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Attitudes and Advocacy: Understanding Faculty Views on Racial/Ethnic Diversity

Introduction and Significance

Diversity has been a hot-button issue in higher education for the past several decades (Chang, Witt, Jones & Hakuta, 2003). A significant portion of research has been dedicated to how students experience the campus racial climate (Hurtado, Milem, Clayton-Pederson, & Allen, 1998; Rankin & Reason, 2005), their views on policies such as affirmative action (Sax & Arredondo, 1999), and how they participate in diversity-related activism (Rhoads, 1998). However, less is known about how faculty feel about diversity policies on their campuses, how important they think diversity is to undergraduates, and their own commitments to fostering a diverse environment (Flores & Rodriguez, 2006; American Council on Education, 2000).

Faculty play a critical role in the life of the university. They design and teach the curriculum, conduct research that advances the existing knowledge base, and set guidelines that determine many of the standards for their campuses. They make up the body from which department heads, deans, and college presidents come from. Trustees may serve

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terms, students cycle in and out, but once tenured, faculty are there to stay. Because faculty play such a sustaining role in the life of the university, it is essential to better understand their attitudes towards diversity, especially in a time period where policies geared towards increasing access to higher education for students of color continue to be challenged (Chang, et al., 2003).

In order to better understand faculty attitudes towards diversity, specifically racial/ethnic diversity, we created a composite variable that taps into a variety of faculty attitudes towards diversity including their commitments to promoting racial understanding and their views on the role of diversity in undergraduate education. We refer to this variable throughout the study as "Diversity Advocacy." The purpose of the study is to examine how Diversity Advocacy varies within subsets of faculty, as well as to identify predictors of faculty attitudes regarding diversity.

Background

Much of the literature on faculty and diversity has concentrated on the under-representation of faculty of color in the professoriate, as well as the challenges that they encounter in academe (Cole & Barber, 2003; Smith, Turner, Osei-Kofi, & Richards, 2004; Turner & Myers, 2000). Still, less is known about how professors view the relevance of campus diversity and diversity-related policies (ACE, 2000). Since faculty of color remain under-represented in the academy and are more likely to hold untenured positions (Harvey & Anderson, 2005), are professors in general more or less likely to support efforts to increase diversity on campus and recognize its educational value?

Citing findings from the UCLA Higher Education Research Institute's survey of faculty, Milem and Hakuta (2000) note that while over 90% of faculty agree that "a racially/ethnically diverse student body enhances the educational experience of all students," 30% thought that "promoting diversity leads to the admission of too many underrepresented students." The general picture presented is that most faculty support diversity, but some may feel that academic standards are being compromised in expanding access to higher education.

In a study of a public institution in the Mountain West region, Flores & Rodriguez (2006) analyzed the responses of 436 faculty on diversity-related issues. In the area of admissions, 60% considered diversity to be an important admissions criterion. While 65% supported giving more financial support to increase the attendance of students of color, substantially more faculty (84%) supported giving more financial support to students with lower socioeconomic status. One item echoes Milem and

Hakuta's (2000) finding that some faculty feel that academic standards are compromised by admitting a more diverse student body; 39% of faculty answered that student applicants of color were not as qualified as applicants from the majority group, and half agreed that students of color received grades as good as majority students. However, as the authors note, the generalizability of the findings is limited as a single-institution study.

Maruyama and Moreno (2000) conducted a highly comprehensive survey on faculty attitudes towards diversity, surveying 1,210 faculty at Research-I institutions. Approximately one-third to one-half of faculty agreed that there were positive benefits to diversity in the classroom. While this is a large portion of faculty, it is much lower than the 90% noted in Milem and Hakuta (2000). The benefit of diversity that faculty supported the most was that diversity was "important for exposing students to a new perspective," with 71% of the faculty agreeing. Faculty members expressed that their departments did not value diversity as strongly as the institution as a whole. Maruyama and Moreno speculate: "To the extent that a department has few if any students of color, it should be difficult for faculty to agree that diversity is a high priority" (p. 14). Because students of color are particularly under-represented in the science, technology, engineering, and mathematics fields (Wilson, 2000), it is important to see how faculty in these departments view diversity issues. In regards to the role of the department, Mayhew & Grunwald (2006) argue that faculty perceptions of the department's commitment to diversity have a larger impact than perceptions of the institutional commitment on whether faculty incorporate diversity-related content in their classes. In their analysis of 336 faculty at a public Midwestern institution, participation in a diversity workshop was the strongest positive predictor of incorporating diversity-related content into courses.

Maruyama and Moreno (2000) also include findings from a multivariate analysis of their dataset. They tested predictors of eleven different faculty opinions on diversity, and two variables were shown to be significantly related to a number of outcomes. First, faculty who believed that a critical mass of students of color in the student body was important were significantly more likely to believe that diversity has a positive effect on the classroom, benefits all students including White students, has positive effects on research, and has positive effects on teaching. Secondly, involvement with ethnic/racial issues was a positive predictor for all of the same outcomes, as well as feeling more prepared to teach in diverse classrooms. Faculty who were involved with ethnic/racial issues were significantly less likely to think that their institutions valued diver-

sity. Interestingly, a faculty member's political view significantly predicted only one outcome: Faculty who were more politically liberal were less likely to believe that there were negative effects of diversity.

