

Organizational Fairness and Diversity Management in Public Organizations: Does Fairness Matter in Managing Diversity?

Review of Public Personnel Administration
2014, Vol. 34(4) 307–331
© 2013 SAGE Publications
Reprints and permissions:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0734371X13486489
rop.sagepub.com



Sungjoo Choi¹ and Hal G. Rainey²

Abstract

Globalization, migration, initiatives for social justice, and other developments have made the representation of diverse groups and relations among them an important issue for organizations in many nations. In the United States, government agencies have increasingly invested in managing demographic diversity effectively. This study examines how perceived organizational fairness combined with diversity management relates to employees' job satisfaction in public organizations. To test these relationships we analyze data drawn from the 2006 Federal Human Capital Survey (FHCS) using hierarchical regressions—hierarchical ordered logistic regressions and hierarchical linear regressions. The results indicate that in an agency where members perceive higher levels of organizational fairness, and where employees perceive that diversity is more effectively managed, employees report higher satisfaction with their jobs. Interestingly, while high organizational fairness in association with diversity management efforts enhances the overall job satisfaction of employees, its positive impact was smaller for racial/ethnic minorities than Whites. In contrast, women tend to report higher job satisfaction than men when they perceive that their agency manages diversity effectively, and has just and fair procedures, whereas the relationship was not significant in the hierarchical linear regression model.

Keywords

affirmative action and equal employment opportunity (EEO), diversity, human capital, employee attitudes, behavior, and motivation, federal government HRM

¹Kyung Hee University, Seoul, South Korea

²University of Georgia, Athens, GA, USA

Corresponding Author:

Sungjoo Choi, Kyung Hee University, Seoul, South Korea.

Email: sungjoochoi@gmail.com

Introduction

Globalization, migration, initiatives for social justice, and other developments have made the representation of diverse groups and relations among them an important issue for organizations in many nations. In the United States over the past several decades, demographic diversity of the workforce has increased significantly. Various policies such as affirmative action and equal opportunity employment have helped the historically underrepresented groups gain access to the jobs from which they were previously excluded (Tsui & Gutek, 1999). More recently, the perspective on demographic diversity in organizations has broadened from pursuing affirmative action programs as legal requirements to taking advantage of individual differences to improve organizational efficiency and effectiveness (Wise & Tschirhart, 2000). However, the impacts of diversity in organizations still provoke controversy among diversity scholars. Demographic diversity in organizations can create benefits, but can also cause difficulties such as relational conflicts between people from different backgrounds.

The recent diversity research has shed light on managing differences in highly diversified workplaces (e.g., Choi 2009, 2012; Choi & Rainey, 2010; Kellough & Naff, 2004; Pitts, 2009; Thomas, 1990; Tsui & Gutek, 1999). Thomas (1990) introduced the idea of managing diversity, which involves creating an environment that helps every employee of majority and minority groups to fully utilize their potential to contribute to their organization. In addition, some researchers have found that diversity management harmonizes differences among employees and reduces relational conflicts. This in turn alleviates the potential negative effects of demographic differences such as decreased job satisfaction and organizational commitment (Choi, 2009; Ely, 2004; Jehn, Northcraft, & Neale, 1999; O'Reilly, Caldwell, & Barnett, 1989).

Even though public agencies have increasingly implemented diversity management programs, research analyzing effective strategies for diversity management in the public sector is still lacking (Pitts & Wise, 2010). In addition, many of these programs appear to be run without careful evaluation of intended beneficiaries' perceptions (Kellough & Naff, 2004). How organizational fairness relates to managing diversity has received very limited attention, except in discussions of Equal Employment Opportunity (EEO) and affirmative action programs (e.g., Nacoste, 1985; Richard & Kirby, 1998).

The present study discusses the relationships between diversity management and organizational fairness and employee job satisfaction in public organizations, drawing on a large sample of federal employees. First, we analyze how managing demographic diversity is related to public employees' job satisfaction. We argue that job satisfaction of employees is an important measure of effective diversity management, which contributes to employees' mental well-being. Furthermore, years of research have shown that job satisfaction is one of the most important work attitudes that can motivate individuals to improve their performance and reduce counterproductive behaviors such as turnover and absenteeism (Harrison, Newman, & Roth, 2006; Wright & Davis, 2003; Wright & Kim, 2004). We postulate that employees will show higher levels of job satisfaction when they perceive that their agency manages diversity effectively.

Next, we test the interaction effects of perceived organizational fairness and diversity management on job satisfaction. We do not incorporate the direct measure of whether diversity management programs are fairly implemented to our model, but we argue that the overall fairness in an agency will provide a nurturing environment that may foster the benefits of diversity management. We thus hypothesize that when employees perceive that diversity is managed well, and that the agency also has fair procedures or treatment, they will show higher levels of job satisfaction. Finally, our study examines the distinct impact of diversity management and organizational fairness on women and racial/ethnic minorities. We assume that women and racial/ethnic minorities will show higher job satisfaction when they perceive demographic diversity to be managed well and their agency to maintain higher fairness.

The next section provides a literature review, followed by development of hypotheses. Then, statistical analysis of the data and the findings are presented. Finally, implications of the results and conclusions are addressed.

Theoretical Backgrounds and Hypothesis

Prior research has reached no consensus on the impacts of diversity on organizational management (Milliken & Martins, 1996; Wise & Tschirhart, 2000). Instead, they agree that the consequences that diversity can have for an organization are complex and not yet captured by one common theory. The impacts of diversity may vary by types of diversity (e.g., demographic diversity, functional diversity) and organizational contexts (e.g., policies or strategies; Milliken & Martins, 1996).

Demographic diversity¹ has been a more salient concern than any other type of diversity in U.S. government. The potential negative outcomes of demographic diversity have been underscored because surface-level or relations-oriented differences may generate high levels of relational conflict between individuals with different demographic characteristics, unless adequately managed (Chatman & Flynn, 2001; Chatman, Polzer, Barsade, & Neale, 1998; Foldy, 2004; Jehn et al., 1999). Byrne's (1971) similarity-attraction theory suggests that people prefer interacting with similar others and find interactions with them easier, positively reinforcing, and more desirable compared with interactions with others who are different (Ely, 2004; Schneider, 1987; Tsui, Egan, & O'Reilly, 1992; Williams & O'Reilly, 1998). In a similar vein, social categorization and social identity theories developed by Tajfel (1981) and Turner (1987) suggest that people tend to classify themselves and others into various social categories such as organizational membership, religious affiliation, gender, and age cohort (Tajfel & Turner, 1985). Members of a group sharing the same social category establish positive social identity and confirm affiliation by showing favoritism to members of their own social category (Billig & Tajfel, 1973; Kramer, 1991). However, such favoritism based on similarity decreases interaction and integration within or between groups composed of people from different social categories through discrimination and self-segregation, drawing distinctive lines along which conflicts and miscommunication can occur.

Diversity Management and Job Satisfaction

As racial/ethnic minorities and women have increasingly been introduced to the workforce, organizations need to confront the challenge of managing these negative consequences of demographic diversity. Effectively managing demographic diversity in organizations can harmonize differences among employees and reduce relational conflicts, alleviating the potential negative effects of demographic differences (Ely, 2004; Jehn et al., 1999; O'Reilly et al., 1989; K. G. Smith et al., 1994). Indeed, some empirical research has demonstrated that efforts at managing diversity can also enhance positive outcomes such as increased employee job satisfaction and organizational commitment, and improved organizational performance (Choi, 2009; Choi & Rainey, 2010; Pitts, 2009). It is believed that policies and programs that promote representative bureaucracy and leadership in order to integrate employees of different backgrounds will help employees reduce relational conflicts or resolve them peacefully. Also, employees' perception of being accepted by the organization will improve their job satisfaction (Roberts & O'Reilly, 1979) and their commitment to the organization (O'Reilly et al., 1989). Based on these theoretical arguments, we postulate that efforts to manage demographic diversity will reduce its negative impacts and positively affect employees' job satisfaction.

