
Affirmative Action and the “Level Playing Field:” Comparing Perceptions of Own and Minority Job Advancement Opportunities

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Abstract

Little research has been done on the effectiveness of affirmative action programs in establishing perceptions of a “level playing field” for historically disadvantaged groups. Especially lacking is research on the perceptions of people working for specific affirmative action employers. This research utilizes both outcome and attitudinal data of correctional officers employed by the Federal Bureau of Prisons, an affirmative action employer. Black and white correctional officers provide evaluations of their *own* opportunities for job advancement that are generally consistent with objective, aggregate data. Black and white officers, however, exhibit wide disagreement when surveyed about opportunities available for *minorities*. This research examines the processes by which the discrepancies between black and white evaluations of minority opportunities arise. In particular, we examine the ability of two competing hypotheses to explain the disagreement between blacks and whites. The first hypothesis, the denial of minority opportunity hypothesis, holds that minorities underestimate minority opportunities relative to their own opportunities. The second hypothesis, the denial of majority opportunity hypothesis, maintains that non-minorities overestimate minority opportunities. Results suggest that white correctional officers tend to overestimate minority opportunities.

Social science research helps us to understand the sources of opposition to as well as support for proactive remedies to historical discrimination, programs like affirmative action. Social science research also illuminates the perceptual differences about and support for affirmative action among women, racial minorities, and white men (Kluegel & Bobo 1993, Taylor 1995, Kluegel & Smith 1986). Social science research, though, has not been particularly informative regarding people's attitudes and perceptions about particular affirmative action programs and/or their experiences with affirmative action programs. In particular, while there is some research that examines whether people feel personally discriminated against (Crosby 1984, Crosby et al. 1989), there is little research on how people view their job promotion opportunities in organizations that practice affirmative action (for an exception see Camp and Steiger 1995).

It is important to understand and track perceptions regarding the effects of affirmative action and the resulting diversity (Cox 1994). For example, it is useful to know how minority group members perceive their *own* opportunities for promotion in comparison to majority group members, especially when controlling for objective evidence regarding promotion opportunities for whites and minorities. Likewise, it is helpful to know how majority and minority group members perceive opportunities for *minorities* (considered as a group) in organizations, especially in relation to the respondents evaluation of their own, personal opportunity. This is important because most existing research on affirmative action asks respondents to compare group opportunities, black versus white, for example. But do people make the same judgements about opportunities when they are asked about groups that they make when asked about personal experiences? As we argue later, there are strong reasons to believe this is not the case, and existing research has been remiss in not addressing this issue.

From a practical viewpoint, there are legal, training, and policy consequences that result from employee perceptions of promotion opportunities. For example, if an organization has a positive, objective track record regarding the promotion of minority members and women, yet minority members perceive there to be a problem, it is not unreasonable to expect problems to arise for the organization from these perceptions. Minority members would probably be expected to file job grievances or even bring legal action because of their perceptions. At the very least, there would probably be suspicions in the work place about job promotion opportunities, even though the perceptions are incongruent with the actual facts in this hypothetical case. Such suspicions could lead to lower morale, lower levels of worker cooperation, and a host of other workplace problems. On the flip side, if research shows that majority members have an exaggerated view of the opportunities available to minority members, then we would also expect organizational problems such as those mentioned above. In this case, though, the causes and appropriate remedies would obviously differ.

In short, we need to understand not only whether affirmative action creates more equitable outcomes in employment and promotion opportunities, the area where most research has been conducted to date, we also need to understand how the consequences of affirmative action policies are perceived by employees. Where racial and gender differences in perceptions continue to exist in organizations committed to affirmative action, it is important to understand the sources of those differences if effective policy and training are to be designed and implemented by the organization to address possible misperceptions about promotion opportunities. At the very least, we think it is reductionist to assume that perceptions follow in a simple manner from experiences in organizations.

Literature Review

Affirmative action differs from previous legislative attempts to end gender and racial employment discrimination. Title VII of the Civil Rights Act, passed by Congress in 1964, established the explicit prohibition of racial, sexual, ethnic or religious discrimination. Shortly after the passage of the Civil Rights Act, President Lyndon Johnson issued Executive Order 11246, establishing what is now known as affirmative action. Affirmative action and “equal opportunity,” as the Civil Rights Act came to be known, differ in at least five ways (Crosby 1994:18-21). For our purposes, it is sufficient to note that affirmative action is much more proactive in rectifying discrimination, whereas equal opportunity is more reactive and serves to redress documented instances of discrimination.

Support among the public for affirmative action varies. Broad cross-sectional studies of the United States population, such as the studies done by Kluegel and his colleagues (Kluegel & Bobo 1993, Kluegel & Smith 1986), suggest that women and racial minorities are more supportive of affirmative action than white males. Kluegel and Bobo (1993) found that proactive measures such as race-targeting diminished white support for opportunity-enhancing policies by about 22 percent on average.

Using data similar to that of Kluegel and Bobo (1993), Taylor (1995) examines the contextual effects of working in organizations with and without affirmative action programs. Taylor found no evidence to support the contention that experience with race targeting creates white resentment or polarization. Indeed, Taylor (1995) suggests that experience with affirmative action for white men may generate support for the policy as a whole. Of course, Taylor’s study does not contradict directly the work of Kluegel (Kluegel & Bobo 1993, Kluegel & Smith 1986)

since she compares only white workers whose employers do and do not practice affirmative action. Taylor's research does show that experience with affirmative action does not necessarily make white males any more negative about affirmative action and in some cases it may make them more supportive.

