	1					1	1		1	1		1	1								4	4
Sophomore		1	1					3	3														4	4
Junior		2	2											2	2								4	4
Senior	1	12	13					3	3		3	3	1	5	6							2	23	25
Undergraduate	1	16	17					7	7		4	4	1	8	9							2	35	37
Master's	15	136	151				1	16	17		9	9	6	31	37	1		1		3	3	23	195	218
Doctoral	3	17	20					5	5		2	2	1	2	3	1	6	7		3	3	5	35	40
Graduate	18	153	171				1	21	22		11	11	7	33	40	2	6	8		6	6	28	230	258
Total	19	169	188				1	28	29		15	15	8	41	49	2	6	8		6	6	30	265	295
INTERCOLLEGIATE PROGRAMS																								
Master's	4	3	7							1		1		1	1	1		1				6	4	10
Doctoral	20	15	35							1	1	2	2	2	4	17	8	25	2		2	42	26	68
Graduate	24	18	42							2	1	3	2	3	5	18	8	26	2		2	48	30	78
Total	24	18	42							2	1	3	2	3	5	18	8	26	2		2	48	30	78
TOTAL UT																								
Freshman	398	347	745	2	1	3	52	47	99	92	103	195	111	121	232	18	10	28	1	1	2	674	630	1,304
Sophomore	282	314	596	4	4	8	49	43	92	104	86	190	98	72	170	14	19	33	3	2	5	554	540	1,094
Junior	770	823	1,593	3	2	5	49	61	110	226	211	437	156	186	342	26	38	64	8	6	14	1,238	1,327	2,565
Senior	1,852	2,027	3,879	17	19	36	92	138	230	589	612	1,201	467	506	973	110	100	210	9	13	22	3,146	3,405	6,551
Total Undergrad	3,302	3,511	6,813	26	26	52	242	289	531	1,021	1,002	2,023	832	885	1,717	168	167	335	21	22	43	5,612	5,902	11,514
MBA/MPA	163	71	234	2		2	5	2	7	46	30	76	16	8	24	62	27	89	11	3	14	305	141	446
Master's	443	844	1,287	4	6	10	14	53	67	42	64	106	65	138	203	146	117	263	21	29	50	735	1,251	1,986
Doctoral	778	658	1,436	3	5	8	21	41	62	58	61	119	91	101	192	865	399	1,264	36	30	66	1,852	1,295	3,147
Subtotal Graduat	1,384	1,573	2,957	9	11	20	40	96	136	146	155	301	172	247	419	1,073	543	1,616	68	62	130	2,892	2,687	5,579
Law	111	80	191	2	1	3	3	8	11	6	8	14	33	19	52		1	1	15	3	18	170	120	290
Pharm.D	12	58	70					1	1	6	25	31	7	12	19		1	1		1	1	25	98	123
Subtotal Spec. Fi	123	138	261	2	1	3	3	9	12	12	33	45	40	31	71		2	2	15	4	19	195	218	413
Total Graduate	1,507	1,711	3,218	11	12	23	43	105	148	158	188	346	212	278	490	1,073	545	1,618	83	66	149	3,087	2,905	5,992
Total	4,809	5,222	10,031	37	38	75	285	394	679	1,179	1,190	2,369	1,044	1,163	2,207	1,241	712	1,953	104	88	192	8,699	8,807	17,506

Appendix B

Results of Regression Analyses

Total Black and Hispanic Enrollment in the College of Liberal Arts

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.873	.440		29.261	.000
	semester	.147	.028	1.237	5.144	.000
	dummy	-3.705	.619	-1.083	-5.986	.000
	Hopwood	-.171	.043	-.788	-3.983	.000
	Adjusted R Square	.602				

a Dependent Variable: batotalper

Black Enrollment in the College of Business Administration

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.715	.169		21.944	.000
	semester	.011	.011	.283	1.030	.308
	dummy	-.810	.238	-.703	-3.401	.001
	Hopwood	-.023	.017	-.308	-1.364	.179
	Adjusted R Square	.481				

a Dependent Variable: bablackper

Hispanic Enrollment in the College of Business Administration

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.158	.348		26.322	.000
	semester	.135	.023	1.501	6.003	.000
	dummy	-2.895	.490	-1.112	-5.914	.000
	Hopwood	-.148	.034	-.899	-4.373	.000
	Adjusted R Square	.570				

a Dependent Variable: bahispper

Total Black and Hispanic Enrollment in the College of Communications

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	13.999	.310		45.103	.000
	semester	.186	.020	1.972	9.234	.000
	dummy	-2.275	.437	-.837	-5.210	.000
	Hopwood	-.119	.030	-.690	-3.930	.000
	Adjusted R Square	.686				

