The challenge of increasing minority-group professional representation in the United States: intriguing findings

By: E. Holly Buttner, Kevin B. Lowe, and Lenora Billings-Harris

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Abstract:

Census statistics highlight the increasing diversity of the populace in the United States. However, minority-group Americans continue to be under-represented in professional occupations. Six propositions for low minority-group professional presence in US organizations are that under-representation is due to leader racial insensitivity, discrimination, the (small) pipeline of minority-group professional employees, (un)equal opportunity theory, rational person economic theory, and low organizational diversity strategic priority. We describe and explore these six arguments with related empirical tests. Results indicated that leader-rated importance of cultural change, above and beyond leader racial awareness, influenced representation. The more specific strategies of diversity recruitment and provision of performance feedback also predicted minority-group representation, while diversity as an organizational strategic priority did not. We discuss the implications of these findings and present directions for future research.
Keywords: discrimination; diversity; equal opportunity; minority shortage; professional employees

Article:

Introduction

Recent statistics highlight the increasing diversity of the US population. The US Census Bureau (2002) projects that by 2025 minority-group Americans will comprise 38% of the US population. Over the past decade increasing globalization and competition have accentuated the organizational importance of recruitment and retention of high- performing professional employees. These concurrent trends foreshadow an increasingly competitive marketplace where the attraction and retention of a diverse applicant pool of skilled workers will emerge as a significant twenty-first century staffing issue for US organizations (Benschop 2001; Ployhart 2006). Organizational leaders increasingly are recognizing the importance of having diverse work forces, not only in their own organizations but also among their suppliers (Tung 1995). For example, over 500 US corporations have made a pledge to work with law firms that have demonstrated commitment to increase the representation of women and minority-group professionals on their workforces (Levs 2005). Other research suggests that firms that effectively manage their workforce diversity may experience positive outcomes. The results of several studies indicate that firms with higher percentages of women and people of color in management positions report relatively higher financial performance (Shrader, Blackburn and Iles 1997; Ng and Tung 1998) and greater effectiveness (Richard and Johnson 2001).

In spite of widespread organizational commitment to the advancement of diversity initiatives, white women and employees of color continue to be under-represented in the professions. According to the American Bar Association, people of color account for just 9.7% of attorneys in the US (American Bar Association 2007). Women make up 3 1 % of accountants, but only 15% of partners in public accounting firms (American Institute of Certified Public Accountants 2007). Another area where women and minority-group professionals continue

to be under-represented is the higher education industry, an industry that provides the context for our research. Because both white women faculty and faculty of color are under-represented in higher education, the definition of minority professionals includes US racial and gender minorities, i.e. US-born male and female professionals of color and white non-Hispanic women professionals for the purposes of this report. A number of propositions have been advanced in the literature to explain the shortage of minority professionals. Next, we briefly review each of these explanations and propose hypotheses grounded in the respective literatures.

Theoretical framework and hypotheses
Organizational unit leaders' sensitivity to racial issues
Several diversity scholars and human resource professionals address the importance of top management commitment to advancing diversity initiatives. For example, Cox, a diversity scholar, cites leader awareness of diversity competence as a critical component to successful diversity initiatives. Leaders must be aware of the impact of their behaviors in modeling 'diversity-supportive' behaviors, those which demonstrate sensitivity to diversity issues (2001, p. 42). Focusing on the roles that different leaders may play depending on organizational level, Childs (2005) and Jayne and Dipboye (2004), industry experts with diversity management experience, report that senior management commitment and accountability are key drivers of successful diversity strategy implementation whereas consistent line management leadership is a cornerstone of effective tactical interventions. The impact of senior management commitment has been demonstrated empirically by Ng, Weisner and Jain (2005), Konrad and Linnehan (1995) and Linnehan, Chrobot-Mason and Konrad (2002). Ng et al. (2005) reported that positive cognitions of diversity predicted organizational leaders' commitment to diversity while leader demographic characteristics such as gender and ethnicity did not. Konrad and Linnehan (1995) found empirically that top managers' diversity attitudes were predictive of effective equal employment and affirmative action initiatives. Linnehan et al. (2002) reported that organizational members' attitudes toward diversity predicted their diversity-related behavioral intentions. The researchers also found that ethnic identity, or an individual's identification with his/her ethnic group, was related to behavioral intentions while ethnic status had little effect on behavioral intentions. These research findings suggest that leaders' awareness of diversity issues will affect their behaviors and others' perceptions of the importance of representation of minority-group professionals. Therefore, based on past research suggesting that leader racial awareness will be related to minority representation, we hypothesize that:

Hypothesis 1: Organizational units where leaders have higher racial awareness will have higher representation of minority-group professionals than will units with leaders having lower racial awareness.

Discrimination theory
A second possible explanation for differential representation of minority-group professionals is discrimination theory (Becker 1971; Zoogah and Josephs 2005). This theory proposes that an individual (e.g. an employer) may have a preference for discrimination whereby he/she is willing to sub-optimize (e.g. forego profits) in order to maintain an exclusionary workplace. Other research suggests that minority group workers are sensitive to the strategies a discriminatory employer may employ, as noted below.

