Examining Academic Leadership Position Attainment in Higher Education: Evidence from NSOPF: 99

Raul A. Leon and Jerlando F. L. Jackson
University of Wisconsin-Madison

This study, like many others in the field of higher education literature is concerned with diversity in our nation's colleges and universities, especially, in light of the growing number of people of color in the United States, and their advancement in the U.S. workforce overall. Unfortunately, data reveals that this particular trend is not reflected in most senior-level positions (Athey, Avery, & Zemsky, 2000; Burbridge 1994; Jackson & Daniels, 2007; Johnsrud & Heck, 1994b). Above all, studies that focus on employment trends for women and administrators of color in colleges and universities provide a metric of progress to examine whether society is accommodating these groups in higher education (Harvey, 2001; Harvey, 2003; Johnsrud, 1991; Johnsrud & Heck, 1994b).

Since the 1960s, the concepts of access and diversity have been grappled with regarding students and faculty, but only minor attention has been given to administrators (Jackson, 2004a). Largely based on anecdotes and accounts from other sectors in society (e.g., business and public administration), it was a widely accepted belief that women and people of color are disproportionately located in lower-level administrative positions, while White males are disproportionately located in upper-level positions (e.g., Bluedorn, 1982; Perry, Davis-Blake, & Kulik, 1994) In particular, however, comparing trends from these underrepresented groups across the employment sector, the number of people of color in senior-level positions in higher education remains low (Jackson 2004b; Jackson & Daniels, 2007).

Over a decade ago, Konrad and Pfeffer (1991) tested this assertion and found that in fact women and people of color were more likely to be hired in lower-level positions at less complex and prestigious organizations. While this benchmark work has been widely cited, the findings clearly need to be revisited for two reasons. First, Konrad and Pfeffer collapsed all types of administrators (i.e., student affairs, academic affairs, and administrative affairs) within a single sample. In so doing, they assumed the findings applied uniformly across all types of administrators. Second, the study was based on data collected several decades ago, namely, in 1978 and 1983. Accordingly, this research was aimed at re-examining the conventional wisdom in light of these concerns.

Therefore, the present study focused on just one category of administrators (i.e., academic leadership) with more recent data. Accordingly, the research questions guiding this study were: (a) To what extent, if at all, are women and people of color underrepresented in academic leadership positions?; and (b) To what extent, are women and people of color who attain these leadership positions underrepresented in upper-level positions?

Leadership Positions Typically Held by Faculty

The pathways or trajectories to academic leadership positions are seldomly discussed. Simply because for most faculty, academic leadership positions are an "after thought" and not an aspiration, because assuming administrative positions is seen as changing careers (Moore 1983; Moore & Sagaria, 1982). However, others view the work of the academy (university's business) as the work of the intellect, thus believing that faculty and administrators share the same work and career (Martin, 1988). This is embodied by the notion of the "first among equals" concept and that administrators should come from the ranks of faculty.

The administration of higher education institutions is broken down into at least three specialty areas: (a) academic affairs (academic leadership positions); (b) student affairs; and (c) administrative affairs (Sagaria, 1988). Academic affairs or academic leadership positions include positions such as: president, academic deans, vice president or provost of research, and department chairs. Student affairs include: vice president for student affairs, dean of students, and director of financial aid. Administrative affairs encompass positions such as vice president for finance, director of alumni affairs, and the director of computer services. Career mobility differs among the three specialty areas (Moore & Sagaria, 1982); however, the focus of this study is on the area of academic leadership positions which are typically held by faculty. It is critical to note that the intent is not to suggest that all faculty want to pursue academic leadership positions, but rather to understand the position attainment process.

Administrative and Managerial Selection Process

In order to understand who successfully obtains certain key positions, insight into the selection process is needed. Accordingly, the body of literature examining the administrative and managerial selection process in higher education was explored. Previous research on administrative and managerial selection can be delineated in two approaches: (a) rational and (b) representational (Sagaria, 2002). The rational approach is based on the premise that the selection process is objective, logical, and predictable, while focusing on quantifiable characteristics of the candidate and job. According to this approach, search committees employ a series of clearly defined steps for the search process (e.g., Kalpowitz, 1986; Twombly, 1992). Within this line of inquiry, research has focused on gender and racial inequity (Perry, Davis-Blake, & Kulik, 1994). The aggregate of this work suggests that the search chair's characteristics (e.g., race, gender, and attitudes) influence hiring decisions (Sagaria, 2002).