For our purposes, the value of the research by Kluegel is limited because the studies do not control for the respondents' experiences with affirmative action. Taylor, on the other hand, does control for respondents' experiences with affirmative action, but Taylor does not provide comparisons between different racial groups. More limiting is that none of the studies examine how respondents' perceptions of opportunities for job advancement are affected by affirmative action, an outcome we feel has been surprisingly overlooked. When outcomes are examined at all, the outcomes in question are generally objective in nature, as in looking at racial or gender representativeness within the work force or promotions awarded. Even with objective outcomes, the number of studies is relatively small, and the results are generally mixed (see Blum 1990, Hanna 1988, Thomas 1991; or for studies on the effects of affirmative action in the Federal government see Benokraitis & Gilbert 1989, DiPrete & Soule 1986, Kellough 1989).

The only studies that deal with perceptions of opportunities among respondents are those by Kluegel and Smith (1986) and Camp and Steiger (1995). As Kluegel and Smith argue, it is better to ask people about their opportunities than to ask them about discrimination. Discrimination is a "hot button" issue in American society; one that may evoke excessive ideological imagery among respondents that is borrowed from the media and other social institutions. Perceptions of opportunities, on the other hand, are probably more rooted in personal experience (Kluegel & Smith 1986: 56). We agree. The job advancement opportunities items

analyzed here were designed for a similar purpose, to assess differences in staff perceptions about opportunities with as little ideological contamination as possible (Saylor 1996).

While Americans in general perceive personal opportunity, there are important group differences. According to Kluegel and Smith (1986: 64), “blacks have a less favorable assessment of opportunity in general and of their personal opportunity than do whites, and women’s beliefs about these aspects of opportunity differ from men in the same direction.” Further analysis of these differences show that the greatest differences lie between people at different levels of socioeconomic status (p. 68), that blacks perceive that their opportunity is much more limited by discrimination than do whites (p.200), and that black-white differences are greater on issues related to Black opportunity while male-female differences are less on issues related to women’s opportunity (p.240).

Camp and Steiger (1995) also found group differences in perceptions of opportunity in a case study of workers of one organization, but their results are somewhat different than those of Kluegel and Smith (1986). Much of the difference between the findings of Camp and Steiger and Kluegel and Smith is probably due to the implicit control for exposure to affirmative action programs in the Camp and Steiger study. The respondents studied by Camp and Steiger are all employed by the same affirmative action employer, the Federal Bureau of Prisons (BOP). We do not have any information about respondents’ experiences with affirmative action in the Kluegel and Smith study. Regardless, unlike Kluegel and Smith, Camp and Steiger found no difference between males and females in their assessments of personal job advancement opportunities either within the specific prison of employment or within the BOP overall. Similar to Kluegel and Smith, men rated opportunities for minorities more favorably than did women. But, again, unlike Kluegel

and Smith, Camp and Steiger found that blacks more strongly agreed than whites that they personally have job advancement opportunities. As did Kluegel and Smith, Camp and Steiger found that whites more strongly agree than blacks that minorities have job advancement opportunities (see Appendix 2 for the results produced by Camp and Steiger [1995]).

The results presented by Camp and Steiger (1995) are intriguing. When asked about their own opportunities, there is very little difference between the average ratings provided by blacks and whites, and no difference between men and women (see Appendix 2). These findings alone seem to imply that, at the BOP anyway, there is recognition among minority and majority members of the fairly equal opportunities for job advancement available to minority and majority group members.¹ However, when asked to assess opportunities available to minorities as a group, there is a large discrepancy between blacks and whites and a similar gap between men and women. Taken together, these findings imply that majority and minority group members think about their own opportunities for promotion in a similar fashion, but they do not extend that same reasoning when thinking about the opportunities available to minorities as a group at the BOP.

Camp and Steiger (1995) did not explore the nature of the difference between black and white officers in their responses to questions about minority job advancement opportunities. We believe that such an examination is crucial. In particular, we think it is necessary to examine the empirical nature of the discrepancies between majority and minority evaluations of own and minority opportunities. Why do the perceptions of blacks and whites, men and women, regarding their own opportunities for advancement accurately reflect the objective data on promotions

¹We demonstrate in this analysis that, objectively, majority and minority group members and men and women have fairly comparable promotion opportunities at the BOP, at least as measured by aggregate promotion data for 1992, 1993, and 1994.

presented below, while the perceptions regarding minority opportunity demonstrate wide disagreement between majority and minority group members? We analyze the same data used in the study by Camp and Steiger (1995) to address these issues.

Hypotheses and Methods

One possible explanation for the discrepancy in attitudes comes from the work of Crosby on the denial of personal disadvantage (Crosby 1984, Crosby et al. 1989). In her research, Crosby found that racial minorities and women are willing to indicate on surveys that the groups they comprise face discrimination and suffer from disadvantage, but the same respondents are unwilling to acknowledge that the disadvantage extends to them personally. The reasons given for this phenomenon are largely psychological. While the data analyzed here and by Camp and Steiger (1995) pertain to perceptions of opportunity rather than discrimination and disadvantage, we can still use the logic provided by Crosby to derive a hypothesis that we call the *denial of minority opportunity*.²

Hypothesis 1: The lower evaluations of minority opportunities for job advancement provided by women and minorities are due to women and minorities not recognizing the opportunities available to minorities and thus providing evaluations of minority opportunity that are lower than their evaluations of their own opportunity.

Evidence against Hypothesis 1 would come if women and minority members provide comparable evaluations of their own and minority opportunities.

Another possibility for the reversal in attitudes about job advancement opportunities is provided by the research on national opinions toward affirmative action. National surveys find

²Keep in mind that the hypotheses are derived for an agency in which there is an affirmative action program. As shown below, minorities and women tend to be slightly over-represented at the aggregate level in terms of receiving promotions.

that women and minorities more strongly favor affirmative action programs. It seems likely that items inquiring into minority job advancement opportunities tap into these opinions about affirmative action, especially among whites and males who typically hold more negative views. As such, rather than minorities failing to recognize minority opportunities, the discrepancy may be more due to historically favored groups (whites and males) overestimating the opportunities for job advancement available to minorities, and, thus, underestimating the opportunities available to majority members. We call this hypothesis the *denial of majority opportunity* on the part of formerly privileged groups.