Organizational climate is an important consideration when designing diversity strategies (Jayne and Dipboye 2004). An exclusionary workplace, created or reinforced (intentionally or unintentionally) by an employer, could include policies and practices which create a hostile climate for minority professionals. Several scholars have documented empirically the uninviting dimensions of climate such as unequal access to resources and exclusion from informal networks for various minority groups. Studies assessing the perceptions of various minority-group members including Chicano pro- fessionals (Reyes and Halcon 1996), black professionals (Cross 1998), female professionals (Riger, Stokes, Raja and Sullivan 1997) and American Indian professionals (Cross 1996) indicate that minority-group group professionals are more sensitive to harassment and bias than are majority-group colleagues. For instance, Cross (1996) highlighted the potential conflict in values of American Indian professionals, for whom a collective tribal orientation may be paramount, while individualistic, competitive values are held in high regard at mainstream organizations. Individually and collectively, these dimensions of diversity atmosphere may foster an acid rain climate for minority- group

professionals with significant implications for an organization's ability to adapt its ecosystem to the challenges of the twenty-first century marketplace.

Minority professionals, recognizing discriminatory practices and inhospitable work- places, may seek employment at organizational units where leaders place high importance on cultural change that transforms hostility into a more affirming atmosphere. Childs (2005) argued that the critical quality for a leader seeking to change the diversity climate is the ability to serve as a catalyst, to motivate others. Awareness of the need for cultural change may be a cornerstone to fulfilling the catalyst role of eliminating discrimination and other forms of hostility. Therefore, based on the theoretical arguments that discrimination will detract from minority-group representation (Becker 1971; Zoogah and Josephs 2005), we hypothesize that:

Hypothesis 2: Organizational units where leaders rate diversity cultural change as more important will have higher representation of minority-group professionals than will organizational units where leaders assign lower importance ratings.

Organizational leaders play a pivotal role in developing and maintaining their organizations' cultures (Schein 1985). Linnehan et al. (2002) highlighted the importance of diversity attitudes on diversity-related behavioral intentions. In their study, participants with stronger positive attitudes toward diversity reported stronger diversity-related behavioral intentions than participants with weaker attitudes. Cox (2001) and Thomas and Woodruff (1999) propose that a leader's recognition of the need for cultural change has more influence on unit members' climate perceptions than does the leader's racial awareness. The leader's recognition of need for cultural change would be expected to have a greater impact than leader racial awareness because cultural change is a more proximal influence for unit employees. Accordingly, while we have posited that both leader racial awareness and leader recognition of the need for cultural change are important, we propose that a leader's attitude about the importance of cultural change will further impact minority-group representation after controlling for the effect of leader racial awareness. Therefore, we hypothesize that:

Hypothesis 3: After controlling for leader racial awareness, leaders' ratings of the importance of cultural change will affect representation of minority-group professionals in their units such that higher cultural change ratings will be associated with higher minority-group representation.

Institutional theory: Strategic response to institutional pressure for diversity
In addition to leader racial awareness and recognition of the need for cultural change, a third argument for under-representation pertains to organization leaders' strategic response to institutional pressures for diversity in their professional staffs. Institutional theory predicts that organizations must respond to pressures in their environment to achieve legitimacy (Yang 2005). Oliver (1991) posited that organizations respond to institutional pressures using a variety of strategies. An organization's strategic priorities, as determined by the leader, influence activities and allocation of resources (Hill and Jones 2001). Zoogah and Josephs (2005) empirically demonstrated that organizations are responsive to institutional pressures for minority-group employee representation. They found that a higher education institution's responsiveness to institutional pressures (such as those from employers, advisory boards, and alumni) for demographically representative faculty and student bodies varied depending on institutional size, demographic composition of faculty and students, and institution type (private versus public). Additionally, institutional pressures for a diverse workforce derive from a need to grow and achieve a competitive advantage to serve a diverse customer base (Konrad 2003; Jayne and Dipboye 2004). As organizations face increasing pressure for diverse representation from customers, regulatory agencies, and other stakeholder groups, organizational leaders may accord increased strategic priority to minority-group employee representation. Accordingly, we propose a fourth hypothesis based on institutional theory:

Hypothesis 4: Organizational units where leaders rate diversity as a higher strategic priority will have higher representation of minority-group professionals than will units where leaders rate diversity as a lower strategic priority.

Thomas and Woodruff (1999) and Cox (2001) also propose that while leader recognition of the general strategic importance of diversity is important, recognition of the importance of specific strategic steps, such as recruiting policies and practices, and performance review policies and practices are critical to successful diversity management. Accordingly, we propose that leader recognition of the importance of specific tactical strategies pertaining to minority recruitment and performance evaluation will impact minority-group representation beyond that of a well-intentioned but less focused strategic orientation to advocate for the importance of diversity. We advance two arguments regarding the more specific tactical strategies of recruitment and performance feedback.

