

## Valuing diversity: a group-value approach to understanding the importance of organizational efforts to support diversity

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### Summary

Using Leventhal's rules as well as the group-value model of procedural justice, we first examined how the negative effects of perceived racial discrimination on procedural justice judgments can be attenuated by perceived organizational efforts to support diversity. Secondly, we examine how these effects ultimately impact affective commitment and organizational citizenship behavior. We found that employees who believe some individuals in the workplace are discriminating against them on the basis of race tend to report lower levels of procedural justice from the organization. However, this negative relationship was attenuated when employees perceived that their organization was making efforts to support diversity. Results suggest that individuals' perceptions of organizational efforts to support diversity can help restore perceptions of procedural justice for employees who experience racial discrimination at work. Improving procedural justice also positively impacts affective commitment and organizational citizenship behavior directed at the organization. Copyright © 2009 John Wiley & Sons, Ltd.

### Introduction

Procedural justice, or the perceived fairness of the processes used to make decisions in an organization (Colquitt, 2001; Colquitt & Greenberg, 2003; Leventhal, 1980; Leventhal, Karuza, & Fry, 1980; Thibaut & Walker, 1975), is critical to organizational well-being. Decades of research have demonstrated that procedural justice is positively related to favorable outcomes including employee job satisfaction, affective commitment, evaluations of both authority figures and the organization as a whole, citizenship behavior, and even job performance (Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Folger & Konovsky, 1989; Konovsky, 2000; Niehoff & Moorman, 1993). Procedural justice is also negatively related to undesirable outcomes such as withdrawal and turnover (Colquitt et al., 2001). Although much research has been conducted to establish the importance of procedural justice in organizations, the overwhelming majority of studies on procedural justice have examined the outcomes of procedural justice as opposed to the antecedents of procedural justice. Given the importance of

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procedural justice in organizations, an examination of antecedents to procedural justice seems warranted.

In this paper, we examine how employees' perceptions of racial discrimination (when perpetrated by some individuals in the workplace) can act as an antecedent to feelings that the organization as a whole is procedurally unjust. We argue that perceiving racial discrimination from individuals with whom one interacts at work should lead to feelings of procedural injustice, because discrimination violates Leventhal's (Leventhal, 1980) rules for procedural justice. The need to empirically assess discrimination and procedural justice together has been recognized by several researchers who have expressed surprise that the relationship between discrimination and procedural justice has not been empirically investigated (i.e., Dipboye & Colella, 2005; Hicks-Clarke & Iles, 2000; Stone-Romero & Stone, 2005).

To our knowledge, no empirical studies have examined perceived racial discrimination at work as an antecedent to procedural justice perceptions. One notable exception is Foley and Kidder (2002) who asked Hispanic law school students to imagine how much race and sex discrimination they might experience in their future jobs as lawyers and to describe how this would probably make them feel regarding the fairness of procedures in this future job. Interestingly, that study found that anticipated discrimination influences expected procedural justice, and ultimately, job satisfaction (Foley & Kidder, 2002). However, that study did not survey employees about actual discrimination experienced at work. In this study, we do so.

In addition to investigating discrimination as an antecedent to procedural justice, we investigate how perceived organizational efforts to support diversity can mitigate the negative effect of perceived discrimination on procedural justice. We further investigate how perceived discrimination and organizational efforts to support diversity can influence important outcome variables including affective commitment and organizational citizenship behavior directed at the organization. We define *organizational efforts to support diversity* as employee perceptions that the practices of the organization indicate that valuing and promoting diversity is a priority in the organization. This definition is based on the work of others who have studied organizational diversity climates, which is a related topic (Cox, 1993; Gelfand, Nishii, Raver, & Schneider, 2005; Kossek & Zonia, 1993; Mor Barak, Cherin, & Berkman, 1998; Nishii & Raver, 2003). However, we define organizational efforts to support diversity more narrowly than diversity climate. Specifically, while definitions of diversity climate have included individual acts (Mor Barak et al., 1998) and attitudes (Kossek & Zonia, 1993) by managers toward members of minority groups, we are more concerned with general employee perceptions of the overall organizational practices with respect to diversity.