Hypothesis 1 (H1): Perception of effective diversity management will be positively related to job satisfaction of employees.

Organizational Fairness and Diversity Management and Job Satisfaction

Despite the optimistic views on diversity management, the diversity management literature still shows little consensus over what outcomes diversity management can actually bring in diverse organizational contexts. This shows the need for further clarification of the nature of effective diversity management, and of managerial strategies that can be utilized to reduce negative effects of differences and enhance benefits of diversity. Kellough and Naff (2004), in their study of diversity management programs in U.S. federal agencies, found that the most commonly implemented strategies included managerial accountability for diversity, numeric representation, diversity training, mentoring, and shared values among employees, customers, and groups. However, research on diversity management can usefully go beyond the adoption of programs to examine the management of the programs and the overall organizational environment for diversity management. The adoption of diversity programs does not necessarily indicate their effective implementation. Indeed, there exist significant variations among the implementation of these diversity programs in federal agencies (Kellough & Naff, 2004).

What, then, determines effective diversity management? While numerous factors may support successful diversity management, we focus on organizational fairness. An organizational environment or atmosphere of general fairness and fair treatment can enhance perceptions of how diversity and individual differences are managed in

the organization. Our definition of organizational fairness closely resembles that of procedural justice² and we also develop our conception of organizational fairness draws on ideas that other scholars have associated with procedural justice. As described later, researchers analyzing procedural justice have emphasized the need to ascertain the existence of specific procedures in the organization in order to represent procedural justice appropriately. The survey data we use do not include questionnaire items we consider adequate to represent these procedures. So, we develop a measure that simply reflects whether the respondents feel that people are treated fairly in important organizational or personnel procedures. As with procedural justice, such perceptions appear obviously very important for individuals' satisfaction and adjustment in their workplaces. One of the very sensitive aspects of diversity programs, affirmative action programs, and similar processes in organizations concerns whether some employees feel that such programs provide unfair advantages for those employees the programs seek to protect and support. Where employees perceive a climate of general fairness and fair treatment, such perceptions should enhance positive perceptions of diversity management provisions.

The theory of procedural justice posits that when individuals perceive procedures as consistent, accurate, and unbiased, the procedures are considered fair (Leventhal, 1980). Previous research has shown that perception of procedural justice has been "a source of both job satisfaction and positive evaluations of the organization" (Cohen-Charash & Spector, 2001; Lind & Tyler, 1988, p. 191). Some scholars (e.g., Huo & Tyler, 2001; Tyler & Lind, 1992) propose that the fair treatment of diverse values and interests in decision-making procedures acts as a key factor that bridges those differences and integrates employees with such differences. Effective diversity management should also be associated with authorities' strong commitment to justice in organizations through such means as treating every individual fairly (Kellough & Naff, 2004). When they believe that authorities make decisions using fair procedures and treat subordinates fairly, subordinates are more willing to comply with decisions and policies even when the subordinates do not agree with or do not benefit from them (Greenberg & Folger, 1983; Huo & Tyler, 2001; Lind & Tyler, 1988). Especially in highly diversified settings, fair resolution of conflicts and disagreements can help employees trust authorities in organizations, facilitating collaboration toward achieving organizational goals. Thus, perceived fairness of formal rules and procedures will help manage diversity and improve employees' attitudes toward their organizations and supervisors, positively affecting job satisfaction of employees.

While a moderate number of studies (e.g., Buttner, Lowe, & Billings-Harris, 2010; Choi, 2009; Choi & Rainey, 2010; Pitts, 2009; Sanchez & Brock, 1996; Triana, García, & Colella, 2010) have investigated the effects of diversity management efforts on employee perceptions, less research has explored how organizational fairness can support diversity management. Some empirical studies (e.g., Huo & Tyler, 2001; Lind, Tyler, & Huo, 1997) indicate that employees perceive fairness in procedures as one of the most important factors in resolving relational disputes caused by differences in interests and values across racial/ethnic groups. These findings suggest that an organizational fairness strategy may provide a nurturing ground for

harmonizing differences and reducing potential relational conflicts in demographically diverse organizations (Huo & Tyler, 2001). Buttner and her colleagues (2010) found that a diversity climate perceived to be fair increased racial minority professionals' organizational commitment and intention to stay with their organizations. Their data, however, came from professionals in only one industry and also did not represent nonminority employees. This makes it difficult to examine racial differences in awareness of diversity management and justice. Findings of this present study will improve our understanding of how fairness in an organization can contribute to managing diversity effectively, by analyzing a large representative sample from the federal government. We hypothesize that organizational fairness is positively related to job satisfaction and also positively moderates the relationship between diversity management and job satisfaction.

Hypothesis 2 (H2): Perception of organizational fairness will be positively related to job satisfaction

Hypothesis 3 (H3): Perception of organizational fairness will positively moderate the relationship between diversity management and job satisfaction. In agencies that are perceived to maintain a higher level of organizational fairness and to manage diversity more effectively, employees will be more satisfied with their job than those in other agencies.

Gender and Race/Ethnicity Differences

Konrad and Linnehan (1995, p. 789) note that there are two types of personnel structures that are designed to help protected groups (e.g., women and racial/ethnic minorities)—“identity-blind” and “identity-conscious” structures. The former structures ensure that the outcome in the decision-making process is based on merit not affected by demographic group identity, treating every individual equally regardless of their demographic characteristics, whereas the latter structures consider group identity to support the protected groups (Konrad & Linnehan, 1995). In general, the theory of “identity-blindness” may be favored over “identity-consciousness” because the former can enhance perceptions of justice in personnel procedures and strengthen the legitimacy of personnel decisions, which is also associated with higher employee satisfaction (Davis & West, 1984; Konrad & Linnehan, 1995).³ When employees believed that individuals from distinct demographic groups are unjustly awarded organizational benefits, they express resentment (Bies & Shapiro, 1987; Folger & Martin, 1986; Richard & Kirby, 1998). In fact, some studies found that the use of race- and gender-based hiring and promotion preferences may produce negative reactions in both White men and the beneficiaries alike (e.g., Chacko, 1982; Heilman, Kaplow, Amato, & Stathatos, 1993; Richard & Kirby, 1998; Tsui, Egan, & O'Reilly, 1992).

The equity theory of motivation, which is closely related too much of the thinking about organizational fairness, also provides theoretical support for this argument. Equity theory predicts that people will not feel comfortable with positive inequity or

unfair favorable treatment or advantages for them. In addition, preferential treatment under identity-conscious structures can make it more likely that those receiving support or protection in such structures will feel that their accomplishments may be impugned by others who say that they do not deserve their accomplishments (e.g., promotions).

More people are likely to favor the theory of identity-blind structures, but in reality there can be a gap between the minority group members' (e.g., racial/ethnic minorities and women) evaluation of the actual consequences of diversity management programs and that of the majority group members (e.g., men and Whites). It may be because racial/ethnic minorities are more sensitive about ethnic identity and race-related concerns than nonminorities (Buttner et al., 2010; Phinney, 1992). Such different levels of racial awareness may lead to different expectations about the employer's commitment to diversity management, which will affect job satisfaction of employees differently. Indeed, studies show that racial/ethnic minorities and women tend to feel less valued than White men in their organizations (Cox, 1993; Richard & Kirby, 1997). If agencies have strong initiatives for diversity management and leadership that deal with biases against minorities, this should contribute more to increased job satisfaction of these minority employees than to that of nonminorities. In a similar vein, when women and racial/ethnic minorities perceive they are treated fairly and have equal chances for advancement in their workplace they are likely to show higher job satisfaction with their jobs. In light of this argument, we postulate the following hypotheses:

Hypothesis 4 (H4): Racial/ethnic minorities will be more satisfied with their job than Whites when they perceive that their agency maintains high organizational fairness and manages diversity effectively.

Hypothesis 5 (H5): Women will be more satisfied with their job than men when they perceive that their agency maintains high organizational fairness and manages diversity effectively.