Antonio's (2002) study of faculty of color and their contributions to non-traditionally considered aspects of scholarship sheds light on faculty commitments to applying their work to assist society. He uses Boyer's (1990) multi-faceted model of scholarship to compare differences between White faculty and faculty of color. One construct, the scholarship of application, was made up of five different measures including prioritizing providing services to the community, choosing academe because of opportunities to influence social change, and the opinion that colleges should be actively involved in solving social problems. Their findings showed significant differences between faculty of color and White faculty on all five measures, with faculty of color scoring higher on all items. In particular, faculty of color were ten percentage points more likely than White faculty to prioritize providing services to the community. Also, faculty of color were fourteen percentage points more likely to choose an academic career due to opportunities to influence social change. Antonio's findings suggest that faculty of color may be more inclined to actively promote diversity insofar as it relates to their desires for social change and reaching out to the community.

Although these studies and others make sizeable contributions to our understanding of faculty attitudes towards diversity, there are still unanswered questions, such as how do faculty of different races, demographic groups, and departments vary in their attitudes towards diversity? What are some of the background characteristics, activities, and attitudes that predict Diversity Advocacy? Our study uniquely contributes to research on faculty diversity in several ways. First, our analysis is of a nationally representative subset of colleges and universities. While previous work has focused specifically on Research-I institutions in order to narrow analysis to the schools most directly impacted by affirmative action (Maruyama & Moreno, 2000), we were curious to see how Diversity Advocacy plays out in other types of institutions as well, such as Historically Black Colleges and Universities (HBCUs). Secondly, the size and scope of a nationally representative dataset allows us to build on examinations of faculty diversity in single-institution studies (Flores & Rodriguez, 2006; Mayhew & Grunwald, 2006). Finally, the composite variable that we have created, Diversity Advocacy, captures a meaningful range of constructs around diversity, from faculty's own personal commitment to promoting racial understanding to their views on the goals of undergraduate education.

Framework

The guiding theoretical concept for this study is the idea that the campus racial climate is influenced by the organizational/structural dimension of the university (Milem, Chang, Antonio, 2005). Milem et al. (2005) list this organizational/structural component of the campus climate as including elements such as the diversity of the curriculum, tenure policies, and organizational decision-making policies. They see this component as complimenting previous conceptions of the campus racial climate that identify four interrelated areas, none of which alone can produce a healthy climate: demographic diversity, historical legacy, behavioral interactions, and psychological dimensions (Hurtado et al., 1998). Hurtado et al.'s framework suggests that structural diversity, generally viewed as the percent of students of color on campus and the component of diversity that generally receives the most attention, depends on other factors such as perceptions of the campus climate and the institution's history with diversity to produce a positive campus racial climate. Although faculty may be directly involved in all four aspects of diversity, the added focus on the organizational and structural dimension of climate brings the faculty role in fostering diversity to the forefront. Because faculty, along with administrators, play such a large role in shaping these conditions, which in turn affect other elements of the campus climate such as the perceptions that students have of the institution's commitment to diversity, the addition of an organizational/structural component to the campus racial climate framework helps us to better understand why faculty play such a critical role in facilitating or discouraging efforts to foster a positive campus racial climate.

Methodology

Sample

The data for this study were collected as part of a triennial national survey of college and university faculty conducted in 2004–05 by the Higher Education Research Institute (HERI) at the University of California, Los Angeles. Of the 172,051 questionnaires mailed out to faculty at 511 two- and four-year colleges and universities across the country, 65,124 usable faculty surveys were returned, reflecting a 38% response rate. The final analytic sample used for this study consisted of 38,580 faculty members from 414 colleges and universities, which is a normative subset of the overall sample that included full-time undergraduate teaching faculty from institutions with a representative number of respondents.¹

Variables

The independent variables were chosen based on previous research on faculty (Lindholm & Astin, 2008; Maruyama & Moreno, 2000) and can be categorized into five blocks: background characteristics, academic discipline, institutional characteristics, work-related variables, and faculty values/perceptions/goals. Several factors in Blocks 4 and 5 of the regression were constructed via principal components analysis with varimax rotation; items used to create the factors are included in Appendix A. Additional variables measuring institutional characteristics were merged in from the U.S. Department of Education's Integrated Postsecondary Educational Data System 2004–2005 survey. Missing value analysis was conducted on the entire sample using the expectation-maximization algorithm to compensate for missing data. Missing values were replaced via maximum likelihood estimates for continuous independent variables with less than 10% missing (McLachlan & Krishnan, 1997).

The dependent variable, "Diversity Advocacy," combined variables measuring attitudes on the value of diversity, as well as goals for how the institution should approach diversity. Although the concept of diversity applies to other traditionally disenfranchised groups, the items in the factor focus on racial/ethnic diversity. The resulting factor was a composite measure of faculty attitudes on the following four items ($\alpha = .78$): Racial and ethnic diversity should be more strongly reflected in the curriculum; a racially/ethnically diverse student body enhances the educational experience of all students; undergraduate education should enhance students' knowledge of and appreciation for other racial/ethnic groups; and commitment to helping promote racial understanding.

Analytic Approach

We performed two types of analyses in this study: descriptive and multivariate analyses. The descriptive analyses explored variations in key variables across demographic characteristics, academic rank, and institutional types—all variables that other research has shown to account for differences among faculty perspectives (e.g. Lindholm & Astin, 2008). We also examined differences among faculty on Diversity Advocacy by racial/ethnic group and department. For multivariate analyses we employed a blocked entry regression analysis in which the independent variables were entered in five separate blocks: background characteristics, academic discipline, institutional characteristics, work-related variables, and faculty values/perceptions/goals. Tolerance levels, which indicate the linear relationships between independent variables, were examined to assess multicollinearity: higher tolerance levels

indicate low multicollinearity. We used a cut-off level of .30 for tolerance in order to prevent multicollinearity among independent variables.