The second approach embedded in the administrative and managerial selection literature is representational view. Studies anchored in this perspective examine the hiring process from a symbolic and serendipitous standpoint (Birnbaum, 1988a; McLaughlin & Riesman, 1985). For the most part, these studies are aimed at unearthing the unpredictable and intangible elements of the search processes. Sagaria (2002) advances this body of work by proposing four filters used by decision makers to screen candidates in administrative searches. First, the normative filter focuses on the candidate's qualifications (e.g., education, experience, credentials, and academic accomplishments). Second, the valuative filter looks at the administrative behavior of the candidate (e.g., leadership and decision making style), while at the same time considering fit and image. Third, the personal filter scrutinizes the candidate's personality traits (e.g., character, habits, family composition, and sexual orientation). Fourth, the debasement filter was used solely

for candidates of color which exercised a form of institutional racism that focused on stereotypical views of people of color in administrative positions.

Conceptualizing Position Attainment

Empirically reducing position attainment to a subset of variables may be premature; however, it is equally risky to permit the aggregation of potential variables to a level of abstraction that renders them meaningless. In developing and testing theory, it is important to reduce the complexity of numerous variables of interest to those that capture reality in the simplest way while maintaining fidelity to what is meaningful. For purposes of this study, two broad frameworks show promise for providing expression to position attainment: (a) human capital and (b) person-environment fit. These frameworks are believed to be relevant to successfully securing academic leadership positions. Academic leadership positions are the focus of this study because they are the ones that tend to lead to the college presidency.

Human Capital

The notion of human beings as capital was introduced by the 18th century economist Adam Smith in his classic work *Wealth of Nations* (Smith, 1776/1937); myriad researchers (e.g., Marshall, 1890/1930; Fisher, 1906; and Walsh, 1935) have kept the idea alive. Notwithstanding its long history, the theory of humans as capital remained undeveloped into the 20th century. Human capital refers to knowledge, attitudes, and skills that are developed and valued primarily for their economic productive potential (Baptiste, 2001). Human capital has two fundamental assumptions: (a) there is an unqualified causal effect of human capital on economic productivity; and (b) differences in workers' earnings are due entirely to differences in their capital investments (e.g., education and experiences) (Sweetland, 1996).

Previous research has found that an investment in education increases an individual's income after controlling for important variables (e.g., cost of schooling, ability, and family background) (Carnevale & Desrochers, 2003; Psacharopoulos, 1985; Cohn & Hughes, 1994). In addition, some human capital theorists (e.g., Becker, 1993; Shultz, 1981) have used education as the prime human capital investment for empirical analysis. Becker (1992) further argued that differential investments in education alone explain the income disparities that exist between ethnic groups in the United States. Further, he drew the same conclusion when examining disparities by gender and social class. As such, in higher education literature, an individual's status and rewards in the academic labor market are determined primarily by his or her investment in themselves (e.g., type of education, professional experiences, and mobility) (Perna, 2001a, 2001b). For these reasons, human capital theory provides for a solid construct to inform a study on position attainment.

Person-Environment Fit - (P-E) fit

The idea that person-environment (P-E) fit is an important mediator of outcomes is a central theoretical construct in vocational, counseling, educational, social, industrial/organizational, and management psychology (Tinsley, 2000). For the most part, research reveals that the P-E fit model is valid (e.g., Dawis, 2000; Hesketh, 2000). Plato was the first theorist to propose a person-environment fit model; in *The Republic* he argued for wisdom

of assigning persons to jobs in accordance with their temperaments and abilities (Kaplan, 1950). Parsons' (1909) model of vocational choice represents the earliest application of P-E fit theory in academe. During the Great Depression, Patterson, Darley, and Associates established the usefulness of P-E fit models in vocational psychology. Their students (e.g., Lofquist, Dawis, and Holland) further refined the P-E model in the 1950s and 1960s.

While P-E fit models were first shown to be effective during the Great Depression (Patterson & Darley, 1936), more recently, industrial/organizational psychologist and organizational behavior researchers have investigated a wide range of P-E fit models with a strong connection to Holland's (1997) theory. His approach of characterizing and comparing persons and environments, in research and practice, is based on vocational interests (Holland, 1985; Meir, 1995). More specifically, this approach is based on the concepts of congruence and job satisfaction as suggested by Holland (1997), with congruence inversely related to the distance between the individual's vocational interests and the characteristics of their work environment. Further, this theory emphasizes the concept of correspondence. As Rounds, Dawis, and Lofquist (1987) define it: "Correspondence is a reciprocal relationship in which the work personality and work environment are mutually responsive, with the individual fulfilling the requirements of the work environment and the work environment fulfilling the requirements of the individual" (p. 298). Therefore, P-E fit was an appropriate construct to help conceptualize position attainment. Collectively, the two aforementioned frameworks provided a clear yet simple method to conceptualize position attainment for this study.