Diversity researchers have long maintained that in order for organizations to achieve success with a diverse workforce, employees need to perceive that their organization supports and values the contributions of all employees (Kossek & Zonia, 1993; Mor Barak et al., 1998; Mor Barak & Levin, 2002; Thomas & Ely, 1996; Williams & O'Reilly, 1998). For instance, Ely and Thomas (2001) concluded that in order for an organization to achieve a benefit from cultural diversity, members of the organization need to integrate the insights and experiences that come from having a diverse group of employees and learn from these differences in order to do business. Other research on employees has shown that people who are most likely to experience discrimination based on race or sex (i.e., racial minorities and women) are more likely to be positively affected by organizational support for diversity (Avery & McKay, 2006; McKay, Avery, Tonidandel, Morris, Hernandez, & Hebl, 2007; Mor Barak et al., 1998; Mor Barak & Levin, 2002). Therefore, it is well understood that companies should support and value diversity. However, what is not well understood is whether perceived organizational efforts to support diversity can have a mitigating effect on negative outcomes (such as feelings of procedural injustice) when someone perceives racial discrimination at work. There is no answer to this question yet.

This study is important both theoretically and practically for two reasons. First, from a managerial perspective racial diversity is both a fact of life and a resource that must be managed. Minority groups

are growing rapidly in the United States (U.S. Census Bureau, 2004). While White Americans made up 80 per cent of the population in 1990 (U.S. Census Bureau, 1990) that number decreased to 69 per cent in 2000 and is expected to decrease to 50 per cent by 2050 (U.S. Census Bureau, 2004). In addition, there is a fair amount of evidence that discrimination in the workplace exists (Dipboye & Colella, 2005; Goldman, Gutek, Stein, & Lewis, 2006; Tomaskovic-Devey, Thomas, & Johnson, 2005). In 2006, almost 76 000 discrimination charges were filed with the Equal Employment Opportunity Commission (EEOC, 2007). Over 27 000 of these charges were race related (EEOC, 2007). This makes workplace discrimination problematic not only for the individual employees who perceive discriminatory behavior, but also for the organizations that face costly lawsuits (King & Spruell, 2001) and tarnished public images (Pruitt & Nethercutt, 2002; Wentling & Palma-Rivas, 1997) when their employees file discrimination claims. As such, it is important for managers to manage racial diversity effectively.

Second, from a research perspective it is very important to understand the mechanisms that can be used to diminish the harm caused by perceptions of workplace racial discrimination. Diversity researchers have already done much to demonstrate that perceptions of discriminatory treatment in general (e.g., on the basis of race, sex, or sexual orientation) lead to negative outcomes. For example, perceptions of discrimination lead to employee stress and strain (Gee, 2002; Shaffer, Joplin, Bell, Lau, & Oguz, 2000; Waldo, 1999), dissatisfaction with work, lowered commitment to the organization (Hicks-Clarke & Iles, 2000), feelings of low power and prestige at work (Gutek, Cohen, & Tsui, 1996) and greater turnover (Robinson & Dechant, 1997). However, an area that needs clarification is whether companies can restore a sense that the organization is procedurally just, even for people who perceive discrimination at work. In this paper, we empirically test this question. We also examine whether restoring procedural justice ultimately impacts two important outcomes of procedural justice, affective commitment and organizational citizenship behavior directed at the organization.

## Theory and Hypotheses

We begin by utilizing Leventhal's (1980) rules for judging the fairness of a situation to explain how experiencing workplace racial discrimination from certain individuals in the organization can lead employees to associate the organization as a whole with procedural injustice. Leventhal's six rules include the consistency, bias suppression, accuracy, correctability, representativeness, and ethicality rules. People who perceive discrimination at work are likely to believe that at least three rules have been violated: The consistency rule (that procedures should be consistent across persons), the bias suppression rule (that "self-interest and blind allegiance to narrow preconceptions should be prevented at all points"; Leventhal, 1980, p. 41), and the accuracy rule (that the processes used to allocate outcomes need to be based on good information and informed opinions; Leventhal, 1980). Leventhal's rules allow us to examine the conditions under which specific interactions may be deemed as being fair or unfair. However, these rules do not take the contextual nature of the employer/employee relationship into account. The group-value model does so.