Data and Method

Data Sources and Sample

The present study analyzes the data drawn from the 2006 Federal Human Capital Survey (FHCS) published by U.S. Office of Personnel Management (OPM). It was administered to full-time, permanent employees of the selected executive agencies and the small/independent agencies electronically on the Internet. Of the 390,657 employees who received surveys, 221,479 completed the survey, for a response rate of approximately 57%. The sample was stratified and representative of the various demographic groups in the federal workforce (OPM, 2006). The data were also weighted to represent all federal employees in terms of demographic characteristics and to correct for nonresponse error (OPM, 2006). Despite controversy among methodologists over the use of sampling weights in the statistical analysis of survey data,

analyzing the weighted data provides advantages. Some researchers, such as Pfeffermann (1993, p. 317), argue that the sampling weights can improve the accuracy of statistical inferences by correcting for a sample's disproportionate representation of the target population or "unequal sample inclusion probabilities" and compensating for nonresponse errors. We analyze the weighted data in order to increase the precision of the population estimates and to correct for missing values in our analysis. Furthermore, analyzing the weighted data can control for agency effects on our models. In the federal government individual employees are grouped into agencies or programs, which have a natural clustering effect (e.g., sharing policies and procedures). The 2006 FHCS includes two types of weights, probability weights and frequency weights, which adjust the sample to represent the number of employees in demographic categories in the survey population from which the sample is drawn. The description of how the final weights were calculated for the data⁴ suggests that the frequency weighting method is appropriate for our analysis. The inflated sizes of the data are attributed to the way of the frequency weighting method being applied to analysis.

Method

An important goal of this study is testing the interaction between organizational fairness perception and diversity management and its relationship with job satisfaction of employees. We use a series of hierarchical regressions to test the main and the interaction effects of organizational fairness perception, diversity management, and demographic factors (sex and minority status).⁵ We develop two models—Model 1 with the single-item measure dependent variable and Model 2 with the multiple-item measure. Some researchers express reservations about the reliability and validity of a single-item self-reported (Gardner, Cummings, Dunham, & Pierce, 1998). The current norm for self-report research is creating multiple-item measures that sum multiple, Likert-type items that produce an acceptable level of internal reliability measure, or Cronbach's α (Gardner et al., 1998; Podsakoff & Organ, 1986). Nevertheless, there is no clear evidence that multiple-item measures are always superior to single-item measures (Gardner et al., 1998). We analyze two models and compare them to find out if these two measures can actually make differences in the results. Model 1 was tested using hierarchical ordered logistic regressions and Model 2 was tested using hierarchical linear regressions.

Measurements

The 2006 FHCS was designed to evaluate federal employees' work-related perceptions such as organizational fairness, commitment to diversity management, job satisfaction, pay and rewards, and leadership. The survey items used in this study were answered on a 5-point Likert-type scale (5 = "strongly agree" to 1 = "strongly disagree"). The Appendix presents the questionnaire items for the scales constructed for this study.

Dependent Variable

Job Satisfaction. For reasons described above, we develop two types of dependent variables—a single-item measure of job satisfaction and a multiple-item scale. The single-item measure used the question “considering everything, how satisfied are you with your job?” Respondents answered the item on 5-point scales (5 = “strongly agree” to 1 = “strongly disagree”). Because the dependent variable is coded as a categorical variable, we used hierarchical ordered logistic regression to test the relationships between job satisfaction and the independent variables. For the multiple-item measure, we combined six questions. The items measure five facets of job satisfaction included in the Cornell Job Descriptive Index (JDI)—satisfaction with the job itself, with opportunities for recognition and advancement, with pay, with coworkers, and with supervisors⁶ (P. Smith, Kendall, & Hulin, 1969). The Appendix shows the specific questions for this measure. Principal components factor analysis and varimax rotation produced a single factor on which the six items loaded. The Appendix shows these six questions. The initial eigenvalue of the scale is 3.808 and Cronbach’s α is 0.882. Factor loadings range between 0.588 and 0.873.

Independent Variables

Diversity Management. Diversity researchers expressed their concern over lack of measures of diversity management. Naff and Kellough (2003) developed the measure that targeted five components of diversity programs: diversity training, internal communications, accountability, resource commitments, and the scope of programs. Choi (2009) measured diversity management referring to the number of EEO complaints regarding violations of antidiscrimination and whistleblower protection.⁷ However, subjective measures of diversity management relying on perceptions have been more commonly used in much research (e.g., Choi, 2009, 2012; Choi & Rainey, 2010; Pitts, 2009). The diversity management measure includes three questions that inquire about employees’ perceptions of diversity management programs and policies of their agencies (see the Appendix). The questions assess leaders’ commitment to diversity and policies and practices to promote diversity. Principal components factor analysis and varimax rotation produced a single factor on which these three items loaded. The initial eigenvalue of the scale is 2.323 and Cronbach’s α is 0.854. Factor loadings range between 0.874 and 0.887.

Perceived Organizational Fairness. The measure evaluates respondents’ perception of fairness in important organizational or personnel procedures in their agencies. The four survey questions presented in the Appendix make up the measure. As noted earlier, our measure of perceived organizational fairness is akin to procedural justice. The six Leventhal (1980) criteria included consistent application of procedures, freedom from bias or “bias suppression,” accurate information in decision-making, “correctability,” or mechanisms to correct flawed decisions, conformance to prevailing moral standards, and taking account of opinions of different groups. The survey we used

does not include questions that support direct measurement of all these criteria. Instead, we aim to measure the overall perception of fairness in important organizational or personnel procedures. All the items used in this study measure employees' perception on fairness in personnel procedures and decision-making processes. Our scale addresses "correctability" (e.g., fair resolution of complaints or grievances), "bias suppression" (e.g., no tolerance of arbitrary action, personal favoritism, partisan politics, and prohibited personnel actions such as discrimination, violation of a person's rights), and "ability to appeal the outcome" (e.g., ability to disclose prohibited practices without fear of reprisal; Colquitt, 2001, pp. 388-389; Leventhal, 1980; Lind, 1995; Thibaut & Walker, 1975; Tyler, 1989). Moreover, the questions clearly imply the presence of procedures for disclosure and redress of grievances, coercion, prohibited practices, and legal violations. Hence they ask about the general presence and climate of just and fair procedures. Whether or not one needs to represent each of the Leventhal criteria brings to mind differences in the methods organization theorists have used to measure organizational formalization—the presence and intensity of formal rules and procedures. Some organizational analysts asked about the existence of written rules and manuals for various functions (Pugh, Hickson, & Hinings, 1969; Kalleberg, Knoke, Marsden, & Spaeth, 1996). Other researchers pointed out that rules can exist but people can ignore them, or that the rules can otherwise have little impact. They used measures with questions asking about the effects and implementation of rules, such as whether employees feel they are watched to see that they obey the rules and feel that they were required to "go through proper channels" (Hage & Aiken, 1969). Our measure is more akin to the latter approach than the former. We ask about whether in general people feel that bad procedures are prohibited and that procedures in general promote just and fair conditions. A recent U.S. Merit Systems Protection Board report (2011) on employee perceptions about prohibited personnel practices (PPPs) emphasizes the importance of whether employees perceive others in the organization to be treated fairly in relation to such practices; such perceptions related strongly to employee "engagement." The U.S. Merit Systems Protection Board report (2011, p. iv) also indicates that employees sometimes say they perceive PPPs, but the agency finds no evidence of them; this reflects how sensitive employees can be about such matters and how this can complicate interpretation of perceived violations of PPPs and justice more generally.

Our questions for organizational fairness are combined into a single index variable by principal factor analysis and varimax rotation method. The initial eigenvalue of the scale is 3.094 and the Cronbach's α is 0.902. Factor loadings range from 0.860 to 0.899.

Demographic Variables. Demographic variables, including gender, minority, and supervisory status, were recorded as dichotomous variables in order to control their effects on job satisfaction. The findings of previous research show that differences in terms of gender, minority status, and supervisory status significantly affect job satisfaction. The gender variable was recorded as a "1" for female respondents and as "0" for male respondents. The minority variable was recorded as a "1" when a respondent was a

Table 1. Descriptive Statistics.