Method

Data Source

Data for this study were drawn from the National Study of Postsecondary Faculty (NSOPF: 99)[1]. The National Study of Postsecondary Faculty (NSOPF) was developed in response to a continuing need for data on faculty and instructors. The NSOPF was designed to provide data about faculty to postsecondary education researchers, planners, and policymakers. NSOPF is currently the most comprehensive study of faculty in postsecondary educational institutions. The NSOPF is a survey of faculty in 2-year or higher accredited postsecondary institutions, institution-level representatives, and department chairpersons. The survey was initially conducted during the 1987-88 school year and was repeated in 1992-93 and 1998-99. The 1999 National Study of Postsecondary Faculty (NSOPF: 99) indicated that in the Fall of 1998, there were about 1.1 million (1,074,000) faculty and instructional staff employed by public and private not-for-profit 2-year-and-above postsecondary institutions in the United States.

Unlike NSOPF: 88, which was limited to faculty whose assignment included instruction, the faculty universes for NSOPF: 93 and NSOPF: 99 were expanded to include all those who were designated as faculty, whether or not their responsibilities included instruction, and other (non-faculty) personnel with instructional responsibilities. Under this definition, researchers, administrators, and other institutional staff who held faculty positions, but who did not teach, were included in the samples. Instructional staff without faculty status also were included. Teaching assistants were not included in any cycle of NSOPF. In sum, a defining feature of this study is that administrators had to hold faculty rank in order to be included.

---

[1] At the time of data analyses, the authors did not have access to restricted-level NSOPF:04 data.

Sample

The sample for this study was limited to cases with complete individual and institutional level data. Once individual and institutional level data were merged, only 7,226 cases had complete data. The NSOPF: 99 weight (WEIGHT) is appropriate for approximating the population of college and university faculty from the sample. In order to correct for the non-simple random sample design and to minimize the influence of large sample sizes on standard errors, the effective sample size was altered by adjusting the relative weight downward as a function of the overall design effect (Thomas, Heck, & Bauer, 2005). This was achieved by multiplying the relative weight by the reciprocal of the DEFF value and then re-weighting the data with the DEFF adjusted relative weight. The adjusted weighted sample included 7,226 cases and represents 957,767 faculty nationwide.

Variables

Dependent Variables. Two dependent variables were used in this study: (a) academic leadership position attainment; and (b) upper-level administrative position attainment. Academic leadership position attainment was measured by using each primary activity designation to distinguish between faculty who hold joint administrative appointment statuses versus those who do not. For example, faculty could select four primary activities: (a) teaching; (b) research; (c) administration; and (d) other. Upper-level administrative position attainment was measured using each principal activity title to distinguish between upper-level versus lower-level positions. Upper-level positions were at the dean level and above (e.g., vice president), while other positions were coded as lower-level positions (e.g., department chair).

Independent Variables. Based on previous research of administrators in higher education, this study incorporated a number of independent variables grouped in three categories. The first set of independent variables relevant to successfully securing academic leadership positions were based upon the human and social capital frameworks consisting of administrators' demographic characteristics: race, gender, age, and highest degree. The second set of variables were characteristics of person-environment fit included: overall job satisfaction, likelihood to accept another higher education job within 3 years, and opinions about treatment of minority faculty.

The last set of independent variables focused on institutional characteristics and were used as controls: region, classification, type (e.g., two-year and four-year), and institutional control. Precedent for using these independent or predictor variables to control for the influence of the institution can be found in other research investigations on administrators in higher education (e.g., Bluedorn, 1982; Johnsrud, Heck, & Rosser, 2000; Johnsrud & Rosser, 1999; Johnsrud & Des Jarlais, 1994; Johnsrud & Heck, 1994a; Lee & Mowday, 1987; McCain, O'Reilly, & Pfeffer, 1983; Price, 1977; Smart, 1990; Steers & Mowday, 1981; Weiler, 1985).

Data Analysis

Due to the dichotomous nature of the dependent variables, logistic regression was used to assess the effects of individual and institutional-level characteristics on the probability of individual faculty becoming an academic leader or an upper-level administrator (Cabrera, 1994). Several measures of fit were used when judging the significance of each logistic regression

model; these include the X^2 of the model, Pseudo R^2, and PCPs. A significant X^2 indicates that the independent variable as a group correlate with the dependent variable. At most, the Pseudo R^2 represents the proportion of error variance in relation to a null model. PCP represents the percent of cases predicted by the model. PCPs higher than 55% signify a good fit for the model (Cabrera, 1994). As a measure of the magnitude of effect, Delta-ps were used. Delta-p represents the change in the probability in the dependent variable due to a change in the factor variable under consideration. For example, a Delta-p value of 0.045 indicates that a one unit change in the predictor is related to a 4.5 percentage point increase in the likelihood that a faculty member would become an academic leader.

Results

As earlier discussed, the effects of individual and institutional-level characteristics on the probability of faculty securing academic leadership positions were examined in three ways. First, descriptive distribution of faculty and their primary activity was provided (see Table 1). Second, a logistic regression model was fit to determine who from the faculty ranks had a higher probability of becoming an academic leader. Third, another model was fit to determine of those assuming academic leadership positions, who had a higher probability of securing upper-level versus lower level positions. In this study, both set of analyses show that individual and institutional-level characteristics have important effects on faculty going into academic leadership positions, even though the coefficients are small in many cases.

