Affirmative Action in California Public vs. Private Colleges
Christian Weisenbacher

Colleges today are especially concerned with providing for a diverse student body on campus. Since the civil rights era, affirmative action programs have been considered to be the best approach to increasing student diversity. While research has shown that affirmative action programs can have a positive impact on student diversity, there has been no research into the differences in effectiveness of affirmative action programs in public colleges and private colleges. In this paper, data from three California public colleges and three California private colleges is examined over a fifteen year time period to determine if there is a difference in outcome between affirmative action programs in public and private colleges.

Since the civil rights era and the awakening of American higher education institutions to the need for diversity, colleges have been searching for ways to increase student diversity without being discriminatory. Affirmative action programs, first instituted in the 1960's, have become the norm for higher education institutions looking to increase diversity to provide students with a richer college experience. These affirmative action programs have been particularly effective in the public higher education system. Private institutions have instituted affirmative action policies in the hopes of increasing student diversity as well. The use of affirmative action policies by both public and private institutions begs the question: how have affirmative action policies affected student diversity in public vs. private institutions?

The question of affirmative action is, at its core, a question of equality of opportunity. Since their inception, affirmative action programs have caused a stir in American politics, and even now, more than forty years after they first came into effect, the programs are a cause for concern among institutions of higher education. While the effectiveness of such programs has been debated, it has never been determined if public schools or private schools are more successful in increasing student diversity through these programs.

In this paper, based on research completed in Research Methods (Poli 340), I look at the impact of affirmative action programs on student diversity in public and private colleges. With data covering a fifteen-year period, from 1990-2004, and from a selection of three California public colleges and three California private colleges, I will observe affirmative action programs to see if they influence student diversity. Furthermore, I will endeavor to find out if there is a discrepancy between student diversity in public colleges

with affirmative action programs and private colleges with affirmative action programs. Such research would serve to further an investigation of how schools might increase diversity, depending on the programs and admissions techniques that public schools and private schools tend to use.

A review of the literature regarding affirmative action will show that there is no information specifically regarding public and private affirmative action programs' effects on student diversity. Next, the explanation of why student diversity should necessarily follow from affirmative action programs, and a definition of the variables used in my analysis. Finally, the research design and analysis of the data will be shown.

Literature Review

The issue of affirmative action has been debated in American politics since its institution in the civil rights era in the 1960's. While many have made moral arguments for and against its use, it is the statistical arguments that are perhaps the most compelling. The cases for and against affirmative action usually make a distinction between those programs aimed at promoting diversity in higher education and those aimed at promoting diversity in the workplace or otherwise. Tom Beauchamp argues in, *In Defense of Affirmative Action*, that affirmative action policies are only moral and effective if being implemented to overcome discrimination that could not be otherwise overcome (1997).

Affirmative action programs have long been a part of education in the United States, and as James Beckman writes, in *Affirmative Action Now: A Guide for Students, Families, and Counselors*, the modern form and conception of affirmative action originated in the late 1960's (2006, 15). This form of affirmative action, in which minority groups were given preferential treatment, quickly became the norm—and sometimes the law—in the

American higher education system. California, in particular, has been an arena in which affirmative action has been debated, contested, and fervently practiced. It was in 1978, in *Regents of the University of California vs. Bakke*, that the Supreme Court first issued a decision regarding affirmative action in higher education (Beckman 2006, 17). The decision determined that while negative action, such as the use of racial quotas, was deemed to be unconstitutional, the use of race as a positive factor in college admissions was constitutional.

Affirmative action programs in higher education have also been analyzed from the perspective of a policy's possible effects. These effects are typically split into two divisions: those effects on the students themselves, and those effects on the higher education institution. David Card and Alan Krueger discuss the possible effects of the elimination of affirmative action on minority students in *Would the Elimination of Affirmative Action Affect Highly Qualified Applicants? Evidence from California and Texas*, and argue that there is no evidence that applicants would be turned away by a possible decrease in diversity from the elimination of affirmative action programs (2005). How affirmative action affects an institution of higher education is a consideration, too, and Douglas Massey and Margarita Mooney determined in *The Effects of America's Three Affirmative Action Programs on Academic Performance*, that minorities admitted under affirmative action programs do earn lower grades (2007). Heather Rose also writes on this topic in *The Effects of Affirmative Action Programs: Evidence From the University of California at San Diego*, though she looks at one specific institution (2005).