Pipeline theory
A fourth argument explaining minority professional under-representation is the pipeline theory (Cole and Barber 2003; Zoogah and Josephs 2005). The minority-group professional pipeline is defined as the supply of qualified minority-group individuals in the workforce. The pipeline theory argues that the shortage is a function of the small number of available minority-group professionals. The pipeline 'problem' may be determined by a number of factors including the absolute number of minority-group members, their aspirations, the availability of role models, and access to professional development opportunities.

Professional institutions are competing with each other and with industry and government to attract and recruit employees, particularly minority-group members. For a specific organization, successfully garnering prospective employees from the pipeline may depend on the effectiveness of organizational recruitment strategies. Empirical studies have shown that in a tight labor market, effective recruiting and selection strategies become potential non-wage sources of competitive advantage (Cappelli 2005; Ng and Burke 2005). Therefore, organizational units where the leaders place relatively higher value on recruitment as a tactical strategy may be able to increase their professional minority-group representation. We propose a fifth hypothesis as follows:

Hypothesis 5: After controlling for ratings of the importance of diversity as a strategic priority, organizational units where leaders rate the specific strategy of minority recruitment as more important will have higher representation of minority-group professionals than will units where leaders assign lower importance ratings.

Provision of performance-related feedback
A fifth line of theoretical reasoning for explaining minority professionals' under- representation emanates from a 'color-blind perspective' (Neville, Lilly, Duran, Lee and Browne 2000). The color-blind perspective is based on modern racism theory, which proposes that many white Americans believe that discrimination is a phenomenon of the past and that there is now a level playing field for all aspiring individuals (McConahay 1986; Dovidio and Gaertner 1996). Konrad and Linnehan (1995) defined identity-blind policies as those which ensure that human resource decision-making is implemented in the same way for each employee by ensuring that meritorious performance is accurately measured, that rewards are allocated based on merit and that the pool of employees considered for rewards is as wide as possible. If unit leaders ascribe to this cognitive schema, they may believe that an effective strategy for ensuring success of all professional employees, including minority-group members, is to provide timely, accurate performance feedback so that unit members may adjust their performance to meet expectations. Regular feedback is likely to be especially important in leveling the playing field for minority members who may hold culturally different prototypes for effective performance, who may lack role models and mentors and/or who may have less access to informal feedback regarding employer performance expectations. Kossek and Zonia (1993), Wright et al. (2003), Xie and Shauman (2003), and Settles, Cortina, Malley, and Stewart (2006) found that minority group members experience social isolation including lack of access to informal networks and lack of access to meetings with administrators where performance expectations, both concrete and tacit, would be shared. More frequent feedback would be expected to result in a more level playing field through the timely and consistent sharing of performance expectations. Consequently, in units where leaders place high importance on frequent, useful feedback, there will be higher minority representation. A sixth hypothesis is offered to test this line of reasoning:

Hypothesis 6: After controlling for ratings of the importance of general diversity as a strategic priority, organizational units where leaders rate performance feedback for minority group professionals as more important will have higher representation of minority-group professionals than will units where leaders assign lower importance ratings.

Rational economic motives of professionals
Minority-group professionals are scarce in numbers relative to their white male counterparts in some industries in the US workplace. Unit administrators may offer the highest salaries they can to attract prospective minority-group members. A sixth line of theoretical reasoning, economic theory, has demonstrated that individuals may behave in ways that maximize tangible rewards such as compensation and desirable intangible rewards (Kirchler, Fehr and Evans 1996). Employees behave rationally, striving to maximize their profits (salary), without considering the impact on others (e.g. the employer). For example, a prospective worker who has several job offers will accept that offer which maximizes desired profits. Similarly, equity theory (Adams 1965) suggests that individuals are sensitive to the comparison of their inputs (experience, education, skills, drive, etc) and outcomes with those of colleagues. Thus, minority-group professionals who perceive inequity may be motivated to reduce the disparity (e.g. by moving to a higher paying organization). Turner and Myers (2000) in their empirical study of representation patterns, found through econometric analysis that professionals of color were sensitive to the level of salary and that institutions with higher salaries had a greater representation of professionals of color. Consistent with economic and equity theories as well as prior empirical evidence, minority group candidates would be expected to behave rationally by seeking to maximize their tangible outcomes (salary). Accordingly, we propose that minority group members will seek employment at organizations where the salaries offered are the highest available. Hypothesis 7 is offered to test this line of reasoning:

Hypothesis 7: Organizational units that offer higher salaries will have higher representation of minority-group professionals than will units that offer lower salaries.