The group-value model of procedural justice asserts that people are sensitive to procedural nuances because procedures are viewed as manifestations of values in the group using the procedures (Lind & Tyler, 1988; Tyler & Lind, 1992). A tenet of the group-value model is that people are predisposed to belong to social groups and are attentive to signs and symbols that communicate information about their status in the group. One way in which people ascertain their status within the group is by evaluating whether they are being treated as well as others.

The group-value model maintains that procedural justice judgments are based on the individual's perceptions of neutrality, trust, and standing in the group (Lind & Tyler, 1988; Tyler & Lind, 1992; Tyler, 1989). Neutrality means that even when an employee does not receive a favorable outcome in a particular circumstance, they will evaluate whether the employer has created a neutral situation, or level playing field, over the long run (Tyler, 1989). Trust refers to whether the employee believes that the intentions of the authority figures in the organization are trustworthy. Finally, standing means that the way an employee is treated in their interactions with authority figures indicates what their status is in the group (Tyler, 1989).

Based on the group-value model of procedural justice (Tyler & Lind, 1992), we examine how perceived organizational efforts to support diversity can improve employee perceptions of procedural justice in the organization even when they have personally experienced racial discrimination from certain individuals at work. We rely on the group-value model of procedural justice, because it explains how organizational actions can lead employees to feel more or less valued by their organizations, thus influencing procedural justice judgments.

Finally, we present a comprehensive model showing that the negative effects of perceived racial discrimination on procedural justice can be attenuated by perceived organizational efforts to support diversity. This then influences two well-established outcomes of procedural justice, affective commitment and organizational citizenship behavior toward the organization (OCBOs). Our theoretical model is consistent with recent theory development expanding justice theory and the group-value model in particular to show that procedural justice influences identification with and commitment to the organization which, in turn, influence involvement in the organization including discretionary behavior (Lavelle, Rupp, & Brockner, 2007; Tyler & Blader, 2003). The theoretical model is displayed in Figure 1.

## Literature Review and Hypotheses Development

Our theoretical justification for connecting discrimination to procedural injustice is grounded in the definition of procedural justice, or the perceived fairness of the procedures that are used to

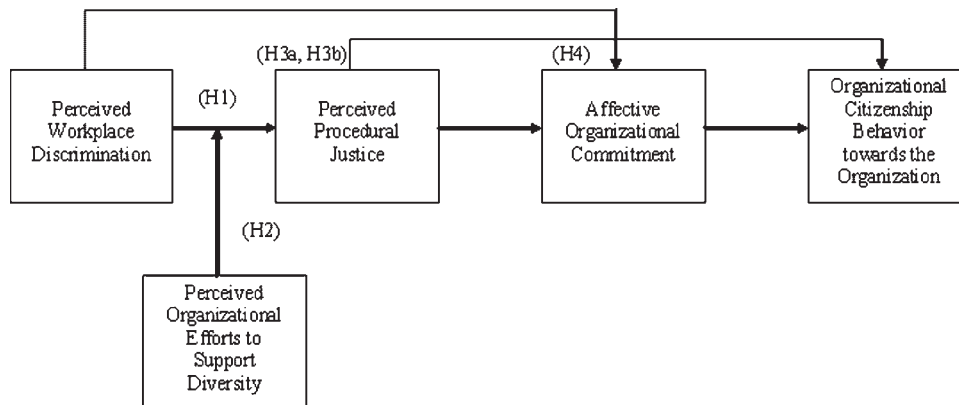


Figure 1. Conceptual model

make decisions in organizations (Colquitt, 2001; Colquitt & Greenberg, 2003; Leventhal, 1980; Leventhal et al., 1980; Thibaut & Walker, 1975). The justice judgment process has been defined as a process that begins with a justice concern being triggered, which then causes people to gather information about the situation in order to ultimately make a justice judgment (Colquitt & Greenberg, 2003).