Table 1. Observed Representation of the Primary Activity for Faculty by Race/Ethnicity and Sex: Fall 1998

Characteristic	Teaching	Research	Admin	Other	Total
Total	72%	7%	8%	13%	7,226
Race/Ethnicity					
Hispanic	73%	7%	6%	14%	
African American	72%	3%	10%	15%	
Asian	57%	21%	5%	17%	
American Indian	73%	8%	6%	13%	
Native Hawaiian/					
Pacific Islander	64%	24%	6%	6%	
White	73%	7%	8%	12%	
Sex					
Male	70%	9%	9%	12%	
Female	74%	5%	7%	14%	

Notes. Sample for this study is limited to faculty who were employed at 2-year, 4-year, public, and private institutions, whose primary responsibility was administration. Observed representation was based on the adjusted weighted sample.

Academic Leadership Position Attainment

Table 2 summarizes the logistic regression results for academic leadership position attainment for faculty. Delta-ps are presented for variables that are statistically significant (Cabrera, 1994; St. John, 1991). For the variables representing human and social capital, the results show that one racial and ethnic group was statistically different from Whites in obtaining academic leadership positions. Asian faculty were 6.96% more likely than Whites to assume academic leadership positions. When considering age, older faculty were 0.22% more likely than younger faculty to be administrators. When examining educational level, faculty with higher degrees (e.g., Ph.D.) were 1.07% more likely to be academic leaders.

Table 2. Logistic Regression Results for Academic Leadership Position Attainment for Faculty

Variable	Academic Leadership
Individual Level Characteristics	
Human and Social Capital Variables	
American Indian (White)	
Asian	.0696*
African American	
Native Hawaiian/Pacific Islander	
Hispanic	
Gender (Male)	
Age	.0022***
Degree Level	.0107***
Person Environment Fit Variables	
Overall Job Satisfaction	.0231***
Likelihood to Accept H.E. Job W/3 Years	.0133*
Opin About Treatment of Min. Faculty	-.0094*
Institutional Level Characteristics	
Control Variables	
New England Region	
Mid East Region	
Plains Region	
South East Region	
South West Region	
Rocky Mountain Region	
Far West Region	
Doctoral Institutions	
Comprehensive Institutions	
Liberal Arts Institutions	
Two Year (Four Year)	.0467***
Institutional Control (Public)	
Adjusted Weighted Sample	7,226
Estimated Population Size	957,767
P_o	.082
Model X^2, df	154.209, 23***
Pseudo R^2	.049
PCP	91.8%

Note: Delta-p statistics are shown only for those variables whose coefficients were significant: *p< .05 **p<.01 ***p<.001

For the person-environment fit set of variables, faculty with higher overall job satisfaction were 2.31% more likely to pursue academic leadership positions. As it relates to faculty with a higher likelihood to accept another higher education job within 3 years, they were

1.33% more likely to obtain academic leadership positions. For faculty that considered their opinion about treatment of minority faculty as important, they were 0.94% less likely to assume administrative duties. Institutional characteristics provided additional insights into which faculty had a higher probability of becoming academic leaders. Individuals employed at two year institutions were 4.67 % more likely to secure academic leadership positions.

Upper-Level Position Attainment

Table 3 summarizes the logistic regression results for upper-level position attainment for faculty. Delta-ps are presented for variables that are statistically significant (Cabrera, 1994; St. John, 1991). It is worth noting that no racial and ethnic group variable was significantly different. Regarding gender, females are 1.01% more likely to hold upper-level administrative positions. Likewise, older faculty were 0.06% more likely to hold upper-level administrative positions. According to the level of education, those with higher degrees were 1.10% more likely to secure upper-level academic leadership status. Considering the person-environment fit set of variables, faculty with higher overall job satisfaction were 1.30% more likely to obtain upper-level academic leadership positions. In relation to faculty with a higher likelihood to accept another higher education job within 3 years, they were 1.05% more likely to secure upper-level administration positions.

Table 3. Logistic Regression Results for Upper-Level Administrative Position Attainment for Faculty

Variable	Upper-Level Administrator
Individual Level Characteristics	
Human and Social Capital Variables	
American Indian (White)	
Asian	
African American	
Native Hawaiian/Pacific Islander	
Hispanic	
Gender (Male)	.0101*
Age	.0110***
Degree Level	.0172***
Person Environment Fit Variables	
Overall Job Satisfaction	.0130*
Likelihood to Accept H.E. Job W/3 Years	.0103***
Opin About Treatment of Min. Faculty	
Institutional Level Characteristics	
Control Variables	
New England Region (Mid West)	
Mid East Region	.0356**
Plains Region	
South East Region	
South West Region	
Rocky Mountain Region	
Far West Region	
Doctoral Institutions	
Comprehensive Institutions	
Liberal Arts Institutions	
Two Year (Four Year)	
Institutional Control (Public)	-.0097***
Adjusted Weighted Sample	593
Estimated Population Size	78,599
P_o	.0184
Model X^2, df	145.147, 23***
Pseudo R^2	.170
PCP	98.2%