Hypothesis 2: The lower evaluations of minority opportunities for job advancement provided by women and minorities are due to overestimates of minority opportunity provided by white and male correctional officers. That is, women and minority correctional officers recognize that minorities as a group share job opportunities comparable to their own personal opportunities, but white and male correctional officers exaggerate the small advantages going to minorities.

Counter evidence to Hypothesis 2 comes primarily in the form of women and minority members providing lower evaluations of minority opportunities than their own opportunities. We already know from the work of Camp and Steiger (1995) that minorities assess their own opportunities in a slightly more favorable fashion than white officers. As will be shown below, there is slight empirical justification for these assessments. As such, it is expected that white officers should provide slightly higher evaluations of minority opportunities than their own opportunities. However, these evaluations should be comparable to the evaluations of minority opportunities provided by minority members, and we know from Camp and Steiger (1995) that the evaluations provided by majority members are much higher. If minorities and women provide comparable evaluations of their own and minority opportunities, then the large discrepancy must arise from

majority males providing exaggerated evaluations of minority opportunities and Hypothesis 2 is supported.

It is also possible that both processes outlined in the first two hypotheses are at work. As such, we are left with a mixed hypothesis.

Hypothesis 3: The lower evaluations of minority opportunities for job advancement provided by women and minorities are due to a combination of the denial of minority opportunities by women and minority correctional officers and the denial of majority opportunities by male and white correctional officers.

The data used in this study come from two general sources. First, the major source of data analyzed, that on perceptions of job opportunities, are taken from the 1994 administration of the Prison Social Climate Survey (PSCS). The PSCS has been given annually since 1988 to a stratified proportional probability sample of Bureau of Prisons staff working at field locations (see Saylor [1984] for a description of the survey design). In 1994, the PSCS was administered to 6,903 staff working in 74 distinct BOP prisons; 6,004 staff responded for a response rate of 86.98%. In this analysis, we select only the 1,242 respondents who self-identified as non-supervisory correctional officers and who completed the items in the survey about job opportunities. By focusing on correctional officers, we get a large group of individuals with similar job responsibilities.

The data on promotions, which make up Table 1 and provide the objective context for job advancement opportunities at the BOP, are taken from operational data bases used to generate statistical information reported in the Executive Staff Module (Muth 1995) of the Bureau of Prison's Key Indicators/Strategic Support System (KI/SSS). KI/SSS is an interactive management

information system that is pressed onto CD-ROM monthly and distributed to BOP managers (Gilman 1991, Saylor 1988).

In this analysis, we use the same measures analyzed by Camp and Steiger (1995) as dependent variables, but we utilize them in a different manner. Where Camp and Steiger (1995) simply look at the four job opportunity measures as dependent measures in isolation from one another (see Appendix 2), we use the measures in a comparative fashion. We compute our dependent measures by comparing the Likert category that respondents choose to assess their own opportunities for job advancement to the Likert category that they select to rate minority opportunities for job advancement.³ This gives three possibilities; respondents can rate minority opportunity as higher than their own, lower than their own, or the same as their own.

We compute two dependent measures respectively for the items about job advancement opportunities at the specific institution where respondents are employed and for job advancement opportunities within the BOP. We do not expect there to be major differences in the performance of the two measures. Within the BOP, promotion opportunities have been linked historically with transfers to other locations. Our concern here is not with whether respondents perceive more opportunity at one level of the organization than the other, though this historical pattern does explain why the survey instrument contains questions about opportunities at both the institution and overall organization level. The institutional comparison score is derived by comparing the values provided for the two items 1) institution has opportunity for me measure (INOPPME) and 2)

³We chose this method over computing a simple difference score between the respective measures because it simplifies the assumptions we have to make about the metric of the scales for the different measures. All we assume with this approach is that the respondents answer the respective questions while taking into account their previous responses. Since the items are located together in the survey instrument, this is not an unreasonable assumption.

the institution has opportunity for minorities (INOPPMIN).⁴ Likewise, the difference in perceptions of opportunity within the overall organization is obtained by comparing the items 1) BOP has opportunity for me (BOPOPPME) and 2) the BOP has opportunity for minorities (BOPOPMIN) (see Appendix 1 for the exact wording of the respective items).

We perform multinomial logistic regression analysis on the difference measures described above to assess Hypotheses 1 through 3. These models allow us to assess in a multivariate sense whether respondents rate minority opportunities as being lower than their own opportunities, comparable to their own opportunities, or higher than their own opportunities.

In addition to entering race and sex into models of the difference measures to evaluate Hypotheses 1 through 3, we control for several other individual level effects that we feel are related to evaluations of job advancement opportunity. In particular we control for education, Hispanic ethnicity, age, tenure at the Bureau of Prisons, and whether or not the respondent has ever accepted a transfer from one BOP facility to another. We are not confident enough about the effects of these variables to generate formal sub-hypotheses nor are we substantively interested in the effects in this analysis, but we do generally expect them to behave in specific ways. We expect higher levels of education to mediate against misperceptions of relative job advancement opportunities. We expect Hispanic ethnicity to generally behave in a manner similar to race, given the same general barriers faced by Hispanics and members of racial minorities. We expect higher values for age and tenure to lead respondents to exaggerate the differences in opportunity between minorities and non-minorities. And, we expect the greater experience with the BOP

⁴ See Appendix 1 for an exact wording of the four original survey questions used to calculate the two difference scores analyzed here.

obtained by accepting a transfer from one BOP facility to another to narrow the gap between perceptions of own and minority job advancement opportunities.