Variables	Mean	SD	Min	Max	Unit
Sex	.423	.494	0	1	Female = 1; Male = 0
Minority	.261	.439	0	1	Minority = 1
Organizational tenure	4.99	1.20	1	6	Years (less than 1 year = 1; 1-3 years = 2; 4-5 years = 3; 6-10 years = 4; 11-20 years = 5; more than 20 years = 6)
Supervisor	.183	.387	0	1	Supervisor = 1
Manager	.103	.304	0	1	Manager = 1
Executive	.024	.152	0	1	Executive = 1
Diversity management	0	1	-2.99	1.48	Factor score
Organizational Fairness	0	1	-2.49	1.52	Factor score
Job satisfaction (single-item measure)	3.71	1.05	1	5	Strongly agree = 5; agree = 4; neither agree nor disagree = 3; disagree = 2; strongly disagree = 1
Job satisfaction (multiple-item measure)	0	1	-2.65	1.83	Factor score

minority⁸ male or a minority female and as “0” when a respondent was a nonminority male or a nonminority female. Supervisory status was classified into three types—supervisor, manager, and executive. These three types of supervisory status were developed as three dummy variables. Tenure indicates the number of years for which a respondent has been with the federal government. Table 1 provides the descriptive statistics of the variables.

Results

Table 2 presents the results of our models. While many researchers tend to develop multiple-item measures of job satisfaction with an acceptable level of coefficient alpha, there has been no clear explanation that multiple-item measures are always superior to single-item scales (Podsakoff & Organ, 1986). Wanous, Reichers, and Hudy (1997) in their meta-analysis found that a corrected correlation between single- and multiple-item measures of job satisfaction was .67, suggesting that it may not be appropriate to reject single-item measures without considering the quality of the measures (Gardner et al., 1998). Indeed, we found very similar results between two models—one with the single-item measure of job satisfaction (Model 1) and the other with the multiple-item scale (Model 2). Model 1 was tested through hierarchical ordered logistic regressions because the dependent variable was measured by a 5-point Likert-type scale. The table includes coefficients and odd ratios of the independent variables. The McFadden’s R-square of Model 1 is .164. Model 2 was tested through hierarchical linear regressions and the R²-square of the model is .55. The largest variance inflation factor (VIF) is 2.46 and the mean VIF is 1.58. These results suggest that

Table 2. Results of Hierarchical Regressions (Weighted Models).

Independent variables	Dependent variable job satisfaction		
	Model 1: Hierarchical ordered logistic regressions with the single-item measure		Model 2: Hierarchical linear regressions with the multiple-item measure
	Coefficient (SE)	Odds ratio	Coefficient (SE)
Step 1: Demographic variables			
Sex	.067*** (.007)	1.069	.080*** (.004)
Minority	.063*** (.012)	1.065	.020*** (.006)
Tenure	-.018*** (.003)	.983	-.020*** (.001)
Supervisor	.237*** (.009)	1.268	.181*** (.005)
Manager	.760*** (.011)	2.139	.471*** (.006)
Executive	1.376*** (.041)	3.959	.755*** (.021)
McFadden's R ²	.01		R ² .023
			Adjusted R ² .023
			F 1320.91***
Cut point 1	-3.101		
Cut point 2	-1.812		
Cut point 3	-.761		
Cut point 4	1.411		
Step 2: The effects of diversity management and organizational fairness			
Diversity management	.625*** (.005)	1.869	.241*** (.002)
Organizational fairness	1.014*** (.005)	2.758	.592*** (.002)
McFadden's R ²	.162		R ² .549
			Adjusted R ² .549
			F 51508.19***
Cut point 1	-4.039		
Cut point 2	-2.394		
Cut point 3	-.990		
Cut point 4	1.858		
Step 3: The moderating effects of organizational fairness on the relationship between diversity management and job satisfaction (two-way interaction)			
Diversity management* Organizational fairness	.141*** (.003)	1.151	.035*** (.001)
McFadden's R ²	.164		R ² .550
			Adjusted R ² .550
			F 46085.14***
Cut point 1	-3.894		
Cut point 2	-2.319		
Cut point 3	-.940		
Cut point 4	1.960		
Step 4: The moderating effects of sex and race/ethnicity on the relationship between the interaction organizational fairness and job satisfaction and job satisfaction (three-way interactions)			
Diversity management* Organizational fairness*Sex	.016*** (.006)	1.016	.002 (.002)
Diversity management* Organizational fairness* Minority	-.034*** (.008)	.966	-.008*** (.003)
McFadden's R ²	.1642		R ² .550
			R ² .550
			F 37707.80***
Cut point 1	-3.892		
Cut point 2	-2.318		
Cut point 3	-.940		
Cut point 4	1.961		

Note.*Significant at .10 level. **Significant at .05 level. ***Significant at .001 level.

multicollinearity is not a significant problem in Model 2. The test results also have important implications, given that when the constituent variables of an interaction term are highly correlated, a statistically significant interaction term may result from a nonlinear multiplicative effect and not because of a linear multiplicative effect (Friedrich, 1982). This would produce a biased coefficient of the interaction variable. The results indicate that no such problem exists. Residual analyses did not show any substantial irregularities or influential outliers in the model. It is also noteworthy, in relation to other findings we report below, that minority status relates negatively to diversity management, organizational fairness, and job satisfaction.

Interpreting coefficients in ordered logistic regression differs from interpretation of OLS regression coefficients. A coefficient in ordered logistic regression indicates that for a one-unit increase in the predictor, the dependent variable level changes by its respective regression coefficient in the ordered logit scale while the other variables in the model are held constant (Long & Freese, 2006). The proportional odds ratios for the ordered logit model, which can be obtained by exponentiating the ordered logit coefficients, would be interpreted as showing that for a one-unit change in the predictor variable, the odds for observations in a group that is greater than k versus less than or equal to k are the proportional odds times larger (Long & Freese, 2006). This study focuses on the proportional odd ratios of the variables to discuss the effect sizes of independent variables on a dependent variable due to convenience of interpretation.

Overall, the results confirm the main arguments on the relationships of diversity management, organizational fairness, and job satisfaction. Of particular interest, as well, are findings about reactions of women and racial/ethnic minorities to diversity management and organizational fairness that are intended to benefit them.

The results show that diversity management relates positively to employee job satisfaction, which is consistent with H1. The proportional odds ratio of diversity management in Model 1 is 1.87, which means that for a one-unit increase in the diversity management score, the odds of high job satisfaction versus the combined middle and low job satisfaction categories are 1.87 times greater, given the other variables are held constant in the model. In a similar way, for a one-unit increase in the diversity management score, the odds of the combined high and middle levels of job satisfaction versus the lower levels of job satisfaction are 1.87 times greater, given the other variables are held constant. Model 2 also demonstrates that diversity management is positively associated with job satisfaction (.241, $p < .001$).

H2, which postulates a direct relationship between organizational fairness perception and job satisfaction, was also supported by the results. The results suggest that if employees perceive organizational fairness, then they are likely to show higher job satisfaction. More importantly, in relation to the central question in this analysis, the moderating effect of organizational fairness on the relationship between diversity management and job satisfaction turned out to be significant and positive, in support of H3. Model 1 shows that the odd ratio of the interaction term is 1.15. This indicates that in agencies that are perceived to maintain higher levels of organizational fairness the positive association between diversity management and job satisfaction will be even stronger. Model 2 shows the same result and the coefficient is .035 ($p < .001$).