a Dependent Variable: cototalper

Black Enrollment in the College of Communication

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.672	.155		30.113	.000
	semester	.007	.010	.161	.743	.461
	dummy	-1.163	.218	-.868	-5.328	.000
	Hopwood	-.011	.015	-.131	-.733	.467
	Adjusted R Square	.677				

a Dependent Variable: coblackper

Hispanic Enrollment in the College of Communications

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.327	.250		37.380	.000
	semester	.178	.016	1.665	11.024	.000
	dummy	-1.112	.351	-.360	-3.168	.003
	Hopwood	-.108	.024	-.551	-4.433	.000
	Adjusted R Square	.843				

a Dependent Variable: cohispper

Total Black and Hispanic Enrollment in the College of Education

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.560	.705		17.827	.000
	semester	.311	.046	1.375	6.821	.000
	dummy	-.410	.991	-.063	-.413	.681
	Hopwood	-.235	.069	-.567	-3.418	.001
	Adjusted R Square	.720				

a Dependent Variable: edtotper

Black Enrollment in the College of Education

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.921	.381		7.657	.000
	semester	.143	.025	1.349	5.789	.000
	dummy	-.707	.537	-.231	-1.318	.194
	Hopwood	-.083	.037	-.427	-2.228	.031
	Adjusted R Square	.626				

a Dependent Variable: edblackper

Hispanic Enrollment in the College of Education

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.640	.545		17.692	.000
	semester	.168	.035	1.185	4.767	.000
	dummy	.298	.767	.073	.388	.700
	Hopwood	-.152	.053	-.585	-2.860	.006
	Adjusted R Square	.575				

a Dependent Variable: edhispper

Total Black and Hispanic Enrollment in the College of Engineering

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.562	.678		17.060	.000
	semester	.105	.044	.880	2.388	.021
	dummy	-1.828	.954	-.531	-1.917	.061
	Hopwood	-.095	.066	-.436	-1.439	.157
	Adjusted R Square	.066				

a Dependent Variable: entotper

Black Enrollment in the College of Engineering

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.170	.108		29.239	.000
	semester	.005	.007	.147	.733	.467
	dummy	-.620	.153	-.611	-4.061	.000
	Hopwood	-.028	.011	-.438	-2.661	.011
	Adjusted R Square	.725				

a Dependent Variable: enblackper

Hispanic Enrollment in the College of Engineering

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.391	.602		13.944	.000
	semester	.100	.039	.927	2.558	.014
	dummy	-1.209	.847	-.389	-1.427	.160
	Hopwood	-.067	.059	-.340	-1.141	.260
	Adjusted R Square	.096				

a Dependent Variable: enhispper

Total Black and Hispanic Enrollment in the College of Liberal Arts

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.740	.325		39.214	.000
	semester	.242	.021	1.982	11.492	.000
	dummy	-1.005	.457	-.285	-2.199	.033
	Hopwood	-.261	.032	-1.169	-8.241	.000
	Adjusted R Square	.795				

a Dependent Variable: latotper

Black Enrollment in the College of Liberal Arts

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.219	.190		16.977	.000
	semester	.032	.012	.949	2.621	.012
	dummy	-.329	.267	-.336	-1.233	.224
	Hopwood	-.026	.019	-.419	-1.408	.166
	Adjusted R Square	.098				

a Dependent Variable: lablackper

Hispanic Enrollment in the College of Liberal Arts

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.521	.222		42.919	.000
	semester	.210	.014	2.023	14.590	.000
	dummy	-.676	.312	-.226	-2.167	.035
	Hopwood	-.235	.022	-1.239	-10.865	.000
	Adjusted R Square	.868				

a Dependent Variable: lahispper

Total Black and Hispanic Enrollment in the College of Natural Sciences

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14.085	.376		37.413	.000
	semester	.046	.024	.692	1.905	.063
	dummy	-1.377	.530	-.711	-2.600	.012
	Hopwood	.010	.037	.079	.266	.791
	Adjusted R Square	.092				

a Dependent Variable: nstotper

Black Enrollment in the College of Natural Sciences

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.446	.153		22.584	.000
	semester	-.004	.010	-.133	-.372	.712
	dummy	-.289	.215	-.363	-1.345	.185
	Hopwood	.005	.015	.091	.308	.760
	Adjusted R Square	.114				

a Dependent Variable: nsblackper

Hispanic Enrollment in the College of Natural Sciences

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.639	.362		29.408	.000
	semester	.050	.023	.764	2.139	.038
	dummy	-1.089	.509	-.575	-2.139	.038
	Hopwood	.005	.035	.043	.147	.884
	Adjusted R Square	.121				

a Dependent Variable: nshispper

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