Initially, we included aggregate and organizational measures in the models. In preliminary ordinary least squares results (not presented here), we did not find any effects for the aggregate and organizational measures we considered, including factors such as the security level of the institution. In fact, when modeling the actual magnitude of the difference between own and minority opportunity, we found little variation in institution means for the difference measures when the effects of the individual-level variables were controlled. Therefore, we concluded these contextual effects have little impact on the determination of perceptions and have thus focused on individual-level variables.

Results

Table 1 shows the promotion rates for all staff, females, males, and the different racial groups within the BOP for the years 1992 through 1994. It is important to note that these values are for BOP staff in all types of jobs, and not just for correctional officers alone.⁵ Table 1 also reports a simple equity measure for females and males and the different racial groups. The equity measure is defined as the ratio of the percentage of promotions going to the group in question divided by the respective percentage of BOP staff in the group in question.⁶ For example, females

⁵The promotion rate is defined as the total number of promotions that occur over the course of the year for each aggregate category in question divided by the total number of promotions for the year. Since Federal regulations generally prohibit an individual from receiving more than one promotion in a twelve month period, these data are not biased by “star” performers who receive multiple promotions during one year.

⁶ The percentage of staff in the category in question is computed by taking an average of monthly data on the number of individuals in the aggregate category of question and dividing it by an average of monthly data for the total number of individuals in active staff status.

received 28% of the promotions in 1994 and comprised, on average, 26% of BOP staff. The ratio of these two percentages, 1.06, is the equity measure for females in 1994, demonstrating that they received more of the promotions in 1994 than would be expected simply from their representation among BOP staff.

As can be seen in the results for the equity measures reported in Table 1, females received a disproportionate share of promotions in 1992, 1993, and 1994. The equity scores for females in 1992 and 1993 are higher than the equity score in 1994, suggesting a slight drop-off in 1994. Males, on the other hand, share the converse of the female situation. That is, males receive a smaller percentage of the promotions as a group in 1992, 1993, and 1994 relative to their numbers.

Table 1 also presents findings for promotions aggregated by race. The results show that blacks have a slightly higher equity rate for 1992, and a clearly higher equity rate for 1994. In 1993, blacks received promotions at a rate lower than what would be expected from their representation among BOP staff. Other staff, on the other hand, had clearly higher equity scores for all of the years. The white equity scores are lower than 1 in 1992 and 1994, and the equity score is effectively 1 in 1993.

Given these results, it seems reasonable to assume that the BOP has been aggressively pursuing affirmative action during the years leading up to and including the administration of the 1994 Prison Social Climate Survey.

Table 2 presents the bivariate results between sex and minority opportunity within the BOP, and Table 3 provides results for the relationship between sex and minority opportunity within the respondents' institutions. As can be seen, males are more likely than females to rate

minority opportunities higher than their own opportunities, both at the levels of the BOP and the institution, though the difference is not statistically significant for the institution. In evaluations of opportunities within the BOP, over 43% of males rate minority opportunities within the BOP as being higher, where only 28.4% of females do. Females are more likely than males to rate minority opportunities as being the same as their own opportunity level.

Tables 4 and 5 provide the bivariate results between race and the difference variables at the BOP and institution levels. As can be seen, the relationship between race and differences in opportunity are stronger than the relationships between sex and the opportunity variables. Whites are much more likely than black or other race correctional officers to evaluate the opportunities of minorities higher than their own opportunity. This is especially true for the difference in opportunities within the BOP.

The bivariate results presented in Tables 4 and 5, and to a lesser extent Tables 2 and 3, generally support Hypothesis 2. That is, the difference between minority and non-minority, and male and female, evaluations of minority opportunities seems to be caused more by males and especially whites overestimating the opportunities minorities have for job advancement. There is less of a tendency for minority members and women to report minority opportunities as being less than their own, although indeed there are some instances of reporting in this direction, especially for evaluations by black and other race correctional officers of opportunities within the institution (see Table 5).

The question now, is, does this partial support for Hypothesis 2 hold up in multivariate analyses?

Table 6 presents the results for the baseline logistic model predicting differences in evaluations of minority and own opportunities in the BOP. The R^2 and adjusted R^2 measures (Nagelkerke 1991) suggest a reasonable fit to the data analyzed with this model with values of .202 and .235 respectively. The effects of the educational comparisons, age, and sex are not statistically significant at the conventional cutoff of $\alpha = .05$.

The effects for race presented in Table 6 are generally consistent with Hypothesis 2. That is, for a typical white, non-Hispanic, female correctional officer, the highest probabilities are that she indicates that minority officers have greater opportunities for promotion than she has ($\hat{p}_3 = .460$) or the opportunities are the same ($\hat{p}_2 = .471$) (see Table 7).⁷ The typical black, non-Hispanic, female officer, on the other hand, is much less likely ($\hat{p}_3 = .107$) to see the opportunities of minorities as being greater than their own opportunities. In fact, there is somewhat of a tendency to see minority opportunities as lower than their own for black, female officers ($\hat{p}_2 = .345$), although the predominant response is to see the opportunities in the same light ($\hat{p}_1 = .548$). Other race, non-Hispanic, female officers respond in between the patterns noted for black and white female officers, though the model predicts that the overwhelming majority see their opportunities as being the same as minority opportunities ($\hat{p}_2 = .573$).

Table 8 presents the results for the baseline logistic model predicting differences in evaluations of minority and own opportunities at the institution. The R^2 and adjusted R^2 measures suggest a reasonable fit to the data analyzed with this model with values of .237 and .279 respectively. The effects of two of the educational comparisons (officers with some college

⁷ Typical hereafter refers to a correctional officer with a high school education, mean values on age and tenure, and no location transfer within the BOP.

education and officers with a bachelors degree compared to officers with a high school education), transfer status, and sex are not statistically significant. The finding for sex is especially surprising given our theoretical expectations and previous analysis.