A *p*-level of .01 was used for interpreting significance, except in the case of institutional characteristic variables. In order to account for possible clustering in the data, we took the advice of Astin and Denson (in press) and used a more stringent .001 *p*-level, as a cut-off point for significance for institutional variables. We considered using hierarchical linear modeling (HLM) (Raudenbush & Bryk, 2002) as an analytic technique; however, ordinary least squares (OLS) regression was chosen because of the ability to follow changes in beta coefficients from block to block. In addition to the regression where variables were entered in five discrete blocks, a supplementary regression was run in which variables were entered into the equation one at a time for the purpose of examining individual changes in beta coefficients when other variables enter the equation. Examining step-by-step beta changes can help us understand how the strength of certain variables changes when other variables are controlled in the regression equation (Astin, 1991). Findings cited from this second regression are noted in the text when appropriate.

This study faces some limitations. While quantitative data can provide a broad snapshot of trends across thousands of faculty, it lacks the ability to capture the nuances of the Diversity Advocacy concept that qualitative research is better suited to investigate. Nonetheless, our study provides a necessary first step from which future qualitative research in this area may benefit. Furthermore, there are some items that might help explain variance in Diversity Advocacy that were not asked on the 2004–2005 survey, such as faculty participation in a diversity workshop. However, we believe that it still makes a valuable contribution to the knowledge around faculty attitudes towards diversity and we hope that it can help inform policy and practice at the institutional level.

Results

Descriptive Analyses

The dependent variable Diversity Advocacy ranged from a minimum of 4 to a maximum score of 16. We categorized the faculty respondents into three groups: low scorers (score of 4 to 8, 15% of sample), medium scorers (score of 9 to 12, 50% of sample), and high scorers on Diversity Advocacy (score of 13 to 16, 35%) for the purposes of the descriptive analyses. Table 1 shows the distribution of Diversity Advocacy into the low, medium, and high categories by the different racial/ethnic groups and departments, as well as gender, academic rank, and institutional type.

TABLE 1

Diversity Advocacy by Race/Ethnicity, Department, Gender, Academic Rank, and Institutional Type.

	Percent of sample	Low	Medium	High
<i>Race/Ethnicity</i>				
White	85	15	53	32
Black/African American	3	2	21	77
Latino/a	4	5	36	58
Asian American	4	9	48	43
Native American	1	15	42	43
Native Hawaiian	1	13	51	36
Other race	2	18	43	39
<i>Department</i>				
Agriculture or forestry	4	26	54	20
Biological sciences	8	17	64	20
Business	7	22	59	18
Education	10	7	46	47
Engineering	6	30	59	11
English	8	6	42	52
Health sciences	7	11	55	34
Humanities	9	7	45	48
Fine arts	9	7	50	42
Math and statistics	7	27	57	16
Physical science	7	29	58	13
Social science	12	11	43	47
<i>Gender</i>				
Women	39	8	46	47
Men	61	19	54	27
<i>Academic Rank</i>				
Non-tenure track	21	14	51	35
Assistant professor	24	13	49	39
Associate professor	24	15	50	36
Full professor	31	16	52	32
<i>Institutional Type</i>				
Two-year institutions	23	14	52	34
Four-year public institutions	49	16	51	34
Four-year private institutions	28	15	50	34
Historically Black college or university	1	4	41	55
Hispanic-serving institution	5	14	48	38

When comparing across racial/ethnic groups, Black faculty were most likely to score high on Diversity Advocacy. Within departments, Engineering faculty were the least likely to score high on Diversity Advocacy and English faculty most likely to score high. Men and women differed markedly in their scores on Diversity Advocacy; men were twice as likely to be low scorers and women were twenty percentage points more likely to be high scorers. Although the differences between faculty of

different academic ranks were slight, the Pearson’s chi-square statistic was significant at $p < .001$. Rates of Diversity Advocacy did not vary widely among two-year institutions versus four-year public institutions and four-year private institutions. Lastly, over half of faculty at HBCUs were high diversity advocates.

After seeing notable differences between men and women on Diversity Advocacy, as well as differences between faculty across departments, we sought to determine whether there were any differences between men and women within departments. Table 2 shows the percentage of men and women from each department in the low and high Diversity Advocacy categories. There is also a “Difference” column in each, which expresses the differences in percentages. A positive value indicates a higher percentage of men.