Mark Long, of the University of Washington, writes of the incentive for institutions of higher education to use affirmative action policies:

> Universities are organizations that have an institutional interest in maintaining a sufficient share of minority students on their campuses in order to gain the positive academic and social benefits of a diverse student body. Universities also serve a public mission in overcoming the effects of past and contemporary discrimination and inequality by providing access to higher education and helping minority students graduate. (2007, 318)

This illustrates the reasoning behind instituting affirmative action programs in colleges and universities; it can be beneficial to both the student and the university. As a result, many institutions were proponents of such programs until the 2000's.

These university affirmative action programs have been shown to help minority students in the application process. As Long writes, "Most of the empirical research on the effects of traditional affirmative action has found that minority students benefit from it" (2007). Long cites two particular studies on the topic:

> Several studies have found substantial degrees of advantage given to minority applicants over otherwise similar applicants at top-tier institutions. Bowen and Bok (1998), for example, examined the admissions decisions of five highly selective institutions in 1989 and found that eliminating affirmative action would reduce "the overall probability of admission for black applicants from its actual value of 42 percent in 1989 to a hypothetical value of 13 percent'' (32). Espenshade, Chung, and Walling (2004), analyzing admissions data from three highly selective institutions in the early 1980s, 1993, and 1997, found that the odds of admission for black and Hispanic applicants were 5.5 and 3.7 times that of comparable white

applicants, respectively. (2007, 317)

These findings suggest that admission of minority students is positively affected by affirmative action programs.

There has been research, also, on the effects of affirmative action on school diversity. The findings of the studies listed above suggests that, if the use of affirmative action programs were to be discontinued, diversity rates would fall, because the likelihood of minority students being admitted to the school would fall, therefore resulting in fewer minority students at the institution. Through a comparison of actual student admissions data to simulated student admissions data, Thomas Espenshade and Chang Chung find that eliminating affirmative action policies would lead to lower minority acceptance rates (2005). In the study, Espenshade and Chang looked at student admissions rates for 1997, with affirmative action programs, versus simulated student admissions rates for the same year, without affirmative action programs. Their results were as follows:

> Data for the 1997 entering class indicate that eliminating affirmative action would reduce acceptance rates for African-American and Hispanic applicants by as much as one-half to two-thirds and have an equivalent impact on the proportion of underrepresented minority students in the admitted class. White applicants would benefit very little by removing racial and ethnic preferences; the white acceptance rate would increase by roughly 0.5 percentage points. Asian applicants would gain the most. They would occupy four out of every five seats created by accepting fewer African-American and Hispanic students. The acceptance rate for Asian applicants would rise by one-third from nearly 18 percent to more than 23 percent. (2005, 303-304)

This evidence clearly shows that, should affirmative action programs be eliminated, and universities use race-blind admissions processes, student diversity would be greatly affected. In this case, the study suggests that the white and Asian student rates would rise, while the Hispanic and African-American rates would fall. This would result in lower student diversity in the school. In California, specifically, there is evidence that affirmative action programs do serve to increase diversity on campus, as Andrew Glass writes in "Private Universities Help Minorities" (1998). Glass writes of the University of California at Berkeley, stating "The number of minority students to be admitted as freshmen this year has dropped off by two-thirds." He continues, "In the first undergraduate class to be chosen since California voters banned affirmative action programs, African Americans, Hispanic Americans, and native Americans will compose just 10.4 percent of those admitted to the class of 2002" (1998). This suggests that the elimination of affirmative action in California public higher education institutions has led to a decrease in student diversity.