The effects for race presented in Table 8 are also generally consistent with Hypothesis 2. The typical white, female, non-Hispanic correctional officer clearly sees the opportunities for minorities at the institution as being higher than her own opportunities ($\hat{\beta}_3 = .678$). The typical black, female, non-Hispanic officer, on the other hand, sees minority opportunities as being lower ($\hat{\beta}_1 = .430$) or the same ($\hat{\beta}_2 = .394$). The typical other race, female, non-Hispanic officer, somewhat surprisingly, sees minority opportunities as being either higher ($\hat{\beta}_3 = .420$) or the same ($\hat{\beta}_2 = .398$) (see Table 9).

Discussion

The results of the multinomial logistic regression analysis are most consistent with Hypothesis 2. Hypothesis 2 states that the differences between minorities and non-minorities, and women and men, in perceptions of own and minority opportunity are caused by non-minorities and males exaggerating the opportunities available to minorities. Perhaps whites accurately perceive the marginal under-representation of whites in the promotion pool. If so, whites should rate minority opportunities as higher than their own, but those evaluations should be generally consistent with the evaluations given by minorities. But we know from Camp and Steiger (Camp & Steiger 1995: 271) that there is great disagreement between black and white officers on perceptions of minority opportunity. On a 7 point Likert scale from strongly disagree to strongly agree, Camp and Steiger report that whites are 1.65 units higher on average than blacks for assessments of opportunities for minorities within the institution and .93 units higher on

assessments of opportunities for minorities within the overall BOP when multivariate controls similar to those used here are introduced (Camp & Steiger 1995: 271). Plus, we know from the logistic regression analysis reported here that minorities, for the most part, rate minority opportunities as being consistent with their own (generally equal) opportunity. Therefore, it is not an underestimation of minority opportunities by black officers that generally causes the disagreement, it is an overestimation of minority opportunities by white officers.

Support for Hypothesis 2 regarding the group findings for race is not unequivocal. In particular, there is some evidence for the denial of minority opportunity hypothesis among black correctional officers, especially when they are evaluating opportunities for job advancement within their current institution of employment. Even so, the most typical pattern is for minorities to see the group minority opportunities as being comparable to or higher than their own opportunity which is consistent with Hypothesis 2. For whites, the general pattern is to see minority opportunities as being higher than personal opportunities. As such, we tentatively conclude that Hypothesis 2 is better supported in this analysis than the competing hypotheses, Hypothesis 1 and Hypothesis 3.

Since we do not find statistically significant sex effects for our difference measures in the multivariate models, we conclude that Hypotheses 1 through 3 are irrelevant for sex, although only at the Federal Bureau of Prisons. The statistically significant relationships between sex and the difference measures reported in Tables 2 and 3 disappear when controls for other characteristics of the correctional officers are added.

While not the specific focus of this analysis, the results for the other individual level variables are interesting. Education does not play a role in mediating perceptions of job

advancement opportunity. In fact, given the educational comparisons we make, we find only one educational comparison to be statistically significant. In the model of differences in opportunity within the respondent's own institution, respondents with an advanced college degree are more likely to see minority opportunities as being more favorable than their own. This finding could very well represent the frustrations of correctional officers with advanced degrees as reported by Jurik and her colleagues (Jurik et al. 1987). Regarding the comparisons between Hispanic and non-Hispanic correctional officers, we did indeed find that Hispanic correctional officers provide more equitable evaluations of the differences between minority opportunities and their own opportunity. This finding is much as we expected.

Age and tenure did not affect the differences in minority and own evaluations exactly as we expected. Age obtains a statistically significant effect only in the model of differences in opportunity within the respondent's own institution. Even here, the effect is not what we expected. While we expected older workers to provide less favorable evaluations of the differences between minority opportunity and their own, we found the opposite. Increasing age works to lower the difference. Tenure did behave as we expected. Officers with more tenure are more likely to rate minority opportunities as higher than own.

Finally, whether a correctional officer had ever transferred from one BOP facility to another was statistically important in only the model of differences in opportunity within the overall organization. Officers who had transferred within the BOP were less likely to evaluate minority opportunities as being higher than their own, as expected. Again, we suspect this finding is due to the broader understanding of the operations of the BOP gained as officers gain experience at more than one BOP facility.

Conclusions

What are the implications of this study for theory and practice? For theory, we see from the research of Camp and Steiger (1995) that there is a general correspondence between the perceptions of personal job advancement opportunity and objective conditions, at least for racial groups. Black workers at the BOP may enjoy a slight advantage in the aggregate promotion rate, and as Camp and Steiger (1995) note, this is reflected in the perceptions of black and white workers. It is probably more accurate to say that the playing field has been leveled for all races rather than to say it favors any particular race given the slight differences between racial groups. Regardless, the attitudinal results suggest that workers are fairly objective in evaluating their *own* opportunities for job advancement and are not influenced, on average, by the racial group to which they belong. In the case study of correctional officers at the BOP, it appears perceptions of their own opportunities that black and white correctional officers provide reflect the slight advantages that minorities enjoy.

The same cannot be said for evaluations of minority opportunities. These results suggest that black and white correctional officers continue to view their place of employment quite differently. From the previous research of Camp and Steiger (1995), we were motivated to investigate why there appears to be such a large amount of disagreement between black and white workers about minority opportunities for job advancement. While the results do not totally rule out the notion that black workers deny minority opportunities for job advancement, the results presented here more strongly suggest that the differences between black and white evaluations of minority opportunities are due to a failure of white correctional officers to recognize the

opportunities that whites have. White officers appear to exaggerate the opportunities for minority advancement relative to their own opportunities.