Table 2 presents an especially interesting trend. In the low category, the greatest gaps between male and female faculty occurred in traditionally male-dominated fields such as Engineering, Business, and Math/Statistics. There was more parity between men and women in fields such as English, Fine Arts, and Education. On the other hand, in the high category the greatest splits between the genders were in disciplines such as Humanities, Social Sciences, Education, and Fine Arts, fields which are relatively less male-dominated. Women in these fields are much more likely than their male counterparts to score high on

TABLE 2
Diversity Advocacy by Gender Within Department

	Low			High		
	Men	Women	Difference	Men	Women	Difference
Agriculture or forestry	28	16	12	19	25	-6
Biological sciences	20	10	10	17	25	-8
Business	26	14	12	15	25	-10
Education	11	4	7	37	55	-18
Engineering	31	18	13	10	22	-12
English	9	4	5	43	59	-16
Health sciences	18	9	9	25	38	-13
Humanities	11	3	8	37	62	-25
Fine arts	9	4	5	36	52	-16
Math and statistics	31	20	11	14	20	-6
Physical science	31	21	10	12	19	-7
Social science	14	4	10	39	61	-22
Other technical	33	16	17	9	27	-18
Other department	15	6	9	32	51	-19
All departments	19	8	11	27	47	-20

Diversity Advocacy. It appears that while departments such as Engineering and Math/Statistics overall are more likely to score low on Diversity Advocacy, their low scores are driven by the male respondents in these departments. In fields such as English, Education, and Fine Arts where faculty are overall more likely to score high, the high score is largely due to the fact that women in these fields are notably more likely to score high than their male counterparts.

Multivariate Analyses

Table 3 presents a summary of the blocked entry regression analysis for Diversity Advocacy. Each column contains the betas (standardized regression coefficients) associated with a particular independent variable, after all of the variables in that block and preceding block of variables were entered into the regression model. Thus, for example, the coefficient for “Do interdisciplinary work” ($\beta = .05$) in the Block 4 column represents the beta for this variable *after* background characteristics, academic discipline, institutional variables, and work-related variables were entered into the regression equation.

TABLE 3
Multivariate analysis of Diversity Advocacy.

	<i>r</i>	β after Block 1	β after Block 2	β after Block 3	β after Block 4	Final β
<i>Background Characteristics</i>						
Gender (Female)	0.25	0.24 ***	0.20 ***	0.19 ***	0.12 ***	0.08 ***
Black/African American	0.14	0.15 ***	0.14 ***	0.14 ***	0.12 ***	0.07 ***
Asian American	0.05	0.07 ***	0.09 ***	0.09 ***	0.11 ***	0.09 ***
Native American	0.01	0.03 ***	0.02 ***	0.02	0.00	0.00
Native Hawaiian	0.01	0.02 ***	0.02 ***	0.02 ***	0.02 ***	0.02 ***
Latino/a	0.11	0.12 ***	0.11 ***	0.12 ***	0.10 ***	0.07 ***
Other race	0.01	0.02 ***	0.02 ***	0.02	0.01	0.01
Political orientation (Liberal)	0.34	0.32 ***	0.29 ***	0.29 ***	0.22 ***	0.17 ***
Age	0.00	0.06 ***	0.05 ***	0.05 ***	0.06 ***	0.04 ***
<i>Academic Discipline</i>						
Agriculture or forestry	-0.05		-0.02 ***	-0.01	0.00	-0.01 ***
Biological sciences	-0.08		-0.07 ***	-0.07	0.00	0.00
Business	-0.11		-0.06 ***	-0.06 ***	-0.03 ***	-0.02 ***
Education	0.08		0.08 ***	0.08 ***	0.04 ***	0.02 **
Engineering	-0.12		-0.07 ***	-0.06 ***	-0.03 ***	-0.02 ***
English	0.10		0.06 ***	0.06 ***	-0.02 ***	0.00
Fine arts	0.07		0.05 ***	0.05 ***	0.05 ***	0.05 ***
Health sciences	0.01		0.01	0.01 ***	0.02 ***	-0.01
Humanities	0.10		0.06 ***	0.05 ***	0.03 ***	0.02 ***
Math and statistics	-0.14		-0.10 ***	-0.11 ***	-0.03 ***	-0.02 ***
Social science	0.11		0.06 ***	0.06 **	0.02 **	0.02 ***
Physical science	-0.15		-0.11 ***	-0.11 ***	-0.03 ***	-0.02 ***

TABLE 3 (Continued)
Multivariate analysis of Diversity Advocacy.

	<i>r</i>	β after Block 1	β after Block 2	β after Block 3	β after Block 4	Final β
<i>Institutional Characteristics</i>						
Two-year college	0.00			-0.01	-0.02 **	0.01
Four-year public institution	-0.04			-0.03 ***	-0.03 ***	0.03 ***
Historically Black college or university	0.03			0.02 ***	0.02 ***	0.01
Hispanic-serving institution	0.01			0.01	0.00	0.01
Percent of students of color	0.01			-0.05 ***	-0.05 ***	-0.03 ***
Total full-time faculty	-0.06			-0.04 ***	-0.01	-0.01
<i>Work-Related Variables</i>						
Academic rank	-0.05				-0.01	0.00
Highest degree held	-0.01				-0.02 ***	0.00
Research orientation	-0.03				-0.05 ***	-0.02 ***
Held an academic administration position	0.04				0.00	0.00
Do interdisciplinary work	0.17				0.05 ***	0.02 ***
Won outstanding teaching award	0.02				0.01 *	0.00
Hours per week spent preparing for teaching	0.09				0.01 ***	0.01
Did public service or professional consulting without pay	0.10				0.04 ***	-0.01
Incorporated readings on race and/or gender	0.50				0.33 ***	0.21 ***
Student-centered pedagogy	0.33				0.13 ***	0.01
<i>Faculty Values/Perceptions/Goals</i>						
Perception of climate for citizenship	0.23					-0.01 *
Perception of climate for prestige	0.07					0.03 ***
Perception of institutional diversity climate	0.19					0.11 ***
Opinion: Diversity leads to under-prepared students	-0.44					-0.21 ***
Spirituality	0.19					0.03 ***
Civic values orientation	0.60					0.28 ***
Student development orientation	0.39				0.17 ***	
<i>R</i> ² after block entered		0.21	0.26	0.27	0.39	0.59