The analysis of affirmative action programs in higher education has shown that affirmative action does contribute to greater student diversity, albeit indirectly. In the analysis of affirmative action to date, it has yet to be determined whether there is a disparity between affirmative action's effects on campus diversity in private institutions and public institutions. Such research would enable the analysis of public-specific and private-specific restrictions regarding the scope of affirmative action. In the following sections, I will analyze data from public and private institutions to determine if there is a direct link between affirmative action and student diversity and if there is a disparity in campus student diversity related to affirmative action programs.

Argument and Hypothesis

Dependent Variable

Student diversity can be understood to mean the relative equality of enrollment between students of different economic class, race, religion, and gender. In the case of American higher education institutions, however, it is best defined as the student demographics—specifically ethnic diversity—of the school by percentage of the student body.

Explanatory Variable

As implemented in the education system, affirmative action policies are those policies that give preferential treatment to disadvantaged students. These programs are designed to increase, and have the stated goal of increasing student diversity and opportunity for minority students. These policies can include such things as heavily recruiting minority students, admitting most, or all, minority students that meet admissions criteria, targeting retention programs at minority students, or instituting quotas of minority students to be let in with each admissions class.

Argument and Hypotheses

An ideal affirmative action policy would have influence student diversity. Each affirmative action policy separately would ideally promote some positive change in student diversity. If a higher education institution employs multiple affirmative action policies, the student diversity would increase, as each policy would presumably engage different students, without much, if any, overlap in admitting students. It is in this way that the

dependent variable, student diversity, is impacted by the explanatory variable, affirmative action policies.

According to Heather Rose, affirmative action policies were first instituted in the 1960's, and perhaps reached its height on California higher education campuses in the 1980's, and slowly reducing the scope of the policies starting in the mid 1990's (2005). In 1996, California passed the California Civil Rights Initiative, or Proposition 209, which advocated a race-blind approach, mandating that race could not be used in the public higher education admissions process. This effectively abolished many of the affirmative action policies that California public institutions had been using to increase student diversity, and subsequently led to a decrease in student diversity. As David Leonhardt of *The New York Times* in "The New Affirmative Action," writes, "The changes on U.C.L.A.'s campus were hard to miss. In 1997, the freshman class included 221 black students; last fall [Fall 2006] it had only 100. In the region with easily the largest black population west of the Mississippi River, the top public university had a freshman class in which barely 1 in 50 students was black" (2007). With this evidence, it becomes clear that, at the very least, the absence of affirmative action policies has a negative effect on student ethnic diversity.

Affirmative action policies usually work in three ways: by creating an environment that is more welcoming to minority students, by simply admitting more minority students, and/or by using race a positive factor in admissions. A positive environment for minority students can be created through programs that are designed to recruit minority students, effectively attempting to increase diversity by increasing the number of minority applicants. Retention programs aimed at minority groups, too, can have a positive effect on diversity by helping to keep minority students in school. By making a conscious effort to

admit more minority students, it logically follows that student diversity would increase. Likewise, when using race as a positive factor, it is conceivable that minority students who were equal to majority students would be accepted due to the use of race as a positive, which would raise them above the otherwise equal competition. In taking these programs away, one witnesses the sharp decline in minority student participation and student diversity. For example, in Florida, after a decision in 2000 to remove race-conscious admissions practices from the public higher education system, the state colleges experienced a decrease in enrollment of many minority groups (Beckman 2006, 53).

Affirmative action policies can positively affect student ethnic diversity by increasing the number of minority students admitted and retained on campus. It is my hypothesis that the data from these schools will show a positive effect of affirmative action on student diversity. In addition, it is my hypothesis that the public schools with affirmative action programs will show more student diversity than the private schools with affirmative action programs.

Research Design

For the analysis of the effect of affirmative action policies on student diversity, I will use a sample of six California-based colleges, the University of California Berkeley, the University of California Davis, the University of California Los Angeles, Stanford University, Harvey Mudd College, and Notre Dame de Namur University. The University of California schools are public, while the remaining colleges are private. This sample provided a good matchup of public and private institutions with affirmative action policies for which ethnic admissions data was available during the sample years. By using this sample, it would be possible to generalize the results of the analysis to other California schools, only.