The findings about gender and racial differences in relation to the moderating effect of organizational fairness on the relationship between diversity management and job satisfaction are mixed, in an interesting way. While the perception of diversity management and organizational fairness may enhance job satisfaction, step 4 in Table 2 indicates that this effect does not hold for racial/ethnic minorities. They are more likely to show lower levels of job satisfaction than nonminorities such as Whites, in the three-way interaction of organizational fairness, diversity management, and minority status. These findings are neither consistent with previous literature (Choi, 2009; Pitts, 2009) nor with H4, which predicts that racial/ethnic minorities are likely to have higher job satisfaction than their counterparts when they think that their agencies manage diversity effectively while maintaining a high level of organizational fairness. The odds ratio of the different effects of fair diversity management by minority status in Model 1 is .966. When odds ratios are less than 1, this indicates that the positive effects of managing diversity together with higher levels of organizational fairness are smaller for racial/ethnic minorities than for Whites.⁹ On the other hand, the result for H5, which postulates that women are more likely to be satisfied with their jobs when they perceive better diversity management and higher levels of organizational fairness, was consistent with our expectation in Model 1. The positive impact of diversity management with higher organizational fairness was greater for women than for men, in support of H5 (1.016, odd ratios). The finding in Model 2, however, was positive but insignificant, indicating that in relation to the five-item index, the effect is not significantly different for women than for men.

Discussion and Conclusion

Public workforces have become increasingly diversified in demographic composition. In 2006, almost one third of the federal workforce consisted of racial/ethnic minorities and women made up about 44% of the workforce (Copeland, 2008). This increases the already-important need to enhance management skills and strategies to support diverse workforces in the public sector. Nevertheless, the evidence also indicates that public organizations have not invested in diversity management programs as much as private businesses have (Selden & Selden, 2001). Scholars and practitioners need to continue to develop effective ways of managing diversity to enhance the welfare of public workforces and ultimately to improve the effectiveness of public organizations.

This study contributes to the identification of effective approaches to diversity management (e.g., Cox, 1990; Kellough & Naff, 2004; Pitts, 2009; Thomas, 1990; Wise & Tschirhart, 2000). The findings reveal that diversity management combined with just and fair organizational procedures relate to more favorable results such as higher employee job satisfaction. Where effective diversity management and organizational fairness are jointly present, the positive influence on employee job satisfaction is even stronger. This in turn suggests that diversity management has its strongest beneficial influence in organizations in a context of fair, just procedures. This study thus contributes evidence about the separate and joint effects of organizational fairness

and diversity management using a large data set of survey responses from U.S. federal government employees.

In agencies that are believed to maintain higher levels of organizational fairness and diversity management, employees will be more satisfied with their jobs than those in agencies that are not. This suggests that fairness in organizational procedures can provide a crucial context for diversity that can significantly influence its effectiveness. This finding is consistent with previous literature that has argued that diversity programs may not accomplish their goals when the procedures of the programs are not adequately justified (Richard & Kirby, 1997). Programs that focus only on outcomes (e.g., hiring or promoting racial/ethnic minorities or women) without appropriate consideration of fair procedures that lead to the outcomes may result in negative consequences. These include beneficiaries' perception of implied incompetence and decreased commitment to their organizations, and nonminorities' dissatisfaction with their jobs and organizations when they perceive preferential treatment for minorities. Indeed, some empirical evidence (e.g., Chacko, 1982; Richard & Kirby, 1997) has demonstrated that women and racial/ethnic minorities who perceived that they were beneficiaries of preferential treatment showed negative reactions such as role stress, feeling of implied incompetence, reduced commitment to their responsibilities and agencies, and dissatisfaction with their jobs (James, Lovato, & Khoo, 1994, Richards & Kirby, 1997).

Our study provides unexpected but important findings in relation to this challenge. Racial/ethnic minorities whom many experts expect to be beneficiaries of diversity management programs expressed significantly lower satisfaction with their jobs, as compared to Whites, when they perceived their agencies as having effective diversity management and maintaining a high level of organizational fairness. This is not consistent with previous findings (e.g., Choi, 2009; Pitts, 2009). How can we explain such a result? One central issue concerns the way minorities might react to identity-blind procedures. Probably, people may consider the measures of organizational fairness and diversity management as implying identity-blindness. Complaints are handled fairly, coercion and prohibited practices are not tolerated, and one can report violations without fear for reprisals. Supervisors work well with different people, value representation of different segments of society, and there are diversity policies. Yet, from the perspective of a minority employee, is this enough to raise the employee's job satisfaction, including satisfaction with all the facets that our multiple-item measure asks about? As discussed earlier, the identity-blind approach is supposed to enhance the sense of fairness toward different groups by not involving group identity factors in important personnel decisions. Racial/ethnic minority group members, however, may not regard identity-blind procedures as truly identity-blind, and they may consider them unfair (Konrad & Linnehan, 1995). They may feel that identity blindness ultimately maintains inequitable power relationships between members of the majority and the minority group (Frankenberg 1993). Minority group members may regard reward systems as focused on values and competencies of majority group members in ways that inadequately recognize those of minority group members (Acker, 1989; Konrad & Linnehan, 1995) and in ways that reduce their job satisfaction (Ng & Tung,

1998). They may feel pressure to assimilate into the dominant cultural norms set by the majority group (Ely & Thomas, 2001). Whites, on the other hand, can benefit from these conditions because they feel a sense of legitimacy of personnel decisions favorable to them. Regarding this perspective, many racial/ethnic minorities reported that they feel devalued and undermined (Ely & Thomas, 2001).¹⁰ They often regard identity-conscious practices as helpful in compensating for past discrimination, thus providing more justice from their standpoint.¹¹ In fact, quite a few empirical studies (e.g., Foldy, Rivard, & Buckley, 2009; Frankenberg, 1993; Omi & Winant, 1994; Purdie-Vaughns, Steele, Davies, Ditman, & Crosby, 2008) have found that many racial/ethnic minority group members do not prefer identity-blind approaches, and that such approaches lower racial/ethnic minorities' trust in the organization's purportedly color-blind policies.

A similar but different explanation emphasizes racial/ethnic differences in expectations and sensitivity about diversity management and organizational fairness. Diversity management and race-related matters tend to be more salient to racial/ethnic minorities, who may evaluate these subjects in their agency based on stricter and more sensitive criteria and therefore may feel less satisfied than majority group members with their agency's performance (Buttner et al., 2010; Morrison & Robinson, 1997; Phinney, 1992). When the agency devotes more attention to diversity management and organizational fairness, racial/ethnic minorities are likely to feel more comfortable in expressing their concerns about unfair treatment of racial/ethnic minorities, but then they may feel that they do not receive adequate responses for their complaints (U.S. Merit Systems Protection Board, 2011, p. iv). Such different levels of expectations by race/ethnicity may result from racial/ethnic identity or racial awareness that racial/ethnic minorities are more sensitive about race-related concerns than nonminorities (Buttner et al., 2010; Phinney, 1992). In contrast, our findings indicate that women show higher job satisfaction than men when they perceive that their agency maintains high organizational fairness and manage diversity well. As sensitive as the matter of gender can be, it can nevertheless be less sensitive than race/ethnicity, thus making the identity-blindness debates less critical for gender. Furthermore, women tend to place a higher value on fairness in important organizational or personnel procedures than men and feel more satisfied with their job than men when they believe personnel decisions are made in a fair way (Choi, 2010; Sweeney & McFarlin, 1997).¹²

Further research should address potential limitations of this study. First, this study does not suggest the causal directions of the relations observed because it analyzed cross-sectional data collected at one time. The observed relationships imply the correlations between variables, but do not necessarily show that one variable causes the other. Compiling a pooled, cross-sectional data set consisting of multiple years will be helpful to observe potential causal relations between variables. Second, this study analyzed data that were measured by self-reported responses. That may cause monosource biases, which possibly affect the results of this study in a way that the parameters of interest are inflated. Especially, diversity management was measured relying on subjective perceptions of respondents rather than the actual effectiveness of diversity management in an organization. Kalev, Dobbin, and Kelly (2006) found that diversity

management programs targeting individual bias or network isolation were less effective than organizational structures that strengthen responsibility for diversity, such as diversity management programs and diversity committees and staff (Choi & Rainey, 2010). Future research that will develop more rigorous measures of diversity management will be an important addition to the literature. The addition of qualitative data or some objective measures of effective diversity management such as average ranks, promotion, and salary of different demographic groups will complement the limitations of subjective measures. Nevertheless, it will also be important to examine subjective perceptions of people in organizations as well as objective measures of diversity management in organizations given that job satisfaction which is also an inherently perceptual measure tend to be based on perception of effectiveness. It is important to note, moreover, that one of the frequent concerns about “subjective” responses, mono-method bias, and cross-sectional data focuses on the possibility of a general response bias. For example, a typical concern would be that respondents in this study might be showing a tendency to report higher job satisfaction, higher perceived organizational fairness, and more effective diversity management because of a general positive disposition toward their organization and their environment, or as a social desirability response. Yet, as described earlier, the responses of the minority respondents indicated a negative effect on job satisfaction of the interaction between their minority status with diversity management and organizational fairness. This evidence weighs against a general positive response bias of the sort just described. We hypothesized what seemed an obvious result, that minority group employees would show higher satisfaction when they perceived more diversity management and organizational fairness. It did not happen. The results were contrary to our hypothesis, and thus indicate the value of asking for subjective responses, and weigh against concerns about a general positive response bias.