p* < 0.01, *p* < 0.005, ****p* < 0.001

For the background variables, six of the nine variables retained statistical significance after all five blocks were entered into the regression. In particular, gender had a positive effect on Diversity Advocacy, indicat-

ing that women were more likely than men to score higher on the Diversity Advocacy factor. In regards to race, Black, Asian American, Native Hawaiian, and Latino/a faculty were all significantly more likely to be diversity advocates than White faculty. Of the background variables, political orientation was the strongest predictor of Diversity Advocacy, with liberal faculty being more likely to be diversity advocates as compared to conservative faculty ($B = .17, p < .001$). When examining the step-by-step beta changes, the political orientation variable shows an interesting trajectory. It has a simple correlation of .34 with the dependent variable. When political orientation first enters the regression, it has a beta coefficient of .32 and declines steadily as other variables enter the regression. When the variable measuring whether faculty believe that diversity leads to under-prepared students enters the regression, the beta drops to .17 where it stays until the final step of the regression. The reason for this sudden decline in the beta coefficient is that faculty who are more liberal tend to be less likely to believe that diversity leads to under-prepared students ($r = -.32$).

Lastly, being an older faculty member was also a significant predictor of Diversity Advocacy. Beta coefficients for the significant background variables tended to steadily reduce, expectedly, as each block of independent variables was entered into the regression, with one exception. As each block entered the equation, the beta coefficient for being Asian American rose from .07 in the first block to .11 by the fourth block, settling at .09 in the final block. This slight but steady increase in the size of the beta coefficient suggests that the simple correlation between being Asian American and Diversity Advocacy ($r = .05$) masks the strength of the relationship between these two variables. Controlling for other variables shows that Asian American faculty are even more likely to score higher on Diversity Advocacy than White faculty.

Several academic fields were significant predictors of Diversity Advocacy in comparison to the reference group of faculty in other departments. Faculty housed in the fields of Agriculture or Forestry, Business, Engineering, Math/Statistics, and Physical Science scored significantly lower as diversity advocates. However, being a professor in Education, Fine Arts, Humanities, or Social Sciences was a significant positive predictor of Diversity Advocacy. Two variables in particular, teaching in Physical Science or Math and Statistics, experienced marked changes when the last two blocks of independent variables entered the equation. Being from Physical Science entered the equation at $-.11$ but was reduced to $-.03$ when work-related variables were controlled for, with a final beta coefficient of $-.02$ ($p < .001$). Similarly, being a faculty member from Math/Statistics had a strong initial effect but was ultimately reduced

to $-.03$ and $-.02$ after variables related to work experiences and faculty values/perceptions/goals were entered into the equation, respectively.

Only two items from the third block of variables measuring institutional characteristics were significant after all blocks were entered into the regression. Faculty who were employed at a four-year public institution were significantly more likely to score high on Diversity Advocacy than their counterparts at four-year private institutions, while being employed at an institution with a higher percentage of students of color in the student body was a negative predictor. Teaching at a HBCU entered as a significant predictor, but when faculty attitudes/perceptions were controlled for, the variable approached significance ($B = .01$, $p = .01$) but did not reach the more stringent p -value of $p < .001$ that was used to interpret significance for institutional variables.

Three out of the ten work-related variables were significant predictors of faculty Diversity Advocacy in the final model. Doing academic work across multiple disciplines and incorporating more readings on race and gender in their classrooms were positive predictors of Diversity Advocacy. The only negative predictor of Diversity Advocacy was the composite variable that measured a faculty member's research productivity. Incorporating student-centered pedagogy was a significant positive predictor of Diversity Advocacy in the regression until faculty attitudes/perceptions were controlled.

All variables in the final block of variables measuring faculty values, perceptions, and goals were significant predictors of faculty Diversity Advocacy. Of these variables, two were negative predictors of Diversity Advocacy. Faculty perceptions of the climate for citizenship was a slightly negative predictor of Diversity Advocacy. On the onset, this finding puzzled us, if anything we thought that faculty who had more positive perceptions of the institution's commitment to promoting citizenship would be more likely to be diversity advocates. A closer look at the step-by-step beta changes showed that the climate for citizenship variable had a simple positive correlation with the dependent variable and entered the regression at $.17$. It steadily declined as subsequent variables were controlled for, but experienced a substantial drop, from $.08$ to $.01$, when the variable measuring a faculty member's civic values entered the equation. The reason for this substantial drop in the beta coefficient is that faculty who have more positive perceptions of the institutional citizenship climate are also those who hold stronger civic values ($r = .33$). Also, when faculty commitment to student development came into the regression, the beta coefficient for climate for citizenship changed from slightly positive to slightly negative, indicating that faculty who are high in one tend to also be high in the other construct.

Additionally, faculty who agreed with the statement that diversity leads to under-prepared students were significantly less likely to score high as diversity advocates. The Beta coefficient was the second strongest predictor in the final model. The strongest predictor of Diversity Advocacy in the model was the composite variable measuring civic values. Four other variables were positive predictors of Diversity Advocacy: perceptions of a prestige climate at the institution, positive perceptions of the institutional climate for diversity, a faculty member's spirituality, and faculty views on student development.