Over the past 50 years the US higher education industry has experienced a five-fold increase in demand, one of the most rapid demand increases faced by any industry (Kowka and Snyder 2003). The higher education industry employs significant numbers of highly trained professionals. The segment of the higher education industry most closely aligned to US corporations is the business school segment. In US colleges and universities, business school leaders are, in effect, line managers, since they formulate their units' mission and strategies and have responsibility for developing the 'product,' graduates, in their respective units. Numerous research reports have documented the historical under-representation of faculty of color and white female faculty in US universities and at Association for the Advancement of Collegiate Schools of Business, International (AACSB) member business schools, in particular. The number of US-born faculty of color in US business schools has increased from 294 in 1994 to 691 in 2004 (Jackson 2004). According to the AACSB (2005a), of faculty who are US citizens or permanent residents, whites comprise 82% and faculty of color 18%. Women are also under-represented in US business schools, comprising 25% of full-time faculty while at the university level women comprise 39% of full-time faculty (West and Curtis 2006). At the full professor level women constitute 14% of faculty at AACSB schools compared with 24% of full professors nationwide. The AACSB predicts a shortage of approximately 1140 business faculty within five years and over 2400 faculty within 10 years (AACSB International 2005b). Business schools also compete with industry to recruit highly-qualified MBA and PhD graduates. Attracting and retaining faculty will become a critical issue at most business schools in the US. The US higher education industry served as the setting for this study.

Methodology
Sample
Business school deans at the 658 US member schools of AACSB received a survey of diversity policies and practices. Responses were received from 143 leaders for a response rate of 22%. Demographic responses indicated that 73% of the respondents were male and 27% were female. Average age was 54.4 years (SD = 6.5).

The female leaders were younger (mean age = 52.3 years, SD = 6.9) than the male leaders (mean age = 55.1 years, SD = 4.9, t = 2.45, p < .02). Of the participants indicating race, 103 were white (82% of those responding), three (2%) were Hispanic, 11 (9%) were African American, two (1.5%) were US-born Asians, two (1.5%) were Native American and five (4%) were non US-born. Deans constituted 75% with 95 respondents, 28 were assistant or associate deans (22%) and four (3%) indicated they were in some other position (e.g. program director). Average time in current position was 4.7 years (SD = 5.4). The large standard deviation relative to the mean for time in position suggests considerable variability in the sample with more long and short tenured business school leaders than would be expected from a normal distribution. There was no significant difference in time in office between male and female school leaders. Of those 130 leaders indicating institution type, 52 (40%) were from doctoral granting universities and 78 (60%) were from non-doctoral degree granting institutions while for public versus private designation, 89 (68%) leaders reported from public institutions while 41 (32%) were from private institutions.

Comparison of the respondent sample with the population of AACSB school leaders indicated the sample was representative of the population. Data from AACSB International (AACSB 2005a) reported that the median age of 419 member deans who responded to the AACSB Business School survey in 2002 was 54 years, compared to our sample where the average age was 54.4 years (S.D. = 6.5). Regarding sex, AACSB reported that 85% of deans from the US, Canada and the UK were male, compared with 76% from our US sample.

Associate/assistant deans were 60% male in the AACSB data while our respondents were 59% male. Average number of years in current position for deans in our sample was 4.7 years (S.D. = 5.4) while the average for the AACSB sample was 5 years. No information in the AACSB data was available regarding ethnicity of business school leaders. We also compared the representation of historically black colleges and universities (HBCUs) in our sample to that of the AACSB US membership. At the time of the survey administration, there were 35 HBCUs in the AACSB US membership (5.3%). In our sample there were two HBCUs (1.4%). Accordingly, in our sample, the representation of HBCUs was slightly less on an absolute basis than in the AACSB membership but the significance of this difference was not testable due to very small sample size of HBCUs. Overall, our sample is a representative profile of the AACSB leadership.

Procedure
Our initial approach was to survey business school leaders through an online web survey instrument. A letter of introduction was mailed approximately one week before sending out the link to the web survey. Coincident to the web survey 'going live', a series of computer worms and viruses circulating across the Internet resulted in system breakdowns at a number of government and private institutions. These technical difficulties precluded some respondents from accessing the survey via the web and made others wary about doing so. Given that the duration of the Internet difficulties could not be determined at the time, we decided to close down the web site within two days and send the survey via traditional postal service. An email notice was sent to the entire association membership indicating the closure of the web site and subsequent mailing of the paper version of the survey. The mailed survey was identical to the web version and arrived within two weeks of the Internet launch date. Of the 143 surveys returned to the researchers, 37 were posted to the web site in those first two days and the balance were returned via postage-paid first class mail. Analysis of the two sets of respondents indicated there was no difference in the respondents' demographic characteristics of age, sex, race, time in position, or institution type between the survey data collected via the Internet and the survey data collected by mail. Therefore the two groups were combined in subsequent analysis.

Measures
Dependent variable
Minority group and white female representation on business school faculties was assessed by summing the number of full-time US-born men of color and women of color and white women for each business school. This number was then divided by the total number of full-time business faculty in the respective school. The resulting minority percentage representation was labeled Minority Representation and served as the dependent variable in this study.

Predictor variables

- Diversity priority: Four items were used to assess the strategic priority for diversity at the university and business school levels. Two items indicated the priority of diversity at the university level: 'Please rate the strategic priority of diversity at the university level of your university or college as evidenced by mission and objectives statements and other formal documents' and 'Please rate the strategic priority of diversity at the university level of your university or college as evidenced by commitment of resources.' At the business school level, participants indicated the priority of diversity with two items: 'Please rate the strategic priority of diversity at the business school level of your university or college as evidenced by mission and objectives statements and other formal documents,' and 'Please rate the strategic priority of diversity at the business school level of your university or college as evidenced by commitment of resources.' Participants indicated their response on a five-point Likert scale from 1 = lowest strategic importance to 5 = highest strategic importance for each item. The four items were additively combined into one measure of diversity priority, Strategic Priority. Reliability for the four-item scale was acceptable (Cronbach alpha = .88).