This study has practical implications for public administrators. Despite the recent progress in diversity management, women and racial/ethnic minorities perceive significant discrepancy between theory and reality. Thus, for successful diversity management public managers need to make sure that their decisions about managing diversity should be properly justified through fair and transparent procedures so that their subordinates can trust their decisions. Also, the agencies should establish diversity management programs that contribute as much as possible to enhancing fairness in every procedure and throughout the organization.

Appendix

Construction of Index Variables (5-Point Likert-Type Scales)

Diversity Management

- ◆ Supervisors/ team-leaders in my work unit are committed to a workforce representative of all segments of society.
- ◆ Policies and programs promote diversity in the workplace (for example, recruiting minorities and women, training in awareness of diversity issues, mentoring).

- ◆ Managers/ supervisors / team leaders work well with employees of different backgrounds.

Organizational Fairness

- ◆ Complaints, disputes, or grievances are resolved fairly in my work unit.
- ◆ Arbitrary action, personal favoritism, and coercion for partisan political purposes are not tolerated.
- ◆ Prohibited Personnel Practices (for example, illegally discriminating for or against any employee/applicant, obstructing a person's right to compete for employment, knowingly violating veterans' preference requirements) are not tolerated.
- ◆ I can disclose a suspected violation of any law, rule, or regulation without fear of reprisal.

Job satisfaction (Single-Item Measure)

- ◆ Considering everything, how satisfied are you with your job?

Job Satisfaction (Multiple-Item Measure)

- ◆ How satisfied are you with the recognition you receive for doing a good job?
- ◆ How satisfied are you with the policies and practices of your senior leaders?
- ◆ How satisfied are you with your opportunity to get a better job in your organization?
- ◆ Considering everything, how satisfied are you with your job?
- ◆ Considering everything, how satisfied are you with your pay?
- ◆ Considering everything, how satisfied are you with your organization?

Acknowledgment

This work was supported by the National Research Foundation of Korea Grant funded by the Korean Government (NRF-0473-20120016)

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

Notes

1. Demographic diversity refers to "the degree to which a unit (e.g., a work group or organization) is heterogeneous with respect to demographic attributes," such as race/ethnicity, sex, age, organizational tenure, and social status (Lawrence, 1997; Pelled, Eisenhardt, & Xin, 1999, p. 1).

2. Procedural justice refers to the fairness of the procedures or means by which outcomes are allocated (Cohen-Charash & Spector, 2001; Lind & Tyler, 1988). Originally, the concept of procedural justice was introduced in legal procedures (Colquitt, 2001), but was extended into nonlegal contexts such as organizational settings (Colquitt, 2001; Leventhal, 1980). Leventhal and his colleagues developed six criteria of measuring procedural justice: “procedures should (a) be applied consistently across people and across time; (b) be free from bias; (c) ensure that accurate information is collected and used in making decisions; (d) have some mechanism to correct flawed or inaccurate decisions; (e) conform to personal or prevailing standards of ethics or morality, and (f) ensure that the opinions of various groups affected by the decision have been taken into account” (Colquitt, Conlon, Wesson, Porter, & Ng, 2001, p. 426).
3. It is controversial whether members of both minority and majority groups favor identity blind structures over identity-conscious structures. There are opposing arguments on the subject. Some contend that “identity-conscious” structures not only can stigmatize beneficiaries but also raise complaints among White males, while others found evidence that women and people of color actually prefer identity-conscious structures. The discrepancy may be attributed to individual differences or a more serious concern that even though women and racial/ethnic minorities prefer the theory of identity-blind structures, in reality the structures are not truly identity blind. Therefore, they rather prefer identity-conscious structures to compensate for their lost opportunities due to prior discrimination.
4. The 2006 FHCS (2006) provides the detailed information of how the data were weighted (<http://www.fedview.opm.gov/2006/About/#Weighted>). In the first step, the inverse of the employee’s probability of selection was calculated for each respondent in the sample as a base weight. In the next step, the base weights of respondents with usable surveys were increased to compensate for nonresponses. In the final step, the nonresponse-adjusted weights were then modified through the ranking process that ranked the data until sample distributions for the demographic variables equaled population distributions to a predetermined degree of precision. Respondents’ final adjusted weights indicate the number of employees in the survey population they represent.
5. Hierarchical regressions first test the relationship of the predictors (independent variables) of interest on the criterion variable (dependent variable) and secondly test the relationship of a term that carries information about both predictors—the interaction term (Choi & Rainey, 2010). In this study, independent variables such as diversity management, organizational fairness, and demographic variables were entered first and then interaction terms—a two way interaction between diversity management and organizational fairness and three way interactions between diversity management, organizational fairness, and sex and minority status—were entered next. Because a multiplicative term is often highly correlated with its constituent variables, the inclusion of the multiplicative term in a model with its constituent variables leads to multicollinearity, which yields unreliable and unstable coefficients (Allison, 1977; Friedrich, 1982; K. W. Smith & Sasaki, 1979; Wright, 1976).
6. Six questions measure four facets of job satisfaction. We should acknowledge that satisfaction with coworkers was not included in the measure because we use secondary data that do not ask the specific question.
7. Under the Notification and Federal Employee Anti-discrimination and Retaliation (No FEAR) Act of 2002, every federal agency is required to be more accountable for violations

- of antidiscrimination and whistleblower protection laws. The Act requires that each Federal agency post quarterly on its public website certain statistical data relating to Federal sector EEO complaints filed with such agency and for other purposes (Departmental Office of Civil Rights, U.S. Department of Transportation, 2005).
8. The CPDF (Central Personnel Data File) defines American Indian or Alaskan Native, Asian or Pacific Islander, Black (not of Hispanic origin), and Hispanic as the minority race/ national origin groups for Federal statistics and program administrative reporting (OPM 2006).
 9. The coefficient of an interaction term can be added to the main effect to calculate the effect for a special group or condition in a case. For example, the effect of diversity management combined with organizational fairness on job satisfaction of racial/ethnic minorities is still positive (.035-.008 = .027), but smaller than that for Whites.
 10. The findings are consistent with Ely and Thomas' study (2001) that racial/ethnic minorities and women in work groups with a discrimination-and fairness perspective which is less identity conscious tend to feel less valued and less comfortable than those in work groups that support an integration and learning perspective recognizing cultural differences. In their interview with people of color, they reported that their competence and contribution were often "undermined, devalued, or disrespected" and they felt "depressed and dispirited at what they felt was the "paternalistic" and "patronizing" attitude toward people of color generally" (Ely & Thomas, 2001, pp. 255- 256).
 11. Individual variations for their preferences over identity blindness and identity consciousness should also be considered, but much of the previous literature seems to favor the argument that women and racial/ethnic minorities tend to prefer identity-consciousness to identity-blindness.
 12. Women may also tend to experience less deprivation relative to their expectations (Foley, Hang-Yu, & Wong, 2005, p. 426), since some research indicates that women have lower expectations about job rewards than men (e.g., Crosby, 1982), which may account for women's greater job satisfaction with diversity management and organizational fairness compared to men in our study.