The total explained variance (R^2) in Diversity Advocacy that can be explained by the five blocks of variables is .59. In other words, the independent variables included in the regression analysis accounts for 59% of the variance in Diversity Advocacy. The largest changes in explained variance occurred with the addition of the first block of background variables (R^2 change = .21) and the final block of faculty values, perceptions, and goals (R^2 change = .20).

Discussion

The findings indicate that the likelihood of faculty holding a Diversity Advocacy identity is influenced by a variety of traits, backgrounds, and values. Descriptive analyses showed that subsets of faculty, primarily racial/ethnic minorities, women, and those in English, Social Science, and Humanities were most likely to strongly agree with the items in the Diversity Advocacy factor. We also saw marked splits between men and women within departments. The multivariate analysis indicated how Diversity Advocacy is strongly related to political orientation, incorporating race/ethnicity and gender into teaching and research, as well as maintaining civic minded values, among other variables.

In terms of background variables, women were significantly more likely to score higher on Diversity Advocacy, indicating potential for collaboration between female faculty and those faculty who seek change in the area of racial/ethnic diversity on campus. Splits between men and women within departments show that women may be taking the lead within departments to support diversity-related policies, promote racial understanding, and view diversity as an important part of undergraduate education. In terms of race, faculty of color were more likely to be advocates for diversity than White faculty. This is consistent with past research that faculty of color can enhance the overall quality of education at higher education institutions, for example, by serving as role models, advisors, and leaders (Irvine, 1992). The presence of faculty of color also impresses upon students of color the institution's commitment to equity and diversity issues (Alger, 1998).

Also political orientation was significantly related to Diversity Advocacy, consistent with other literature that show liberals being more likely to embrace policies and practices tied to promoting race relations (Sax & Arredondo, 1999). Interestingly, older faculty were more likely to be diversity advocates, although academic rank did not have a significant effect on the outcome. Some older faculty may have attended graduate school or begun their careers in the context of the activism of the Civil Rights movement, Vietnam War, and other political events, possibly making them more likely to embrace campus diversity and want to promote racial understanding.

Only two institutional variables came out as significant in the final step of the regression. Faculty at four-year public institutions were significantly more likely to be diversity advocates, while faculty at institutions with higher percentages of students of color were less likely to score high on Diversity Advocacy. This finding seemed counterintuitive to us; we originally expected faculty at more diverse institutions to be more likely to be diversity advocates. However, it might be that faculty at less diverse institutions want their institutions to become more diverse or make diversity a greater priority, prompting them to desire change on their own campuses. Although teaching at an HBCU approached significance, it did not reach a more stringent level of significance in the final step of the regression. Still, its significance in earlier steps of the regression points to the historic commitment of HBCUs in advocating for justice and educating diverse, underserved populations.

Although a number of academic fields were significant predictors of Diversity Advocacy, in general, the standardized beta coefficients were relatively small, with the exception of being a faculty member from Fine Arts. The small change in R^2 (R^2 change = .05) when this block of variables was added to the equation suggests that academic discipline has a comparatively less of an effect on Diversity Advocacy than a faculty member's own work-related behavior and attitudes, values, and perceptions. Two fields, being from Physical Sciences or Math and Statistics, had an initial strong negative impact on the dependent variable, but were tempered after work experiences and faculty values, perceptions, and goals were controlled. Although the descriptive analysis showed that overall faculty in Math, Science, and Business-related fields were more likely to fall into the low category for Diversity Advocacy, the multivariate analysis shows that the effect of being in these fields is less pronounced once other variables are held constant.

That said, the low number of underrepresented minority students in science, technology, engineering, and math fields (STEM) is great cause for concern (Wilson, 2000). Previous research suggests that underrepresented minority students may experience isolation or a challenging

racial climate in such majors (Seymour & Hewitt, 1997). Thus, it is particularly important to encourage faculty in these fields to become more aware of diversity issues and advocate for initiatives that can help improve the overall campus racial climate and the environment for diversity in their own disciplines. As noted earlier, Maruyama and Moreno (2000) propose that it may be more difficult for faculty to prioritize diversity in departments in which traditionally have had lower enrollments of students of color, and that faculty tend to feel that their departments have weaker commitments to diversity than the overall institution. A cycle is apparent: Faculty may not be inclined to actively advocate for diversity because they have fewer students of color in their classrooms that are bringing up diversity issues, particularly in fields where the relevance of diversity is not immediately present. Nonetheless, the dearth of students of color in STEM will continue unless faculty in these departments take the initiative to advocate for a diverse student body.

Incorporating readings and teaching on issues related to race, ethnicity, and gender had a strong positive effect on Diversity Advocacy. Previous work (Mayhew & Grunwald, 2006) suggests that incorporating diversity-related content is influenced by participation in a diversity workshop, as well as the perception of the department's commitment to diversity. Although attending a diversity workshop was not a question asked on the 2004–05 faculty survey, it is quite possible that such initiatives also have an effect on whether faculty see themselves as diversity advocates.

Another positive predictor of Diversity Advocacy, having positive perceptions of the institutional climate for diversity, indicates that campus commitments to diversity can influence individual faculty members' embracement of Diversity Advocacy. Two of the five variables in the institutional climate for diversity factor were related to gender, hiring women in faculty and administration and promoting gender equity. Thus, it is important for institutions to communicate their values and priorities in the area of promoting diversity to faculty members, especially in the area of faculty searches (Smith et al., 2004). Such overall institutional efforts may assist faculty in forming stronger commitments to valuing and promoting diversity, especially when faculty members perceive their departments to have lesser commitments to diversity (Maruyama & Moreno, 2000).