What cannot be determined from this study, though, is why white officers exaggerate the opportunities available to minorities. It could be that the exaggeration is introduced by general feelings about affirmative action, in line with the trends reported by Kluegel and Smith (1986), or it could be that the feelings arise from the officers' perceptions of their experiences with affirmative action at the BOP. If forced to choose, we would guess that questions asking specifically about minority opportunities are "loaded" in the sense that they invoke responses based upon more than direct experience with affirmative action, but we have no means of substantiating this point at present. Rather, we base the judgement upon the proper correspondence between objective conditions and perceptions of advancement opportunity when the questions are asked about personal opportunities, which probably more directly tap into respondents' experiences with affirmative action at the BOP.

From a policy or practice viewpoint, the results presented here suggest that efforts to address the discrepancies between black and white perceptions of minority opportunities need to be addressed mostly to white workers, at least in the case of the Federal Bureau of Prisons. What should be involved in those efforts is a much more difficult proposition to tackle. The difficulty arises from not knowing whether the exaggerated views of whites are imported into the organization from outside influences or are generated from experiences with affirmative action policy at the BOP. Regardless, these results are suggestive that the disconnect between black and white opportunities for job advancement is predicated on misperceptions by white officers. We feel this is an important starting point for future research.

Clearly, more research is needed to address the theoretical and policy issues raised here. In particular, research is badly needed on the responses of formerly privileged groups, namely white males, as employment opportunities approach greater equity. Of course, the diminishing support for and increasing hostility to affirmative action may undermine proactive efforts at establishing level playing fields for all. Additionally, we need more information upon which perceptions are more instrumental in affecting organizational outcomes, perceptions of respondents' own opportunities or perceptions of minority opportunities.

In addition, further research is need to insure that promotion opportunities are available to minorities at the BOP when controls are introduced for factors that influence promotion rates. In particular, it is necessary to examine the movement of minorities and women into supervisory and managerial positions in the BOP. Despite the limitations noted, we believe this research begins to address, in a meaningful manner, the experiences of workers with affirmative action. We need to see more of this type of research to insure adequate theoretical understanding of the operation of affirmative action in the workplace and to insure the practical success of affirmative action policy.

Appendix 1

*INOPPME: There are job advancement opportunities in this facility for me.

*BOPOPPME: There are job advancement opportunities in the BOP for me.

†INOPPMIN: There are job advancement opportunities for minorities in this facility.

†BOPOPMIN: There are job advancement opportunities for minorities in the BOP.

*Items used to make comparisons between different groupings based on race and sex regarding the perceptions of *personal* opportunities for job advancement.

†Items used to make comparisons between different groupings based on race and sex regarding the perceptions of *minority* opportunities for job advancement.

All items are measured on a Likert scale with the choices being: Strongly Disagree, Disagree, Somewhat Disagree, Undecided, Somewhat Agree, Agree, Strongly Agree.

Appendix 2
 Taken from Table C in Camp and Steiger (1995: 271)
 OLS Models of Perceptions of Job Advancement Opportunities

<i>Explanatory Variables</i>	<i>INOPPME</i> \$	<i>BOPOPPME</i> \$	<i>INOPPMIN</i> \$	<i>BOPOPMIN</i> \$
<i>Gender</i>	0.1518	0.2189	-0.2243	-0.1836
<i>RaceB</i>	0.2668*	0.1837*	-0.6789*	-0.3493*
<i>RaceW</i>	-0.3401*	-0.1753*	0.9713*	0.5830*
<i>RaceO</i>	0.0733	-0.0084	-0.2924*	-0.2340*
<i>L_Age</i>	-0.1373	-0.7152*	-0.6613*	-0.6065*
<i>L_Tenure</i>	-0.4538*	-0.4192*	0.0581	0.0875
<i>Coll_Ed</i>	-0.3333*	-0.3103*	-0.0194	-0.0589
<i>Transfer</i>	-0.4039*	-0.1430	-0.5265*	-0.1983
<i>YearSaly</i>	0.0371	0.0819*	0.0955*	0.0888*
<i>SLHi</i>	0.3406*	0.0079	0.0019	0.0680
<i>SLMed</i>	0.0296	-0.0052	0.0094	0.0155
<i>SLLo</i>	-0.0860	-0.2138*	-0.1097	-0.1286
<i>SLMin</i>	-0.2057	0.0996	0.0481	0.1017
<i>SLAdm</i>	-0.0785 [†]	0.1115 [†]	0.0503 [†]	-0.0566 [†]
<i>RgMXR</i>	0.0445	0.0448	0.0505	0.0034
<i>RgNCR</i>	-0.1147	-0.1161	-0.0144	-0.0408
<i>RgNER</i>	-0.0531	-0.0529	0.1088	0.0947
<i>RgSCR</i>	0.0158	0.1249	-0.1690	-0.0009
<i>RgSER</i>	-0.0914	-0.0268	-0.1272	-0.0929
<i>RgWXR</i>	0.1989 [†]	0.0261 [†]	0.1513 [†]	0.0365 [†]
<i>C%FmPro</i>	-0.0028	0.0069	0.0083	0.0120*
<i>C%MnPro</i>	-0.0073	-0.0047	-0.0011	-0.0079
<i>C%FmStf</i>	0.0048	-0.0066	-0.0554	-0.0381
<i>C%MnStf</i>	-0.0112	0.0068	0.0237	0.0290
<i>C%FmSup</i>	0.0063	0.0034	0.0282*	0.0135
<i>C%MnSup</i>	-0.0122	-0.0186	0.0158	0.0019
<i>R²</i>	8.8%	9.3%	25.8%	16.1%

* T significant at p # .05

[†] Significance of coefficient not tested.