References

- Acker, J. (1989). *Doing comparable worth: Gender, class, and pay equity*. Philadelphia, PA: Temple University Press.
- Allison, P. D. (1977). Testing for interaction in multiple regression. *American Journal of Sociology*, 83(1), 144-153.
- Bies, R. J., & Shapiro, D. L. (1987). Interactional fairness judgments: The influence of causal accounts. *Social Justice Research*, 1(2), 199-218.
- Billig, M., & Tajfel, H. (1973). Social categorization and similarity in intergroup behavior. *European Journal of Social Psychology*, 3(1), 27-52.
- Buttner, E. H., Lowe, K. B., & Billings-Harris, L. (2010). Diversity climate impact on employee of color outcomes: Does justice matter? *Career Development International*, 15, 239-258.
- Byrne, D. (1971). *The attraction paradigm*. New York, NY: Academic Press.
- Chacko, T. I. (1982). Women and equal opportunity: Some unintended effects. *Journal of Applied Psychology*, 67(1), 119-123.
- Chatman, J. A., & Flynn, F. (2001). The influence of demographic composition on the emergence and consequences of cooperative norms in groups. *Academy of Management Journal*, 44, 956-974.

- Chatman, J. A., Polzer, J., Barsade, S., & Neale, M. (1998). Being different yet feeling similar: The influence of demographic composition and organizational culture on work processes and outcomes. *Administrative Science Quarterly*, *43*, 749-780.
- Choi, S. (2009). Diversity in the US federal government: Diversity management and employee turnover in federal agencies. *Journal of Public Administration Research and Theory*, *19*, 603-630.
- Choi, S. (2010). Diversity in the U.S. federal government: Antecedents and correlates of diversity in federal agencies. *Review of Public Personnel Administration*, *30*, 301-321.
- Choi, S., & Rainey, H. G. (2010). Managing diversity in U.S. federal agencies: Effects of diversity and diversity management on employee perceptions of organizational performance. *Public Administration Review*, *70*(1), 109-121.
- Choi, S. (2012, August). Demographic diversity of managers and employee job satisfaction: Empirical analysis of the federal case. Review of Public Personnel Administration. *Advance online publication*. doi:10.1177/0734371X12453054
- Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organizations: A meta-analysis. *Organizational Behavior and Human Decision Processes*, *86*, 278-321.
- Colquitt, J. A. (2001). On dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology*, *86*, 388.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, *86*, 425-445.
- Copeland, C. W. (2008). *The federal workforce: Characteristics and trends* (RL34685) [Electronic version]. Washington, DC: Congressional Research Service. Retrieved from http://digitalcommons.ilr.cornell.edu/key_workplace/551/
- Cox, T. (1990). Problems with organizational research on race and ethnicity issues. *Journal of Applied Behavioral Science*, *26*(1), 5-23.
- Cox, T. H. (1993). *Cultural diversity in organizations: Theory, research, and practice*. San Francisco, CA: Berrett-Koehler.
- Crosby, F. J. (1982). *Relative deprivation and working women*. New York, NY: Oxford University Press.
- Davis, C. E., & West, J. P. (1984). Implementing public programs: Equal employment opportunity, affirmative action, and administrative policy options. *Review of Public Personnel Administration*, *4*(3), 16-30.
- Departmental Office of Civil Rights, U.S. Department of Transportation. (2005). *No fear act*. Washington, DC: Author. Retrieved from <http://www.usbr.gov/cro/nofear.html>
- Ely, R. J. (2004). A field study of group diversity, participation in diversity education programs, and performance. *Journal of Organizational Behavior*, *25*, 755-780.
- Ely, R., & Thomas, D. (2001). Cultural diversity at work: The effects of diversity perspectives on work group processes and outcomes. *Administrative Science Quarterly*, *46*, 229-273.
- Foldy, E. G. (2004). Learning from diversity: A theoretical exploration. *Public Administration Review*, *64*, 529-538.
- Foldy, E. G., Rivard, P., & Buckley, T. R. (2009). Power, safety, and learning in racially diverse groups. *Academy of Management Learning and Education*, *8*(1), 25-41.
- Foley, S., Hang-Yu, N., & Wong, A. (2005). Perceptions of discrimination and justice: Are there gender differences in outcomes? *Group and Organization Management*, *30*, 421-450.
- Folger, R., & Martin, C. (1986). Relative deprivation and referent cognitions: Distributive and procedural justice effects. *Journal of Experimental Social Psychology*, *22*, 531-546.

- Frankenberg, R. (1993). *White women, race matters: The social construction of Whiteness*. Minneapolis: University of Minnesota Press.
- Friedrich, R. J. (1982). In defense of multiplicative terms in multiple regression equations. *American Journal of Political Science*, 26, 797-833.
- Gardner, D. D., Cummings, L. L., Dunham, R. B., & Pierce, J. L. (1998). Single-item versus multiple-item measurement scales: An empirical comparison. *Educational and Psychological Measurement*, 58, 898-915.
- Greenberg, J., & Folger, R. (1983). Procedural justice, participation, and the fair process effect in groups and organizations. In P. B. Paulus (Ed.), *Basic group processes* (pp. 235-256). New York, NY: Springer-Verlag.
- Hage, J., & Aiken, M. (1969). Routine technology, social structure, and organizational goals. *Administrative Science Quarterly*, 14, 366-376.
- Harrison, D. A., Newman, D., & Roth, P. L. (2006). How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management Journal*, 49, 305-325.
- Heilman, M. E., Kaplow, S. R., Amato, M. A. G., & Stathatos, P. (1993). When similarity is a liability: Effects of sex-based preferential selection on reactions to like-sex and different-sex others. *Journal of Applied Psychology*, 78, 917-927.
- Huo, Y. J., & Tyler, T. R. (2001). Diversity and the viability of organizations: The role of procedural justice in bridging differences. In J. Greenberg & R. Cropanzano (Eds.), *Advances in organizational justice* (pp. 213-244). Palo Alto, CA: Stanford University Press.
- James, K., Lovato, C., & Khoo, G. (1994). Social identity correlates of minority workers' health. *Academy of Management Journal*, 37, 383-396.
- Jehn, K. A., Northcraft, G. B., & Neale, M. A. (1999). Why differences make a difference: A field study of diversity, conflict, and performance in workgroups. *Administrative Science Quarterly*, 44, 741-763.
- Kalev, A., Dobbin, F., & Kelly, E. (2006). Best practices or best guesses? Assessing the efficacy of corporate affirmative action and diversity policies. *Academy of Management Perspectives*, 71, 589-617.
- Kalleberg, C. L., Knoke, D., Marsden, P. V., & Spaeth, J. L. (1996). *Organization in America*. Thousand Oaks, CA: SAGE.
- Kellough, J. E., & Naff, K. C. (2004). Responding to wake-up call: An examination of federal agency diversity management programs. *Administration & Society*, 36(1), 62-90.
- Konrad, A. M., & Linnehan, F. (1995). Formalized HRM structures: Coordinating equal employment opportunity or concealing organizational practices? *Academy of Management Journal*, 38, 787-820.
- Kramer, R. M. (1991). Intergroup relations and organizational dilemmas: The role of categorization processes. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (pp. 191-228). Greenwich, CT: JAI Press.
- Lawrence, B. S. (1997). The black box of organizational demography. *Organization Science*, 8(1), 1-22.
- Leventhal, G. S. (1980). What should be done with equity theory? New approaches to the study of justice in social relationships. In K. Gergen, M. Greenberg, & R. Willis (Eds.), *Social exchange: Advances in theory and research* (Vol. 9, pp. 91-131). New York, NY: Plenum.
- Lind, E. A. (1995). Justice and authority in organizations. In R. Cropanzano & K. M. Kacmar (Eds.), *Politics, justice, and support: Managing the social climate of work organizations* (pp. 83-96). Westport, CT: Quorum

- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York, NY: Plenum Press.
- Lind, E. A., Tyler, T. R., & Huo, Y. J. (1997). Procedural context and culture: Variation in the antecedents of procedural justice judgments. *Journal of Personality and Social Psychology*, 73, 767-780.
- Long, J. S., & Freese, J. (2006). *Regression models for categorical dependent variables using stata*. College Station, TX: Stata.
- Milliken, F. J., & Martins, L. L. (1996). Searching for common threads: Understanding the multiple effects of diversity in organizational groups. *Academy of Management Review*, 21, 402-433.
- Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological contract violation develops. *Academy of Management Review*, 22, 226-256.
- Nacoste, R. W. (1985). Selection procedure and responses to affirmative action: The case of favorable treatment. *Law and Human Behavior*, 9, 225-242.
- Naff, K. C., & Kellough, J. E. (2003). Ensuring employment equity: Are federal diversity programs making a difference? *International Journal of Public Administration*, 26, 1307-1336.
- Ng, E., & Tung, R. L. (1998). Ethno-cultural diversity and organizational effectiveness: A field study. *The International Journal of Human Resource Management*, 9, 980-995.
- Office of Personnel Management. (2006). *Federal Human Survey 2006*. Washington, DC: Author. Retrieved from <http://www.fedview.opm.gov/2006/About>
- Omi, M., & Winant, H. (1994). *Racial formation in the United States*. New York, NY: Routledge.
- O'Reilly, C. A., Caldwell, D. F., & Barnett, W. P. (1989). Work group demography, social integration, and turnover. *Administrative Science Quarterly*, 34(1), 21-37.
- Pelled, L. H., Eisenhardt, K. M., & Xin, K. R. (1999). Exploring the black box: An analysis of work group diversity, conflict, and performance. *Administrative Science Quarterly*, 44(1), 1-28.
- Pfeffermann, D. (1993). The role of sampling weights when modeling survey data. *International Statistical Review*, 61, 317-337.
- Phinney, J. S. (1992). The multi-group ethnic identity measure: A new scale for use with adolescents and young adults from diverse groups. *Journal of Adolescent Research*, 7(2), 156-176.
- Pitts, D. W. (2009). Diversity management, job satisfaction, and performance: Evidence from U.S federal agencies. *Public Administration Review*, 69, 328-338.
- Pitts, D. W., & Wise, L. R. (2010). Workforce diversity in the new millennium: Prospects for research. *Review of Public Personnel Administration*, 30(1), 44-69.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12, 531-544.
- Pugh, D. S., Hickson, D. J., & Hinings, C. R. (1969). An empirical taxonomy of work organizations. *Administrative Science Quarterly*, 14(1), 115-126.
- Purdie-Vaughns, V., Steele, C. M., Davies, P. G., Ditman, R., & Crosby, J. R. (2008). Social identity contingencies: How diversity cues signal threat or safety for African Americans in mainstream institutions. *Journal of Personality and Social Psychology*, 94, 615-630.
- Richards, O. C., & Kirby, S. L. (1997). African-Americans' reactions to diversity programs: Does justice matter? *Journal of Black Psychology*, 23, 388-397.
- Richard, O. C., & Kirby, S. L. (1998). Women recruits' perceptions of workforce diversity program selection decisions: A procedural justice examination. *Journal of Applied Social Psychology*, 28(2), 183-188.

- Roberts, K. H., & O'Reilly, C. A. (1979). Some correlations of communication roles in organizations. *Academy of Management Journal*, 22(1), 42-57.
- Sanchez, J. I., & Brock, P. (1996). Outcomes of perceived discrimination among Hispanic employees: Is diversity management a luxury or a necessity? *Academy of Management Journal*, 39, 704-719.
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, 40, 437-453.
- Selden, S. C., & Selden, F. (2001). Rethinking diversity in public organizations for the 21st century: Moving toward a multicultural model. *Administration and Society*, 33, 303-329.
- Smith, K. G., Smith, K. A., Olian, J. D., Sims, H. P., O'Bannon, D. P., & Scully, J. A. (1994). Top management team demography and process: The role of social integration and communication. *Administrative Science Quarterly*, 39, 412-438.
- Smith, K. W., & Sasaki, M. S. (1979). Decreasing multicollinearity: A method for models with multiplicative functions. *Sociological Methods and Research*, 8(1), 35-56.
- Smith, P., Kendall, L. M., & Hulin, C. L. (1969). *The measurement of satisfaction in work and retirement: A strategy for the study of attitudes*. Chicago, IL: Rand McNally.
- Sweeney, P. D., & McFarlin, D. B. (1997). Process and outcome: Gender differences in the assessment of justice. *Journal of Organizational Behavior*, 18, 83-98.
- Tajfel, H. (1981). *Differentiation between social groups: Studies in the social psychology of intergroup relations*. New York, NY: Academic Press.
- Tajfel, H., & Turner, J. C. (1985). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *The psychology of intergroup relation* (pp. 7-24). Chicago, IL: Nelson-Hall.
- Thibaut, J., & Walker, L. (1975). *Procedural justice: A psychological analysis*. Hillsdale, NJ: Erlbaum.
- Thomas, R. R., Jr. (1990). From affirmative action to affirming diversity. *Harvard Business Review*, 68(2), 107-117.
- Triana, M., García, M. F., & Colella, A. (2010). Managing diversity: How organizational efforts to support diversity enhance affective commitment and reduce turnover intent for employees who experience discrimination at work. *Personnel Psychology*, 63, 817-843.
- Tsui, A. S., Egan, T. D., & O'Reilly, C. A. (1992). Being different: Relational demography and organizational attachment. *Administrative Science Quarterly*, 37, 549-79.
- Tsui, A. S., & Gutek, B. A. (1999). *Demographic differences in organizations: Current research and future directions*. Lanham, MD: Lexington.
- Turner, J. C. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, UK: Blackwell.
- Tyler, T. R. (1989). The psychology of procedural justice: A test of the group-value model. *Journal of Personality and Social Psychology*, 57, 830-838.
- Tyler, T. R., & Lind, E. A. (1992). A relational model of authority in groups. *Advances in Experimental Social Psychology*, 25, 115-191.
- U.S. Merit Systems Protection Board. (2011, August). *Prohibited personnel practices: employee perceptions*. Washington, DC: Author.
- Wanous, J., Reichers, A., & Hudy, M. (1997). Overall job satisfaction: How good are single-item measures? *Journal of Applied Psychology*, 82, 247-252.
- Williams, K., & O'Reilly, C. A. (1998). Demography and diversity in organizations. In B. M. Staw and R. M. Sutton (Eds.), *Research in organizational behavior* (pp. 77-140). Stamford, CT: JAI Press.

- Wise, L. R., & Tschirhart, M. (2000). Examining empirical evidence on diversity effects: How useful is diversity research for public-sector managers? *Public Administration Review*, *60*, 386-394.
- Wright, G. C. (1976). Linear models for evaluating conditional relationships. *American Journal of Political Science*, *20*, 349-373.
- Wright, B., & Davis, B. (2003). Job satisfaction in the public sector: The role of the work environment. *American Review of Public Administration*, *33*, 70-90.
- Wright, B., & Kim, S. (2004). Participation's influence on job satisfaction: The importance of job characteristics. *Review of Public Personnel Administration*, *24*(1), 18-40.

Author Biographies

Sungjoo Choi is an assistant professor at Kyung Hee University in South Korea. Her research interests include gender issues, diversity management in government, and organizational behavior of public employees. She has published articles to multiple journals including *Journal of Public Administration Research and Theory*, *International Public Management Journal*, *Public Administration Review*, *Review of Public Personnel Administration*, and *American Review of Public Administration*.

Hal G. Rainey serves as Alumni Foundation Distinguished Professor in the School of Public and International Affairs at the University of Georgia. The fifth edition of his book, *Understanding and Managing Public Organizations* is forthcoming in 2014.