Faculty who agreed that diversity leads to under-prepared students were significantly less likely to score high on Diversity Advocacy. Analyses of other datasets (Flores & Rodriguez, 2006; Milem & Hakuta, 2000) have shown that sizeable proportions of faculty agree with this statement, but this is the first study to show a significant relationship be-

tween believing that diversity leads to under-prepared students and being less inclined to advocate for racial/ethnic diversity. At stake is the issue of whether faculty see equity and excellence as compatible or mutually exclusive goals, a core controversy in the debate over affirmative action (Chang, 2000). When faculty equate diversity with compromising the academic standards of the institution, a potentially negative message can be sent to students of color that they are somewhat unwelcome or unqualified to be at the institution.

Interestingly, faculty who tended to see themselves as being spiritual people were significantly more likely to be diversity advocates. This relationship between spirituality and diversity is unclear. However, recent research may provide some clues. For example, Lindholm and Astin's (2008) study on faculty and spirituality found that faculty who considered themselves spiritual were more likely to incorporate student-centered pedagogy into their teaching. In the current study, using such pedagogy was a positive predictor of Diversity Advocacy until attitudes and perceptions were controlled. Another study by Astin, Astin, Lindholm, Bryant, Calderone, and Szelényi (2006) found that Black faculty, who were most likely to score high on Diversity Advocacy, are also more likely than other racial/ethnic groups to describe themselves as spiritual "to a great extent." A last explanation for why spiritual faculty may be more likely to score higher as diversity advocates is that religion can provide a "moral force" that helps people identify and challenge inequality (Emerson & Smith, 2000). Future studies should further probe this relationship.

Finally, the strongest predictor of Diversity Advocacy was the factor measuring faculty's civic values, which included items from three categories: a faculty member's personal objectives (to influence social values and/or the political structure), a faculty member's opinions on student and institutional engagement in the community, and a faculty member's perception of the goals of undergraduate education (to instill commitment to community service and prepare students for responsible citizenship). Perhaps if colleges want to encourage their faculty to advocate for diversity more, they can begin by cultivating an environment that encourages and rewards faculty for fostering civic values and engagement within their students. Indeed, encouraging civic values and engagement and preparing students for active citizenship has been identified as one of the primary aims of higher education (Ehrlich, 2000).

Conclusion and Implications

Our analysis indicates that Diversity Advocacy is related to a number of traits, including race/ethnicity, academic discipline, incorporation of

readings related to race/ethnicity and gender, and civic values, among other attributes. Universities have put a premium on diversity, arguing that racial/ethnic diversity is linked to a number of important educational outcomes including problem-solving skills, complex thinking, occupational awareness, group functioning skills, and preparation for engagement in a diverse democracy (Chang et al., 2003; Milem, 2003; Terenzini, Cabrera, Colbeck, Bjorklund, & Parente, 2001). The University of Michigan went to the Supreme Court to defend the right of universities to use race-sensitive admissions policies to recruit and admit a diverse pool of students, with many universities filing friend of the court briefs in support of diversity as a compelling interest in education (Brief of Carnegie Mellon University et al., 2003; Brief of Harvard University et al., 2003). Clearly, universities have invested in diversity, but the preservation of affirmative action policies alone does not ensure a healthy campus racial climate or equitable access to higher education (Hurtado et al., 1998). Student activists come and go, trustees serve their terms, but faculty play a critical role in their ability to support and create change on campuses. Encouraging their commitment to supporting a diverse student body is essential for diversity to thrive in higher education.

Our findings suggest three recommendations to promote diversity advocacy among faculty. First, it is essential for institutions of higher education to continue to recruit and retain a diverse professoriate. This may seem like a statement of the obvious; but while a number of scholars of color has increased in the academy, observers note that growth has not continued at the necessary pace (Gose, 2007; Smith et al., 2004). Furthermore, faculty of color face numerous barriers towards tenure and promotion (Turner & Myers, 2000). It is important not to tokenize faculty of color or limit their contributions to the area of diversity. At the same time, it is also important to consider that in general, faculty of color are “more apt to view the work of their profession as being applied to change in society . . . faculty of color are an important resource for the transformation of the professoriate and the academy” (Antonio, 2002, p. 598). While the responsibility of diversity advocacy does not and cannot lie on the shoulders of faculty of color alone, institutional transformation in the area of diversity will not happen without faculty of color, who compose the pool of potential future provosts, deans, and college presidents. Thus, it is critical for universities to make conscious efforts to recruit and retain a diverse faculty.

Secondly, we suggest that universities create innovative initiatives to encourage STEM faculty to become more involved in campus diversity efforts. Our findings indicate that STEM faculty are less likely to score

high on Diversity Advocacy, possibly in part because of the low number of students of color in these subject areas. Another possible explanation is that their fields do not have an immediate connection to diversity issues the way that faculty in Humanities, Fine Arts, and Social Sciences may have. The current analysis shows that faculty who incorporate readings related to gender and race are significantly more likely to be diversity advocates, but such readings are irrelevant to most STEM curriculum. Yet the need for diversity advocates in these fields is critical if America needs a more diverse cadre of future research scientists, STEM faculty, and engineers (Carnevale & Fry, 2000). One possibility is to sponsor workshops for faculty that emphasize the importance of recruiting and retaining underrepresented minority students in STEM fields. Universities can also create greater incentives for STEM faculty to participate in, create, or strengthen undergraduate research opportunities for underrepresented minority students. Such programs have been identified as a key intervention in retaining students of color in STEM majors (Nagda, Gregerman, Jonides, Hippel, & Lerner, 1998).