For the explanatory variable—affirmative action policies—the measurement is simply whether or not they were in place during the time of study, 1990-2004. This information is available on the institution websites, as is the information for the control variable—whether or not the institution is public or private. The University of California school system, including the University of California Berkeley, University of California Davis, and University of California Los Angeles, used affirmative action programs until 1996, when California Proposition 209 passed, stating that race could not be used as a criterion for admission into the school (Beckman 47). In 1997, the proposition went into effect, effectively ending all affirmative action practices at the University of California. Stanford University and Harvey Mudd College have both used affirmative action programs since before 1990 and through 2004 (Beckman 305, 211). Notre Dame de Namur University adopted an affirmative action program in 1993 (Notre Dame de Namur University).

For the dependent variable, student diversity, the variable is calculated using the USA Today Index of Ethnic Diversity (Meyer, 1992). This index takes into account the number of students admitted to a school in each ethnicity and determines the likelihood that any two people out of the total population will be of different ethnicities. The index ranges from 0 to 1, with a result closer to 1 showing a greater chance of any two people being of different ethnicities, and therefore showing greater diversity. Due to the complicated nature of this mathematical formula, an online program developed by Tucker Balch, an adjunct research scientist at Carnegie Mellon University and an assistant professor at Georgia Tech, will be used to calculate each diversity index result. While the diversity index itself will be not be collected, the data to calculate the index will be. The

individual ethnicity data for each institution's freshman students will be drawn from the California Postsecondary Education Commission's online college database (2011).

The explanatory variable is nominal, so the measure of central tendency will be the mode. The mode, in this case, is the colleges that do practice affirmative action. Since this variable is a nominal, the measure of dispersion will be the variation ratio. As 63 of the total observations are in the modal category, only 27 are not in the modal category, leaving a variation ration of 30 percent. The variation ratio for the affirmative action policy variable is 30 percent, which means that the mode is meaningful.

The dependent variable is an interval variable, so it is appropriate to use the mean as the measure of central tendency. The mean for this variable is 0.6618 percent. Since this is an interval variable, it is also appropriate to use the standard deviation as the measure of dispersion. The standard deviation for this variable is .06427. In this case, the mean marks the central point of the distribution, and the standard deviation marks the average distance from the mean. The standard deviation is low, at only .06427, showing the significance of the mean.

I will use a comparison of means and a line graph to show the bivariate statistics for my dependent and explanatory variables. This is because my dependent variable is interval and my explanatory variable is categorical.

The control variable in my project is whether or not the institution is public or private. This variable is a nominal variable, so the measure of central tendency will be the mode. Both answers for the variable occur equally frequently—45 observations of public colleges and 45 observations of private colleges. Since the variable is nominal, the measure of dispersion is the variation ratio. In this case, the variation ratio is 50 percent, because

both forms of the variable occur with equal frequency. Since the institutions included in the data were picked specifically so as to be one half public and one half private, it was expected that the variation ratio would be 50 percent.

In order to analyze this data, two types of bivariate statistics will be used. First, a comparison of means will be used to highlight any differences between colleges with and without affirmative action programs. This comparison of means will be controlled for public and private schools. Also, a linear regression analysis will be performed to test the relationship between the variables. An analysis of the significance of the data will be performed to see if the findings could be applied to the general population outside of the sample.

Findings

To see if there were any differences between institutions with and without affirmative action programs, I first used a comparison of means. This showed a difference between the mean diversity index of colleges with and without affirmative action programs. My hypothesis is supported through the disparity of the mean diversity index for institutions with and without affirmative action programs, when controlled for public and private institutions, as shown in Figure 1 in the appendix. In both public and private institutions, affirmative action programs corresponded with a higher mean diversity index. In public institutions, the mean diversity index for institutions with affirmative action programs was .7024, compared to .6808 for those institutions without such programs. In private institutions, this disparity was shown as well. Private colleges with affirmative action had a mean diversity of .6309, while those without affirmative action had a mean diversity index of .5767. A comparison of the public and private mean diversity indexes

shows that the public mean diversity index was higher, at 0.6909, than that of the private schools, at 0.6265. This means that there was a distinct disparity between diversity on private college campuses and public college campuses, as well as between those colleges with affirmative action programs and without affirmative action programs. This data supports my hypothesis that public colleges with affirmative action programs would have higher campus diversity than private colleges with affirmative action programs.