Gender: dummy variable for sex with female=1. RaceB to RaceO: effects vector for race, respectively, Black, White, and Other. L_Age: logarithm of age. L_Tenure: logarithm of tenure at BOP. Coll_Ed: dummy for education with 1=BS or higher degree. Transfer: dummy for ever transfer to another BOP location with 1=yes. YearSaly: family income in increments of \$10,000 up to \$70,000 or more. SL Hi through SL Adm: effects vector representing institution security level, respectively, High, Medium, Low, Minimum, and Administrative. RgMXR through RgWXR: effects vector representing Bureau of Prisons administrative region, respectively, Mid-Atlantic, North-Central, Northeast, South-Central, Southeast, and Western. C%FmPro: change in percent of promotions going to females from previous year. C%MnPro: change in percent of promotions going to minorities from previous year. C%FmStf: change in percent of female staff. C%MnStf: change in percent of minority staff. C%FmSup: change in percent of female supervisors. C%MnSup: change in percent of minority staff.

Table 1
Organizational Data on Promotions for 1992, 1993, 1994
by Sex and Race

	1992	1993	1994
Total Active Staff (count)	23,145	24,244	25,505
Total Promotions (count)	7,099	4,767	4,696
% Staff Receiving a Promotion	31%	20%	16%
Females			
% of Total Promotions	31%	31%	28%
% of Total Staff	27%	27%	26%
Equity Ratio*	1.16	1.17	1.06
% Females Promoted	35%	23%	17%
Males			
% of Total Promotions	69%	69%	72%
% of Total Staff	73%	73%	74%
Equity Ratio	0.94	0.94	0.98
% Males Promoted	29%	18%	16%
Blacks			
% of Total Promotions	19%	16%	21%
% of Total Staff	18%	18%	18%
Equity Ratio	1.04	0.88	1.13
% Blacks Promoted	32%	17%	18%
Whites			
% of Total Promotions	68%	71%	64%
% of Total Staff	71%	71%	70%
Equity Ratio	0.96	1.01	0.92
% Whites Promoted	29%	20%	15%
Other Race			
% of Total Promotions	13%	13%	15%
% of Total Staff	11%	11%	12%
Equity Ratio	1.21	1.14	1.25
% Other Promoted	37%	22%	20%

*The Equity Ratio is computed as the ratio of the % of Total Promotions going to staff in a given category to the % of Total Staff in the respective category.

Table 2
Bivariate Relationship Between Sex and Perceptions of Minority Opportunities
Within the Overall Organization

	Minority Opportunities Lower than Own	Minority Opportunities Same as Own	Minority Opportunities Higher than Own	Total
Males	11.9%	44.8%	43.3%	1,037
Females	13.9%	57.7%	28.4%	201
Total	151	581	506	1,238

$\chi^2 = 15.73$

Prob. > $\chi^2 = .00038$

Table 3
Bivariate Relationship Between Sex and Perceptions of Minority Opportunities
at the Specific Institution of Employment

	Minority Opportunities Lower than Own	Minority Opportunities Same as Own	Minority Opportunities Higher than Own	Total
Males	12.9%	27.7%	59.4%	1,035
Females	18.1%	30.7%	51.3%	199
Total	169	348	717	1,234

$\chi^2 = 5.77$

Prob. > $\chi^2 = .05593$

Table 4
Bivariate Relationship Between Race and Perceptions of Minority Opportunities
Within the Overall Organization

	Minority Opportunities Lower than Own	Minority Opportunities Same as Own	Minority Opportunities Higher than Own	Total
White	7.5%	39.9%	52.6%	859
Black	26.1%	60.7%	13.2%	234
Other	17.4%	65.1%	17.4%	149
Total	151	582	509	1,242

$\chi^2 = 177.69$

Prob. > $\chi^2 = .00001$

Table 5
Bivariate Relationship Between Race and Perceptions of Minority Opportunities
at the Specific Institution of Employment

	Minority Opportunities Lower than Own	Minority Opportunities Same as Own	Minority Opportunities Higher than Own	Total
White	5.7%	22.8%	71.5%	859
Black	35.1%	39.0%	26.0%	231
Other	26.5%	41.5%	32.0%	147
Total	169	347	721	1,237

$\chi^2 = 247.24$

Prob. > $\chi^2 = .00001$

Table 6
 Logistic Regression Model of Probabilities that Staff See Minority
 Opportunities as Being Higher, the Same, or Lower than Their Own
 Opportunities within the Overall Organization

Variable	Estimate β _i	Odds Ratio	Wald Chi-Square	Probabilty > Chi-Square
INTERCEP1	-0.1621	.	0.71	0.3989
INTERCEP2	2.6074	.	147.99	0.0001
SOMECOLL	0.1643	1.179	1.38	0.2396
COLL_DEG	0.1662	1.181	0.82	0.3646
GRAD_DEG	0.4549	1.576	2.94	0.0865
BLACK	-1.9649	0.140	132.73	0.0001
OTHER	-0.6940	0.500	7.13	0.0076
HISPANIC	-1.0597	0.347	17.53	0.0001
MALE	0.3088	1.362	3.43	0.0640
AGE (log)	-0.7505	0.472	3.13	0.0770
TENURE (log)	0.6062	1.833	51.31	0.0001
TRANSFER (yes)	-0.4081	0.665	5.84	0.0157

R² = .2016

Adjusted R² = .2346

The two fitted parallel regression lines are given by the equations:

$$\text{logit}(\hat{p}_3) = -0.1621 + \sum_{i=3}^{12} \beta_i X_i$$

$$\text{logit}(\hat{p}_2 + \hat{p}_3) = 2.6074 + \sum_{i=3}^{12} \beta_i X_i$$

where \hat{p}_3 is the probability that a respondent evaluates minority opportunities higher than their own opportunities, \hat{p}_2 is the probability that a respondent evaluates minority opportunities the same as their own opportunities, and \hat{p}_1 is the probability that a respondent evaluates minority opportunities lower than their own opportunities ($\hat{p}_1 = 1 - \hat{p}_3 - \hat{p}_2$).