Lastly, we recommend that universities support and promote civic values among their faculty, which was the strongest predictor of Diversity Advocacy in the final model. Along with faculty who hold civic values, faculty who thought that undergraduate education ought to foster student development were significantly more likely to score higher as diversity advocates. There is a historic divide between those who believe that the main responsibility of higher education is to impart academic knowledge to students and those who believe that higher education also has a responsibility to provide for the whole student, with the promotion of civic values and student development falling in the latter category (Astin, 1988). While student affairs professionals have taken on much of the responsibility in these areas, faculty can also be encouraged to integrate these priorities into their teaching and service. Greater collaboration between academic and student affairs can help facilitate this process. Indeed, students are coming to questions of meaning and purpose in the classroom and in their discussion sections, not only the residence halls (Bryant & Schwartz, 2007).

We hope that our findings can encourage colleges and universities to be more intentional about promoting a sense of diversity advocacy among their faculty. If universities want to live up to promises about engaging a diverse student body and preparing students to be good citizens (Chang et al., 2003; Ehrlich, 2000), they should make an effort to encourage diversity advocates in their efforts to create opportunities for all students to succeed.

APPENDIX A

Items Constituting Factor Scales

Diversity advocacy, $\alpha = .78$

Opinion: Racial and ethnic diversity should be more strongly reflected in the curriculum 1 = "disagree strongly" to 4 = "agree strongly"

Opinion: A racially/ethnically diverse student body enhances the educational experience of all students goal of undergraduate education: 1 = "not important" to 4 = "essential"

Enhance students' knowledge of and appreciation for other racial/ethnic groups
Personal objective: Helping to promote racial understanding 1 = "not important" to 4 = "essential"

Research productivity, $\alpha = .76$

Hours per week research and scholarly writing 1 = "none" to 9 = "45 or more"

Primary interest is research 1 = "heavily teaching" to 4 = "heavily research"

Number of publications and presentations in the last two years 1 = "none" to 7 = "51 or more"

Citizenship climate, $\alpha = .79$

Institutional priority: Developing community among students and faculty 1 = "low" to 4 = "high"

Institutional priority: Developing leadership ability in students

Institutional priority: Teach students how to change society

Institutional priority: Create/sustain partnerships with communities

Institutional priority: Resources for community-based teaching and research

Prestige climate, $\alpha = .79$

Institutional priority: Enhance institution's national image 1 = "low" to 4 = "high"

Institutional priority: Increase/maintain institutional prestige

Institutional priority: Hire faculty "stars"

Institutional diversity climate, $\alpha = .86$
Institutional priority: Create multicultural environment 1 = "low" to 4 = "high"

Institutional priority: Recruit more minority students

Institutional priority: Increase minorities in faculty and administration

Institutional priority: Increase women in faculty and administration

Institutional priority: Promote gender equity among faculty

Student-centered pedagogy, $\alpha = .81$

Use in the classroom: Cooperative learning 1 = "none" to 4 = "all"

Use in the classroom: Group projects

Use in the classroom: Student presentations

Use in the classroom: Student evaluations of each other's work

APPENDIX A (Continued)

Items Constituting Factor Scales

Use in the classroom: Class discussions
Use in the classroom: Reflective writing or journaling
Use in the classroom: Student evaluations of own work
Use in the classroom: Student selected course topics

Race/Gender in the classroom, $\alpha = .93$

Incorporate research or writing on racial/ethnic minorities in class 1 = "no" to 2 = "yes"
Incorporate research or writing on women/gender issues in class

Spirituality, $\alpha = .88$

Consider yourself a spiritual person 1 = "not at all" to 3 = "to great extent"
Seek opportunities to grow spiritually
Personal objective: Integrate spirituality into my life 1 = "not important" to 4 = "essential"

Civic values orientation, $\alpha = .79$

Personal objective: Influence social values 1 = "not important" to 4 = "essential"
Personal objective: Influence the political structure
Opinion: Colleges should be involved in social problems 1 = "disagree strongly" to 4 = "agree strongly"
Opinion: Colleges should work with surrounding communities
Opinion: Students should be encouraged to do community service
Opinion: Community service is not a poor use of resources
Opinion: An individual can do much to bring about change in society

Goal of undergraduate education: Instill commitment to community service 1 = "not important" to 4 = "essential"

Goal of undergraduate education: Prepare for responsible citizenship

Student development orientation, $\alpha = .88$

Goal of undergraduate education: Develop moral character 1 = "not important" to 4 = "essential"

Goal of undergraduate education: Provide for emotional development

Goal of undergraduate education: Help develop personal values

Goal of undergraduate education: Enhance self-understanding

Goal of undergraduate education: Enhance spiritual development and purpose

Goal of undergraduate education: Facilitate the search for meaning

Note

¹The normative sample includes institutions that surveyed at least 35% of their full-time faculty in the case of two- and four-year colleges and 25% in the case of universities. This sample of full-time faculty is representative of both institutions and faculty at those institutions.

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