Note: Delta-p statistics are shown only for those variables whose coefficients were significant: *p< .05 **p<.01 ***p.<.001

Institutional characteristics provided yet another layer of understanding on who were more likely to be in upper-level versus lower-level leadership positions. One institutional location affected the probability of securing upper-level positions. Faculty serving in institutions

located in the Mid East region, compared to the referent group (Mid West), were 3.80% more likely to assume upper-level positions. Lastly, in regard to institutional control, public institutions were 1.11% more likely to increase the probability of academic leaders holding upper-level positions.

Discussion

The results of this study show that significant differences in personal and institutional characteristics exist for those who hold academic leadership positions. While differences exist, overall these differences were small between groups. Still, several conclusions can be drawn, but caution should be used when interpreting these results.

Individual-Level Characteristics

First, of all the racial and ethnic groups, Asian faculty were most likely to become academic leaders. As is widely known, Asians have tended to perform well on success indicators within the education system (from K-12 education to graduate school to faculty ranks). Second, women were more likely to hold upper-level positions. Therefore, suggesting that although women still lag behind men in total representation in academic leadership positions, they are making small gains moving up the administrative ascension. In relation to these advancements, the past decade has seen an increase in women securing the college presidency (Lively, 2000a, 2000b; Nicklin, 2001). Consequently, for those women who became academic leaders, they faired better than men in obtaining upper-level positions.

Third, an increase in age augmented the likelihood that the individual would secure an academic leadership position. This finding seems to be straight forward in that with increased age a person has more time to build human capital which is positively connected to higher probabilities of being successful in the work place. Fourth, likewise individuals with higher degrees (e.g., Ph.D.) were more likely to assume academic leadership positions and upper-level positions.

Person-Environment Fit Characteristics

First, faculty with higher overall job satisfaction were more likely to obtain academic leadership positions and upper-level positions. One explanation may be that faculty who benefit from a work environment that provides opportunities for personal and professional development will seek institutional positions that will allow them to grow within the work environment. Academic leadership positions could offer new challenges that align with those expectations, and further promote advancement within the academic leadership hierarchy. In turn, there is a desire to contribute to and build upon this positive work environment.

Second, as it relates to both models, faculty were more likely to obtain academic leadership positions and an upper level position if they had a higher likelihood to accept another higher education job within 3 years. This could be explained by assumptions that describe administrative positions as changing careers (Moore 1983; Moore & Sagaria, 1982). Therefore, accepting a new job might be the perfect scenario to explore a new field within the academic life, and academic leadership and upper level positions could be seen as an appealing path. Further, it may be necessary to move to another institution to assume the desired administrative position.

Third, faculty with higher opinions regarding the treatment of minority faculty were less likely to secure academic leadership positions. This could be explained by the fact that among higher education administrators, some recognize that people of color are not equal in terms of their professional standing compared to White males (Ards, Brintnall & Woodward, 1997; Harvey, 2001; Johnsrud & Heck, 1994b), and opinions that encourage the development of fair hiring and work practices for minorities directly become a threat to faculty and the institution itself, when they do not support similar views.

Institutional-Level Characteristics

First, faculty interested in administrative roles faired better in regions of the country with more colleges and universities (Mid East), where having a diverse range of institutional opportunities might allow for the attainment of academic leadership positions. Second, faculty were more likely to become academic leaders at institutions with teaching as their primary mission and are small enough to build a strong sense of belonging. An interpretation of this finding is that faculty in smaller institutions (e.g., two year) that are small enough to build a strong sense of belonging and positive relationships with their colleagues might find it rewarding to take academic leadership roles. Third, of those holding academic leadership positions, faculty at public institutions had a higher probability of securing upper-level administrative positions. This could simply be due to the inherent complexity of public institutions, public institutions are held accountable by multiple constituents that require senior-level administrators to lead those efforts.

Conclusion

Konrad and Pffefer (1991) found that women and people of color are less likely to be hired in administrative and managerial positions, but if hired, assume lower level positions. The findings from this study suggest that while these findings hold true for the most part, some gains appear to have been made by women and Asians in academic leadership positions. However, as Ebert (2005) states: "The belief that America is meritocratic, egalitarian, and colorblind requires that we ignore current inequalities that fall primarily along racial lines'' (p. 174). Therefore, White men still hold the majority of academic leadership positions and upper-level positions in higher education. However, some unexpected surprises arose from this study.