In the comparison of means chart, when not controlled for public and private institutions, the mean diversity index of the colleges with affirmative action programs shows is 0.6582, while the mean diversity index of colleges without affirmative action programs is slightly higher, at 0.6693. This evidence does not support my thesis that colleges with affirmative action programs would have higher campus diversity. In addition, this difference in the mean diversity index of schools with and without affirmative action programs is a very small amount, at 0.011, and so is almost insignificant.

A comparison of the explanatory variables, public vs. private schools and schools with vs. schools without affirmative action, through regression also supports my hypothesis. As Figure 2 in the appendix shows, the analysis showed a 90 percent confidence that affirmative action has a positive and significant influence on student diversity. The β coefficient for whether or not the school has affirmative action programs was -0.028, with a significance, or p-value of 0.061. This means that if a school has affirmative action programs, then the mean diversity index would be about 0.028 higher than it would if the school did not have affirmative action. This coefficient had a significance of 0.061, which means that it has a 90 percent confidence rate, and therefore can be generalized outside of the sample. For the other variable, the privacy of the

institution, the analysis showed a 99 percent confidence that public institutions have a positive and significant influence on student diversity. The β coefficient for if the school was public or private was -0.077, with a significance of 0. This means that if the school were public, the mean diversity index would be about 0.077 higher than it would be if the school was private. This coefficient had a significance of 0, meaning that it has a 99 percent confidence rate, and can also be generalized outside of the sample. The r-squared value, showing the variability of the data, was 0.0284, an acceptable value.

Conclusion

In my argument, I posited that affirmative action programs have a positive influence on student diversity and I hypothesized that this would be the case in my analysis, and especially so in public institutions. In my analysis of colleges with affirmative action programs, controlled for whether they were public or private, the institutions with affirmative action programs had a significantly higher mean diversity index than those without such programs. The linear regression analysis supported the conclusions from the comparison of means and also showed that public institutions had higher a mean diversity index than private institutions. Altogether, the data supported my hypothesis that affirmative action policies, regardless of college privacy, increase diversity in higher education institutions. The data also supported the second part of my hypothesis that public institutions with affirmative action policies would lead to higher diversity than private institutions with equivalent programs.

While my hypotheses were supported fairly definitively by my comparison of means and linear regression analyses, the comparison of means did show that, when not controlled for the privacy of the college, the schools without affirmative action programs

actually had a greater mean diversity index than schools with affirmative action programs. There are two possible reasons for this perplexing result of the data analysis. First, the mean diversity index for private colleges with affirmative action programs was lower than the mean diversity index for public colleges without such programs. This likely lowered the total mean diversity index for affirmative action institutions, as there were thirty-four instances of private affirmative action colleges compared to twenty-one public affirmative action colleges. That there were only three values for private colleges without affirmative action programs compared to twenty-four of the corresponding public colleges also likely did not lower the mean as much as it would have had the values been equal. This combination of the lowering of the affirmative action institution mean diversity index and stagnancy of the non-affirmative action institution mean diversity index created by the difference in instances of each could have led to the unexpected result. In addition, there were eight data points that I was not able to procure, and it is possible that the inclusion of these data points would have led to a more reasonable result. Though these issues affected the combined mean diversity index, I do not believe it had a negative effect on the controlled mean diversity analysis or the linear regression.