- Awareness of racial issues: The Colorblind Racial Attitude Scale (denoted CoBRAS) (Neville et al. 2000) is a three subscale measure assessing the cognitive aspects of an individual's racial attitude. For this study the Awareness of Racial Privilege subscale (denoted Racial Awareness), the most appropriate to measure participant's awareness of racial prejudice (Neville et al. 2000), was assessed on a Likert scale from 1 = disagree to 5 = agree. Sample statements included, 'White people in the US have certain advantages because of the color of their skin' and 'Racial and ethnic minorities do not have the same opportunities as white people in the US.' The coefficient alpha, indicating reliability for this scale was .68 (n = 131) in the present study. Women participants indicated higher awareness of racial issues (t = 2.47, p < .02) than men. Accordingly, subsequent analyses controlled for the effect of participant sex.

- Potential solutions to minority under-representation: Questions about potential solutions to minority under-representation were developed for this study based on a review of the literature (Kossek and Zonia 1993; Smith 1995; Knowles and Harleston 1997; Ragins, Townsend and Mattis 1998; Aguirre 2000; McKeen, Bujaki and Burke 2000; Pope and Thomas 2000; Cox 2001). The questions were refined through consultation with two subject matter experts. Leaders rated the importance of potential solutions on a five-point Likert scale from 1 = not at all important to 5 = very important. The 13 items rated included: (1) active recruitment of minority faculty; (2) recruitment of senior minority faculty; (3) diversity training for business school faculty; (4) broadening the range of acceptable research topics and methodologies; (5) provision of mentors for minority faculty; (6) incentives for senior faculty to mentor minority faculty; (7) changing business school organizational culture to be more inclusive; (8) providing skill-building workshops for minority faculty; (9) providing minority faculty with information usually available only in informal networks; (10) clarification of performance expectations; (11) providing actionable performance feedback; (12) minority faculty need to take increased responsibility for their success; and (13) with time the number of qualified applicants will increase.

- Items pertaining to possible solutions were moderately correlated. Therefore we conducted factor analysis to identify thematic item clusters for more parsimonious analysis. Principal components factor analysis with varimax rotation yielded three factors meeting the minimum eigenvalue criteria of 1.0. These three factors accounted for 60% of the variance. The first factor, subsequently labeled Cultural Change, included items 3, 4, 5, 6, 7, 8, and 9 and had an acceptable reliability estimate (Cronbach alpha = .85). The second factor, subsequently labeled Recruitment, included items 1 and 2, with acceptable reliability (Cronbach alpha = .73). The third factor included items 10, 11 and 12 and was subsequently labeled Performance Feedback (alpha = .74). Item 13, 'with time the number of qualified applicants will increase', did not load on any of the factors and had a low communality estimate, so it was excluded from the subsequent analyses.

- Salary: The AACSB provides an extensive faculty salary database to member institutions. This database allows administrators and their faculty to judge their relative salary levels with some assurance of accuracy. Participants in this study indicated salary level at their institution with the following query:

‘Salaries offered by your school to new faculty candidates are typically at what percentile of AACSB schools?’ This variable was denoted Salary Percentile in the analysis.

Control variables
Leader-participant demographic variables of sex, age, race, time in position and school type were included in this study as control variables. Participant sex was coded as a dummy variable where 0 = male and 1 = female. Respondent race was recorded by respondents on the survey in six traditional categories (e.g. white non-Hispanic, African American, etc.) and a seventh 'other' category. Race subsequently was coded as a dummy variable where 0 = white and 1 = non-white for analysis. Time in position was recorded by asking the respondents to enter the number of years, in whole numbers, that they had been in their current position. Participant school type was coded as a dummy variable where non-doctoral colleges and universities = 0 while for doctoral-granting colleges and universities school type = 1.

Analysis
For the first hypothesis, a regression analysis was employed to determine whether after controlling for the leader's demographic characteristics of sex, age, race, and time in position, leaders with higher racial awareness had higher representation of minority professionals on their faculty. To test this hypothesis, leader sex, age, race, and time in position, in the first block and racial awareness in the second block were regressed on minority representation. For Hypothesis 2, a regression analysis tested whether, after controlling for participant's demographic characteristics, importance ratings of unit cultural change influenced minority representation. To test this hypothesis, leader sex, age, race, and time in position, in the first block and ratings of cultural change in the second block were regressed on minority representation. For Hypothesis 3, determining whether ratings of cultural change influenced minority representation beyond the effect of leader racial awareness, leader demographic characteristics and leader racial awareness were entered in the first step and ratings of cultural change in the second step were regressed on minority representation. To test Hypothesis 4 examining the effect of the strategic priority of diversity on minority faculty representation, leader demographic characteristics and school type entered in the first block and strategic priority entered in the second block were regressed on the dependent variable, minority representation. For Hypotheses 5 and 6, two regression analyses were conducted to determine if, after controlling for leader demographic characteristics and the strategic priority of diversity, importance ratings of recruitment of minority faculty, and performance feedback influenced minority representation. Leader demographic characteristics, and strategic priority, entered in the first block and recruitment and performance feedback, entered in the second block were regressed on minority representation. Finally, to test Hypothesis 7, whether salary level influenced minority representation, school type entered in the first block as a control and salary entered in the second block as the predictor were regressed in an equation to determine the relationship of salary on minority representation.