Race and Gender Matters

There has been little discussion in the literature about the role Asians play as it relates to administration in higher education. Nonetheless, the results from this study show that Asians have a higher probability than other ethnic categories of holding an academic leadership position. Unfortunately, we do not have a comparative baseline, since most research on administrators in higher education lumped all minority groups together. Therefore, this occurrence may have gone undetected due to past study designs. Lastly, there is a growing body of research that argues that Asians are the "model minority" and fair much better in higher education (Freeman & Morss, 1993; Hirshman & Wong, 1986; Kim & Chun, 1994; Ying, Lee, Tsai, Hung, Lin, & Wan, 2001). The results of this study in relation to gender both verified and refuted in part the findings of Konrad and Pffefer (1991). While women faculty were less likely than men to assume

academic leadership positions, the gap is much smaller than the one reported by Konrad and Pffefer. Achieving gender equity in the administrative levels is a challenge, even in fields that are dominated by women. Of those assuming upper-level positions, women were more likely than men to secure these positions. Once in the ranks of administration, women were chosen more often than men to assume upper-level positions. Therefore, suggesting that women are making gains in the ranks of upper-level positions.

Implications for Theory, Practice, and Research

This study was grounded in two broad frameworks: (1) human capital and (2) person-environment fit. Several implications of this research and speculations are worth noting based on these frameworks.

Human Capital

The accumulation of human capital is clearly an important aspect of position attainment, as evidenced by the increased effect due to age. At the present time, however, it appears that the human capital possessed by women and people of color in higher education is less valued than that possessed by White men and Asians. In turn, higher education institutions clearly should develop programs and opportunities to help women and people of color build critical forms of human capital. To wit, search committee members should be sensitized to value different forms of human capital. Moreover, it is important for future research to examine which types of human capital can contribute to administrative position attainment in higher education.

Person-Environment Fit

Clearly, fit is important in any process to determine who will be hired to fill a position. Candidates should be aware that building human capital is important, but doing so in the appropriate environment is more important. Developing work environments that provide employees with opportunities that increase overall job satisfaction that contribute to the advancement along the administrative hierarchy becomes a priority. The ability for the search committee to see how a candidate's skills transfer is paramount. Additionally, faculty interested in administrative work may have to be flexible enough to move to institutions that present more opportunities as evidenced by the analyses of institutional characteristics. Building on the principles of person-environment fit research, decision makers at institutions may need to re-examine whether they hire internal or external candidates for administrative positions. Thus, leading to the following research question: to what degree does fit predict whether a faculty member will be successful in an administrative position?

Administrative and Managerial Selection

Institutional search processes and personnel should be examined in light of the findings from this study. One of the most important activities done at colleges and universities is the hiring of personnel. Therefore, appropriate resources should be invested in this process to ensure sound decisions. The composition of the search committee, and the chair in particular, impact the type of person eventually chosen (Sagaria, 2002). Consequently, care should be given to who

serves on the search committee and who serves as chair. Particular attention should be given to ensure a diverse group of participants. Considering this, it is important to know whether a connection exists between the characteristics of the committee and/or chair with the chosen candidate.

References

Athey, S., Avery, C., & Zemsky, P. (2000). *Mentoring and diversity. The American Economic Review, 90*(4), 765-786.

Ards, S., Brintnall, M., & Woodard, M. (1997). *The road to tenure and beyond for African American political scientists. The Journal of Negro Education, 66*(2), 159-171.

Baptiste, I. (2001). Educating lone wolves: Pedagogical implications of human capital theory. *Adult Education Quarterly, 51*(3), 184-201.

Becker, G. S. (1992). The Adam Smith address: Education, labor force quality, and the economy. *Business Economics, 27*(1), 7-12.

Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education* (3rd ed.). Chicago: University of Chicago Press.

Bluedorn, A. (1982). The theories of turnover: Causes, effects, and meaning. *Research in the Sociology of Organizations, 1*, 75-128.

Birnbaum, R. (1988a). Presidential searches and the discovery of organizational goals. *Journal of Higher Education*, 59, 489-509.

Birnbaum, R. (1988b). *How colleges work: The cybernetics of academic organization and leadership*. San Francisco, CA: Jossey-Bass.

Bridges, C. R. (1996). The characteristics of career achievement perceived by African American college administrators. *Journal of Black Studies, 26*, 746-767.

Burbridge, L. C. (1994). *The glass ceiling in different sectors of the economy: Differences between government, non-profit, and for-profit organizations*. Wellesley, MA: Wellesley College, Center for Research on Women.

Cabrera, A. F. (1994). Logistic regression analysis in higher education: An applied perspective. In J. C. Smart (Ed.), Higher *education: Handbook of theory and research* (pp. 225-256) (Vol. 10). New York: Agathon Press.

Carvevale, A. P., & Desrocher, D. M. (2003). *Standards for what? The economic roots of K-12 reform*. Princeton, NJ: Educational Testing Service.