If I were able research this topic further, I would open up the data to include more schools. This would allow me to determine if these schools are truly representative of the rest of the United States or even the rest of California. While the significance of the data suggests that my findings are representative, it would be interesting to see if the addition of more data from different regions would change the results. Also, it would be interesting to try to determine which specific aspects of affirmative action programs have the most/least effect. For instance, it would be interesting to find out if recruitment plans work as well as

using race as a plus factor in admissions, in promoting student diversity. Finally, it would be interesting—and worthwhile—to attempt to figure out why, exactly, it is that public affirmative action policies seem to be more effective than private affirmative action policies.

Based on my findings, it appears that affirmative action policies are effective, to an extent, in promoting student diversity. My findings do not shed light the efficacy of any of the specific types of affirmative action programs, nor do they suggest that any program is better than another. They do, however, clearly show that affirmative action programs do have a positive effect on student diversity, and that public schools have greater diversity than private schools. Therefore, assuming that student diversity is a positive institutional characteristic, I would prescribe that policymakers endeavor to implement affirmative action policies that could be effective while still preventing discrimination of any kind. Such policies, if adopted by state institutions of higher education, might then be emulated in private institutions, leading to increased diversity and opportunity in all American institutes of higher education.

Appendix

Figure 1

Is the college private or public?	Does the college practice affirmative action?	Mean Diversity Index	N	Standard Deviation
Public	Yes	.7024	21	.03015
	No	.6808	24	.01767
	Total	.6909	45	.02636
Private	Yes	.6309	34	.07196
	No	.5767	3	.14295
	Total	.6265	37	.07815
Total	Yes	.6582	55	.06877
	No	.6693	27	.05441
	Total	.6618	82	.06427

Figure 2

Explanatory Variable	**Dependent Variable (Diversity Index)**
Does the school have affirmative action?	-0.028* (Sig 0.061)
Is the school public or private?	-0.077*** (Sig 0)
R Square	0.0284
N	82

Note: *p<0.1, **p<0.05, ***p<0.01

References

Balch, Tucker. *The Diversity Calculator*. http://www.cs.cmu.edu/~trb/java/Dcalc/ (April 5, 2012).

Beauchamp, Tom L.. 1997. "In Defense of Affirmative Action." *The Journal of Ethics* 2: 143-158.

Beckman, James. 2006. *Affirmative Action Now: A Guide for Students, Families, and Counselors*. Westport: Greenwood Press.

California Postsecondary Education Commission. 2011. "Higher Education Enrollment." http://www.cpec.ca.gov/OnLineData/SelectFirstOptions.ASP?ReportType=Enroll (January 25, 2012).

Card, David, and Alan Krueger. 2005. "Would the Elimination of Affirmative Action Affect Highly Qualified Applicants? Evidence from California and Texas." *Industrial and Labor Relations Review* 58 (April): 416-434.

Casper, Gerhard. 1995. *Statement on Affirmative Action at Stanford University*. 4 October.

Espenshade, Thomas J., and Chang Chung. 2005. "The Opportunity Cost of Admission Preferences at Elite Universities." *Social Science Quarterly* 86 (June): 293-305.

Glass, Andrew. 1998. "Private Universities Help Minorities." *Lakeland Ledger*, 7 April.

Harvey Mudd College. 2010. http://www.hmc.edu (January 24, 2012).

Leonhardt, David. 2007. "The New Affirmative Action." *New York Times*, 30 September.

Long, Mark C.. 2007. "Affirmative Action and Its Alternatives in Public Universities: What Do We Know?" *Public Administration Review* 67 (March/April): 315-330.

Massey, Douglas, and Margarita Mooney. 2007. "The Effects of America's Three Affirmative Action Programs on Academic Performance." *Social Problems* 57 (February): 99-117.

Meyer, Philip, and Shawn McIntosh. 1992. "The USA Today Index of Ethnic Diversity." *International Journal of Public Opinion Research* (Spring): 56.

Notre Dame de Namur University. 2011. http://www.ndnu.edu (January 24, 2012).

Rose, Heather. 2005. "The Effects of Affirmative Action Programs: Evidence from the University of California at San Diego." *Educational Evaluation and Policy Analysis 27: 263-289.*