Results
Table 1 provides descriptive statistics including means, standard deviations and correlations between the study variables. The control variables of leader sex, race, ethnicity and time in position exhibited no consistent pattern of relationships with other predictor variables or with the dependent variable of interest (minority representation). Predictor variables were generally moderately correlated or not correlated, with correlations ranging from a low of .00 between performance feedback and racial awareness to a high of .57 between performance feedback and cultural change.

Regression results
The regression analyses for Hypotheses 1 through 6 entered, as block one, the demographic variables leader sex, leader age, leader race and leader time in position. The demographic variable leader race was a highly significant predictor (B = .46, t = 5.34, p ,.01) of minority faculty representation. The other three demographic variables were not significant predictors of minority representation. Leader race

Table 1. Means, standard deviations, and intercorrelations of study variables.

	Mean	Standard deviation	1	2	3	4	5	6	7	8	9	10	11	1
(1) Sex	.27	.44	–											
(2) Age	54.4	6.5	−.19*	–										
(3) Race	.15	.36	.22*	−.03	–									
(4) Time in position	4.7	5.4	−.04	.32**	.06	–								
(5) Institution type	.40	.49	.09	.00	.08	.25**	–							
(6) Racial awareness	21.9	6.9	.22*	.00	.18†	−.11	.03	(.68)						
(7) Cultural change	2.53	.90	.22*	.01	.27**	−.00	.02	.35**	(.85)					
(8) Recruitment	3.71	1.12	.22*	−.02	.17†	.09	.20	.28**	.47**	(.73)				
(9) Feedback	2.97	1.14	.03	.14	.17†	.12	.02	−.00	.57**	.43**	(.74)			
(10) Salary	56.1	23.7	.06	−.04	−.21*	.07	.17†	−.13	−.14	.02	−.12	–		
(11) Strategic priority	13.9	3.5	.14	.04	−.02	.16†	.28**	.04	.28**	.05	.04	.17†	(.88)	
(12) Minority representation	.41	.07	.18†	.06	.49**	.11	−.11	.25**	.41**	.25**	.32**	.39**	−.14	–

†p < .10; *p < .05; **p < .01; the demographic variables Sex (2 choices), Race (7 choices) and Institution type (6 choices) are categorical; the demographic variables Age and Time in position are 'continuous' variables provided in whole numbers by the respondent; reliabilities for multi-item predictor variables are on the diagonal; the predictor variable Salary is the AACSB salary percentile typically offered to new faculty candidates as reported by the business school leader; the dependent variable Minority Representation is the ratio of full-time minority business faculty over total full-time business faculty.

continued to be a significant predictor of minority representation when predictor variables hypothesized to be associated with minority representation were included in the second block of the analyses. Thus, leader race appears to be one strong indicator of minority faculty representation.

Hypothesis 1 tested whether, after controlling for demographic variables in the first block, more racially aware leaders would be associated with greater minority faculty representation. The overall equation was significant (F = 8.84, R2 = .31) with racial awareness a significant predictor of minority representation (B = .17, t = 1.98, p <.05). Thus, as shown in Table 2, Hypothesis 1 was supported.

Hypothesis 2 tested whether, after controlling for demographic variables in the first block, leader ratings of the importance of cultural change would be associated with greater minority faculty representation. The overall equation was significant (F = 5.41, R2 = .22) with cultural change a significant predictor of minority representation (B = .30, t = 3.07, p <.01). Thus Hypothesis 2 was supported.

Hypothesis 3 tested whether, after controlling for leader demographic variables and leader racial awareness, entered in the first block, leader ratings of cultural change would be associated with greater minority faculty representation. The overall equation was significant (F = 9.67, R2 = .38). Cultural change was a significant predictor of minority representation after controlling for leader racial awareness and demographic characteristics (B = .24, t = 2.57, p < .01). Further, when cultural change was entered in the equation, leader racial awareness was no longer a significant predictor of minority representation. Thus Hypothesis 3 was supported.

Hypothesis 4 tested whether, after controlling for leader demographic variables and school type, diversity as a strategic priority would be associated with greater minority faculty representation. While the overall equation was significant due to the leader demographic variable of race diversity, strategic priority was not a significant predictor of minority faculty representation. Thus Hypothesis 4 was not supported.

Hypothesis 5 tested whether, after controlling for demographic variables and the strategic priority of diversity in the first block, leader ratings of the importance of minority recruitment would be associated with greater

minority faculty representation. The overall equation was significant (F = 7.91, R2 = .33) with recruitment a significant predictor of minority representation (B = .21, t = 2.26, p <.05). Thus Hypothesis 5 was supported.