Cohn, E., & Hughes, W. W. (1994). A benefit-cost analysis of investment in college education in the United States: 1969-1985. *Economics of Education Review, 13*, 109-123.

Corrigan, M. E. (2002). *The American college president*. Washington, DC: The American Council on Education Center for Policy Analysis.

Dawis, R. V. (2000). P-E fit as paradigm: Comment on Tinsley (2000). *Journal of Vocational Behavior*, 56, 180-183.

Ebert, K. L. (2004). Demystifying color-blind ideology: Denying race, ignoring racial inequalities. In C. Herring, V. M. Keith, & H. D. Horton (Eds.), *Skin deep: How race and complexion matter in the "color-blind'' era* (pp. 174–196). Urbana, IL: University of Illinois Press.

Fisher, I. (1906). *The nature of capital and income*. New York: Macmillan.

Freeman, V. S., & Morss, J. (1993). Study habits and academic achievement among Asian students. *College Student Journal, 27*, 352-355.

Garcia, M. (2000). *Succeeding in an academic career: A guide for faculty of color*. Westport, CT: Greenwood Press.

Harvey, W. B. (2001). *Minorities in Higher Education: 2000-2001*: 18th Annual Status Report. Washington, DC: American Council on Education.

Harvey, W. B. (2003). *Minorities in higher education 2002-2003: Twentieth annual status report*. Washington, DC: American Council on Education.

Hesketh, B. (2000). The next millennium of "fit" research: Comments on "The congruence myth: An analysis of the efficacy of the person-environment fit model" by H. E. A. Tinsley. *Journal of Vocational Behavior*, 56, 190-196.

Hirshman, C., & Wong, M. G. (1986). The extraordinary educational attainment of Asian Americans: A search for historical evidence and explanations. *Social Forces, 65*(1), 1-27.

Holland, J. L. (1985). *Vocational preference inventory*. Odessa, FL: Psychological Assessment Resources.

Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed). Odessa, FL: Psychological Assessment Resources.

Jackson, J. F. L. (2004a). An emerging engagement, retention, and advancement model for African American administrators at predominantly White institutions: The results of two delphi studies. In D. Cleveland (Ed.), *A long way to go: Conversations about race by African American faculty and graduate students in higher education* (pp. 211-222). New York, NY: Peter Lang.

Jackson, J. F. L. (2004b). Engaging, retaining, and advancing African Americans to executive-level positions: A descriptive and trend analysis of academic administrators in higher and postsecondary education. *Journal of Negro Education*. 73:4-20.

Jackson, J. F. L. (2002). Retention of African American administrators at predominantly White institutions: Using professional growth factors to inform the discussion. *College and University, 78*(2), 11-16.

Jackson, J. F. L., & Daniels, B. D. (2007). A national progress report of African Americans in the administrative workforce in higher education. In *Strengthening the educational pipeline for African Americans: Informing policy and practice*, ed. J. F. L. Jackson, (pp. 115 – 137). Albany: SUNY Press.

Jackson, J. F. L., & Rosas, M. (1999). *Scholars of color: Are universities derailing their scholarship*. Keeping our Faculties Conference Proceedings, Minneapolis, Minnesota, 86-107.

Johnsrud, L. K., & Des Jarlais, C. D. (1994). Barriers to the retention and tenure of women and minorities: The case of a university's faculty. *Review of Higher Education*, *17*(4), 335-353.

Johnsrud, L. K., & Heck, R. H. (1994a). A university's faculty: Predicting those who will stay and those who leave. *Journal of Higher Education Management*, *10*(1), 71-84.

Johnsrud, L. K., & Heck, R. H. (1994b). Administrative promotion within a university: The cumulative impact of gender. *The Journal of Higher Education, 65*(1), 23-44.

Johnsrud, L. K., Heck, R. H., & Rosser, V. J. (2000). Morale matters: Midlevel administrators and their intent to leave. *Journal of Higher Education, 71*(1), 34-59.

Johnsrud, L. K, & Rosser, V. J. (1999). Predicting and reducing midlevel administrative staff turnover. *CUPA Journal, 49*, 1-8.

Kalpowitz, R. A. (1986). *Selecting college and university personnel*. Washington, DC: ASHE-ERIC Higher Education Reports.

Kaplan, J. D. (Ed.). (1950). *Dialogues of Plato*. New York: Washington Square Press.

Kim, U., & Chun, M. B. (1994). Educational "success" of Asian Americans: An indigenous perspective. *Journal of Applied Developmental Psychology, 15*, 329-343.

Konrad, A. M., & Pfeffer, J. (1991). Understanding the hiring of women and minorities in educational institutions. *Sociology of Education, 64*, 141-157.

Lee, T. W., & Mowday, R. T. (1987). Voluntarily leaving an organization: An empirical investigation of steers and Mowday's model of turnover. *Academy of Management Journal, 30*(4), 721-743.