Table 7
 Probabilities Associated with Comparisons of Minority and Own
 Opportunities within the BOP for Typical, Female Correctional Officers*

Probability**	Description	Whites	Black	Other
\hat{p}_1	Minority Lower	.069	.345	.129
\hat{p}_2	Minority Same	.471	.548	.573
\hat{p}_3	Minority Higher	.460	.107	.298

*The probabilities for females and males in this model are not statistically different. Probabilities for males are slightly different than those presented here, but not in a statistically significant fashion.

** The probabilities for a typical, non-Hispanic officer are computed from the logistic regression results presented in Table 13 given the codings used in the following manner.

Whites

$$\hat{p}_3 = \frac{e^{\text{intercept1}}}{1 + e^{\text{intercept1}} + e^{\text{intercept1} + \text{draceo}}}$$

$$\hat{p}_2 = \left(\frac{e^{\text{intercept2}}}{1 + e^{\text{intercept2}}} \right) - \hat{p}_3$$

$$\hat{p}_1 = 1 - \hat{p}_2 - \hat{p}_3$$

Blacks

$$\hat{p}_3 = \frac{e^{\text{intercept1} + \text{draceb}}}{1 + e^{\text{intercept1} + \text{draceb}} + e^{\text{intercept1} + \text{draceo}}}$$

$$\hat{p}_2 = \frac{e^{\text{intercept2} + \text{draceb}}}{1 + e^{\text{intercept2} + \text{draceb}} + e^{\text{intercept2} + \text{draceo}}}$$

$$\hat{p}_1 = 1 - \hat{p}_2 - \hat{p}_3$$

Others

$$\hat{p}_3 = \frac{e^{\text{intercept1} + \text{draceo}}}{1 + e^{\text{intercept1} + \text{draceo}} + e^{\text{intercept1} + \text{draceb}}}$$

$$\hat{p}_2 = \frac{e^{\text{intercept2} + \text{draceo}}}{1 + e^{\text{intercept2} + \text{draceo}} + e^{\text{intercept2} + \text{draceb}}}$$

$$\hat{p}_1 = 1 - \hat{p}_2 - \hat{p}_3$$

Table 8
 Logistic Regression Model of Probabilities that Staff See Minority
 Opportunities as Being Higher, the Same, or Lower than Their Own
 Opportunities at Their Own Institution of Employment

Variable	Estimate	Odds Ratio	Wald Chi-Square	Probabilty > Chi-Square
INTERCEP1	0.7458	.	13.17	0.0003
INTERCEP2	2.5722	.	133.44	0.0001
SOMECOLL	0.2581	1.295	2.96	0.0852
COLL_DEG	0.2898	1.336	2.13	0.1440
GRAD_DEG	0.7553	2.128	6.79	0.0092
BLACK	-2.2891	0.101	185.65	0.0001
OTHER	-1.0694	0.343	16.87	0.0001
HISPANIC	-1.0042	0.366	15.85	0.0001
MALE	0.2020	1.224	1.31	0.2527
AGE (log)	-1.3571	0.253	8.90	0.0027
TENURE (log)	0.5889	1.802	45.75	0.0001
TRANSFER (yes)	-0.2198	0.803	1.48	0.2235

$R^2 = .2365$

Adjusted $R^2 = .2791$

The two fitted parallel regression lines are given by the equations:

$$\text{logit}(\hat{p}_3) = -0.1621 + \sum_{i=3}^{12} \beta_i X_i$$

$$\text{logit}(\hat{p}_2 + \hat{p}_3) = 2.6074 + \sum_{i=3}^{12} \beta_i X_i$$

where \hat{p}_3 is the probability that a respondent evaluates minority opportunities higher than their own opportunities, \hat{p}_2 is the probability that a respondent evaluates minority opportunities the same as their own opportunities, and \hat{p}_1 is the probability that a respondent evaluates minority opportunities lower than their own opportunities ($\hat{p}_1 = 1 - \hat{p}_3 - \hat{p}_2$).

Table 9
 Probabilities Associated with Comparisons of Minority and Own
 Opportunities at the Institution for Typical, Female Correctional Officers*

Probability**	Description	Whites	Black	Other
\hat{p}_1	Minority Lower	.071	.430	.182
\hat{p}_2	Minority Same	.251	.394	.398
\hat{p}_3	Minority Higher	.678	.176	.420

*The probabilities for females and males in this model are not statistically different. Probabilities for males are slightly different than those presented here, but not in a statistically significant fashion.

** The probabilities for a typical, non-Hispanic officer are computed from the logistic regression results presented in Table 13 given the codings used in the following manner.

Whites

$$\hat{p}_3 = \frac{e^{\text{intercept1}}}{1 + e^{\text{intercept1}} + e^{\text{intercept1} + \text{draceo}}}$$

$$\hat{p}_2 = \left(\frac{e^{\text{intercept2}}}{1 + e^{\text{intercept2}}} \right) - \hat{p}_3$$

$$\hat{p}_1 = 1 - \hat{p}_2 - \hat{p}_3$$

Blacks

$$\hat{p}_3 = \frac{e^{\text{intercept1} + \text{draceb}}}{1 + e^{\text{intercept1} + \text{draceb}} + e^{\text{intercept1} + \text{draceo}}}$$

$$\hat{p}_2 = \frac{e^{\text{intercept2} + \text{draceb}}}{1 + e^{\text{intercept2} + \text{draceb}} + e^{\text{intercept2} + \text{draceo}}}$$

$$\hat{p}_1 = 1 - \hat{p}_2 - \hat{p}_3$$

Others

$$\hat{p}_3 = \frac{e^{\text{intercept1} + \text{draceo}}}{1 + e^{\text{intercept1} + \text{draceo}} + e^{\text{intercept1} + \text{draceb}}}$$

$$\hat{p}_2 = \frac{e^{\text{intercept2} + \text{draceo}}}{1 + e^{\text{intercept2} + \text{draceo}} + e^{\text{intercept2} + \text{draceb}}}$$

$$\hat{p}_1 = 1 - \hat{p}_2 - \hat{p}_3$$

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