Hypothesis 6 tested whether, after controlling for demographic variables and the strategic priority of diversity in the first block, leader ratings of the importance of performance feedback would be associated with greater minority faculty representation. The overall equation was significant (F = 8.68, R2 = .36) and performance feedback (B = .24, t = 2.79, p <.01) was a significant predictor of minority representation. Thus Hypothesis 6 was supported.

Hypothesis 7 tested whether, after controlling for school type (doctoral granting or non- doctoral granting), higher salaries would be associated with greater minority faculty representation. School type, entered in the first block, was not a significant predictor of minority faculty representation. The overall equation was significant (F = 8.55, R2 = .15) and salary was a significant predictor of minority representation (B = —.40, t = — 4.13, p < .01). Though salary was a significant predictor of minority representation, the direction of this association was not as hypothesized. We hypothesized a positive association and the regression results indicated a negative association. Thus Hypothesis 7 was not supported.

In summary, results indicated that organizational units where leaders reported greater racial awareness and units where leaders reported greater recognition of the importance of cultural change had higher representation of minority-group professionals. Recognition

Table 2. Results of regression for minority faculty representation.

Step/Predictors	Racial awareness H1	Cultural change H2	Cultural change and racial awareness H3	Strategic priority H4	Recruitment H5	Performance feedback H6	Salary level H7
Controls							
Sex	.05	.04	.03	.08	.06	.07	–
Age	.06	.07	.09	.03	.05	.00	–
Race	.46**	.26**	.42**	.31**	.45**	.46**	–
Time in position	.08	.04	.07	.07	.09	.08	–
School type	–	–	–	−.10	–	–	−.05
Predictor (leader)							
Racial awareness	.17*	–	.12	–	–	–	–
Cultural change	–	.30**	.24**	–	–	–	–
Recruitment	–	–	–	–	.21*	–	–
Performance Feedback	–	–	–	–	–	.24*	–
Salary	–	–	–	–	–	–	−.40**
Strategic priority	–	–	–	DNE[1]	−.14	−.10	–
F	8.84**	5.41**	9.67**	1.92	7.91**	8.68**	8.55**
R2(adjusted)	.31(.27)	.22(.18)	.38(.34)	.03(.02)	.33(.29)	.36(.32)	.15(.14)

N = 132 with listwise deletion. Standardized regression coefficients are shown; *p < .05; **p <.01; [1] DNE: Did not enter the stepwise regression at the minimum level of significance of p < .15.

of the importance of cultural change influenced minority representation beyond the effect of leader racial awareness. Strategic priority, a more general measure of whether the organization espouses diversity as a priority, was not associated with minority representation. However, the more specific strategies of recruitment and performance feedback for minority-group professionals were positively associated with higher reported levels of minority professional representation.

Discussion

This study contributes to the diversity literature by providing new evidence regarding the viability of six theoretical explanations for the under-representation of minority-group professionals in an organization. Consistent with the first hypothesis, the sensitivity of the unit leader to racial issues, as captured by the racial

awareness measure, was associated with the level of minority faculty representation in the professional organizational sample. After controlling for the leader's ethnicity, racially aware leaders had higher minority-group professional representation at their institutions than leaders who were less sensitive to racial issues. This finding supports Dass and Parker's (1996), Cox's (2001), Linnehan et al.'s (2002), Jayne and Dipboye's (2004), and Childs' (2005) contentions that the genuine, deep level, commitment of top management is critical to successful diversity initiatives. This finding is also of interest given that leader race, a significant predictor of minority faculty representation, was already in the model. Clearly the cognitive orientation of the leader, above and beyond his/her racial characteristics, is a significant variable in determining minority-group faculty representation in the US. The finding with respect to the influence of leader racial awareness was corroborated by the finding that leaders who recognized the importance of cultural change in their institutions also had higher minority representation in their organizational units.

The findings with respect to the second hypothesis also lend support to the discrimination theory of racial imbalance in US organizations. Organizational units with leaders who recognized the importance of cultural change had higher minority-group representation on their staff. Consistent with the findings of Brown (1990), Cross (1996), Reyes and Halcon (1996), Riger et al. (1997), and Chrobot-Mason and Hepworth (2002), it appears that US-born professionals from under-represented groups may be sensitive to the diversity climate, or at least the leader's awareness that cultural change is needed, when making employment decisions.

While both leader racial awareness and ratings of cultural change influenced minority group representation, leader recognition of the need for cultural change trumped racial awareness. It appears that while a leader's racial awareness is important, the application of this awareness in the form of recognition of the need for cultural change is what materially affects minority professionals' representation in US organizations.