Lively, K. (2000a). Women in charge: More elite universities hire female provosts, creating a new pool for presidential openings. *The Chronicle of Higher Education, 46*(41), 41A.

Lively, K. (2000b). Diversity increases among presidents: Survey finds that more women and members of minority groups are rising to the top. *The Chronicle of Higher Education, 47*(3), 3A.

McCain, B. E., O'Reilly, C, & Pfeffer, J. (1983). The effects of departmental demography on turnover: The case of a university. *Academy of Management Journal, 56*(4), 626-641.

Marshall, A. (1930). *Principles of economics* (8ᵗʰ ed.). London: Macmillan. (Original work published in 1890).

Martin, J. (1988). *To rise above principle: The memoirs of an unreconstructed dean*. Urbana, IL: University of Illinois Press.

Meir, E. I. (1995). Elaboration of the relation between interest congruence and satisfaction. *Journal of Career Assessment, 3*, 236-241.

McLaughlin, J. B., & Riesman, D. (1985). The vicissitudes of the search process. *The Review of Higher Education*, 8, 341-355.

Moore, K. D. (1983). The role of developing leaders for academe. *Educational Record, 60*, 261-271.

Moore, K. D., & Sagaria, M. A. D. (1982). Differential job change and stability among academic administrators. *Journal of Higher Education, 53*(5), 501-513.

Nicklin, J. L. (2001). Few women are among the presidents with the largest compensation packages. *The Chronicle of Higher Education, 48*(11), 11A.

Parsons, F. (1909). *Choosing a vocation*. Boston: Houghton-Muffin.

Patterson, D. G., & Darley, J. G. (1936). *Men, women, and jobs: A study in human engineering*. Minneapolis, MN: University of Minnesota Press.

Perry, E. L., Davis-Blake, A., & Kulik, C. T. (1994). Explaining gender-based selection decisions: A synthesis of contextual and cognitive approaches. *Academy of Management Review, 19*, 786-820.

Price, J. L. (1977). *The study of turnover*. Ames, IA: Iowa State University Press.

Psacharopoulos, G. (1984). Returns to education: A further international update and implications. *Journal of Human Resources, 20*, 583-60.

Rounds, J. B., Dawis, R. V., & Lofquist, L. H. (1987). Measurement of person-environment fit and prediction of satisfaction in the theory of work adjustment. *Journal of Vocational Behavior, 31,* 297-318.

Rusher, A. W. (1996). *African American women administrators*. Lanham, MD: University Press.

Sagaria, M. A. D. (1988). Administrative mobility and gender: Patterns and prices in higher education. *Journal of Higher Education, 59*(3), 306-326.

Sagaria, M A. D. (2002). An exploratory model of filtering in administrative searches: Toward counter-hegemonic discourses. *Journal of Higher Education, 73*(6), 677-710.

Schultz, T. W. (1981*). Investing in people: The economics of population quality*. Los Angeles: University of California Press.

Smart, J. C. (1990). A causal model of faculty turnover intentions. *Research in Higher Education, 31*(5), 405-424.

Smith, A. (1937). *Wealth of nations*. New York: Random House. (Original work published in 1776).

Steers, R. M., & Mowday, R. T. (1981). Employee turnover and post-decision accommodation processes. In L. L. Cumming & B. M. Staw (Eds.), *Research in Organizational Behavior* (pp. 235-281). Greenwich, Conn.: JAI Press.

St. John, E. P. (1991). What really influences minority attendance? Sequential analyses of the high school and beyond sophomore cohort. *Research in Higher Education, 32*(2), 141-158.

Sweetland, S. R. (1996). Human capital theory: Foundations of a field of inquiry. *Review of Educational Research, 66*(3), 341-359.

Thomas, S. L., Heck, R. H., & Bauer, K. W. (2005). Weighting and adjusting for design effects in secondary data analyses. In P. D. Umbach (Ed.), *Surveying research: Emerging issues* (pp. 51-72). San Francisco: Jossey-Bass.

Tinsley, H. E. A. (2000). The congruence myth: An analysis of the efficacy of the person-environment fit model. *Journal of Vocational Behavior*, *56,* 147-179.

Twombly, S. B. (1992). The process of choosing a dean. *Journal of Higher Education*, *63*, 653-683.

Walsh, J. R. (1935). Capital concept applied to man. *Quarterly Journal of Economics*, *49,* 255-285.

Weiler, W. C. (1985). Why do faculty members leave the university? *Research in Higher Education, 23*(3), 270-277.

Ying, Y., Lee, P. A., Tsai, J. L., Hung, Y., Lin, M., & Wan, C. T. (2001). Asian American college students as model minorities: An examination of their overall competence. *Cultural Diversity and Ethnic Minority Psychology, 7*(1), 59-74.

You may contact the authors at:

Raul Leo – rleon@wisc.edu
Jerlando F. L. Jackson – jjackson@education.wisc.edu