We found that leader recognition of the importance of more specific strategies, including recruitment and actionable feedback, impacted minority representation, while the ratings of the importance of diversity as a more general strategic priority did not. These results suggest that leaders will have more success in enhancing minority representation by focusing on specific steps their units can take rather than assuming that strategic priorities will be self-fulfilling. Said another way, our findings support the perspective that increasing minority representation is a tactical rather than an intellectual exercise. Ryan and Tippins (2004) report that prospective minority-group employees in the US are sensitive to procedural and interactive justice issues in the recruitment and selection processes, including use of job-related selection tools, interviewer honesty and sincerity, and adequate explanations for selection processes and decisions. Future research could shed light on what specific steps are most effective at attracting and retaining minority-group professionals and why those factors implicated in the present study are effective.

The most prestigious universities in the United States typically provide higher salaries than their less prestigious counterparts. Our findings were consistent with reports (Cross 1998; West and Curtis 2006) that white women and employees of color are substantially under-represented at the most prestigious US universities. Minority-group professional representation at the highest paying institutions was lower in our study as well. The results of the seventh hypothesis, that minority-group faculty tended to be at relatively lower paying institutions, are consistent with the proposition that factors other than salary exclusively influence their employer choices. Kirchler et al. (1996) found that wage negotiations between employers and employees are not determined exclusively by 'egoistic profit maximization' (p. 313), but also by other intangible criteria, such as social norms. Queneau and Zoogah (2002) posited that minority faculty members may choose to work at universities with greater diversity to avoid social isolation. Thus, a compensatory model may be in operation where social conditions of work may be considered along with salary in determining a faculty member's work site choice. Indeed, a recent Diversity Inc. article (Hinton 2005) addresses the climate issue and these findings appear to generalize to varying degrees across cultures (cf. Wu and Chiang 2007). Hinton advises minority job applicants to examine the core values, guiding principles, management's demonstrated commitment to diversity, representation of minorities at management and non-management levels, and the diversity track record of prospective US organizational employers. Other plausible explanations are that minority faculty are less

effectively mentored during the negotiation process or have lower evaluations of academic self worth. Lower self-evaluated worth would, according to equity theory, lower the perceived value of inputs and correspondingly the required level of outcomes (salary) required to achieve parity with referent others (Adams 1965). Results in the current study are counter to those of Turner and Myers (2000) who found that faculty of color were responsive to differential salary levels in their employment choices in the US Midwest. It is possible that higher paying schools are more selective in recruitment, have more specific selection and performance evaluation criteria (e.g. the faculty member must be able to publish consistently in a few predetermined journals) and through those processes are disproportionately screening out minority-group faculty. Future research could explore the possible causes of the negative relationship between salary percentiles and minority professional representation.

One aspect of the minority representation issue is attraction of professionals. Another dimension of the issue is retention, a measure not assessed directly in the current study. Retention may be at least partly a function of the experience of professionals at their respective organizations. Hicks-Clarke and Iles' (2000) findings that diversity climate perceptions affect employees' work outcomes, including organizational commitment and job satisfaction, suggest that climate dimensions may have an important effect on retention of minority-group professionals. Jones and Schaubroeck (2004) found that employees of color reported lower levels of co-worker social support and that co-worker support partially mediated the relationship between the participant's race and job satisfaction. Jandeska and Kraimer (2005) found that among women employees, perceptions of a masculine organizational culture were negatively related to career satisfaction. Several questions to explore in future research include: Are US-born minority professionals as satisfied and as committed as their white male colleagues? What other climate dimensions lead to minority-group professionals' job satisfaction, commitment and retention? Do professional employees' perceptions of organizational fit vary by ethnicity? If minority-group professional employees perceive that their organization fails to recognize and value diversity, do these employees experience less career satisfaction? Finally, do the findings of the present study generalize to minority-group professionals outside the US?

We did not examine the possible effect of leader education level on our dependent variable, minority professional representation. Higher education leaders in the US tend to be well educated with over 90% coming from academia (AACSB 2005a). Thus, a possible leader-education effect may be attenuated in the higher education industry. It is possible that advanced education sensitizes leaders to such social issues as demographic diversity in their organizations' work forces. Other industries may have wider variance in the education levels of their leaders. Future research could also assess the possible influence of leader education level on leader racial awareness.

This study has several strengths and one limitation of note. A strength is the representativeness of the sample. Comparison of the demographics of participants with the US AACSB membership indicates that the two groups were very similar. A second strength is that unit leaders, line managers with the greatest potential impact on strategies and practices in their divisions, were the focal participants. A third strength is that we have demonstrated that current theoretical diversity frameworks are useful for understanding why minority representation is high or low across a set of knowledge-based organizations. A limitation of the current study is that some of our predictor variables are measures of leader perceptions of the importance of various tactics (e.g. cultural change, feedback, recruitment) rather than a post hoc analysis of the implementation of specific initiatives. Thus, while we can argue that there is likely correspondence between what the leader views as important and the initiatives undertaken by the leader, we did not directly measure this correspondence. Future research could examine (post hoc) the extent to which the implementation of specific strategies, such as recruitment and type of feedback, are effective. Finally, we surveyed unit leaders in higher education institutions which hire a significant number of knowledge professionals. Additional research could ascertain whether our findings generalize to other knowledge-based professional industries, such as the law, healthcare, accounting, and engineering in the US.

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