One way in which a justice concern can be triggered is through perceived discriminatory treatment. Consistent with Allport (1954), we define racial/ethnic discrimination as denying individuals equality of treatment because of their racial/ethnic background. We argue that perceived discrimination will lead people to gather information that ultimately leads to a judgment of procedural injustice. This argument is consistent with Leventhal's (1980) rules of procedural justice. Discriminatory treatment is not consistent across persons because some people are being favored over others. Discriminatory treatment is not free from bias, because those who discriminate are often blindly favoring their in-group members due to phenomena like similarity-attraction (Byrne, 1971) and social categorization (Turner, 1985). Finally, discriminatory treatment is the epitome of inaccurate information, because people are being treated differently from others on the bases of illegitimate factors and prejudices. Drawing from these criteria, we believe that perceived racial discrimination should be negatively related to procedural justice. This rationale is consistent with the group-value model of procedural justice (Lind & Tyler, 1988; Tyler & Lind, 1992), because when a person perceives racial discrimination at work this signals the ascription of lower status and that they are being treated unequally compared to people of other racial backgrounds. Therefore, we predict that

*Hypothesis 1:* Perceptions of racial discrimination at work will be negatively related to perceptions of procedural justice at work.

Although employees may perceive discriminatory treatment from some individuals they work with, we believe that it is still possible for employees to perceive that the organization as a whole is procedurally just, provided that individuals perceive that the organization shows efforts to support diversity. Drawing from the group-value model (Lind & Tyler, 1988; Tyler & Lind, 1992; Tyler, 1989), perceived organizational efforts to support diversity could be a mechanism that helps restore perceptions of neutrality, standing and trust for employees who have experienced discrimination at work, because it can signal that the authority figures in the organization are trying to maintain race-neutral policies and that all racial groups are in good standing (i.e., are valued by the organization). Demonstrating organizational efforts to support diversity is one way in which the organization can provide an environment that indicates social approval and respect for all employees, regardless of their racial backgrounds (*cf.*, Hicks-Clarke & Iles, 2000; Mor Barak & Levin, 2002).

We argue that if an employee does not perceive any racial discrimination at work, then their procedural justice judgments should not be diminished (at least not as a result of racial discrimination). However, when an employee does perceive racial discrimination at work, the degree to which their procedural justice judgments will diminish as a result of perceiving racial discrimination is conditional upon the employee's perceptions of organizational efforts to support diversity. Support for diversity is an organizational action which demonstrates respect for all employees and may help improve employee perceptions of neutrality (that the authority figures maintain race-neutral policies), trust in the authorities, and standing (perceptions that their own racial group is respected by the organization). Even when an employee perceives racial discrimination at work from a few individuals that they interact with, being in an organization that is supportive of diversity as a whole should help them feel valued, thereby improving their overall perception of how they are treated at work. This reasoning is not only consistent with the group-value model of procedural justice but also with the judgment process defined by Colquitt and Greenberg (2003), whereby people engage in an

information-gathering process about the situation before making a justice judgment. Therefore, we expect that

*Hypothesis 2:* The negative relationship between perceived racial discrimination and procedural justice will be moderated by employees' perceived organizational efforts to support diversity such that this relationship is weaker when employees perceive that organizational efforts to support diversity are present.

Our next hypothesis relies on mediation, whereby we posit that perceived racial discrimination influences affective commitment through procedural justice. It has been established in the organizational justice literature that procedural justice is an antecedent to affective commitment (Colquitt et al., 2001; Greenberg, 1990; Korsgaard, Schweiger, & Sapienza, 1995; McFarlin & Sweeney, 1992). Affective commitment is defined as "the employee's emotional attachment to, identification with, and involvement in the organization" (Meyer & Allen, 1991, p. 67). Affective commitment is a natural consequence of procedural justice, because organizational-level perceptions of justice (such as procedural justice) translate into employee reactions toward the organization as a whole (Cropanzano, Prehar, & Chen, 2002; Masterson, Lewis, Goldman, & Taylor, 2000; Malatesta & Byrne, 1997).

Affective commitment is particularly relevant within the context of discrimination at work, because experiencing discrimination is likely to make employees dislike their organizations. When employees have been subject to racial discrimination within the workplace, they are likely to experience negative emotions at work, which leads to lower affective commitment (Mowday, Porter, & Steers, 1982). Empirically, researchers have shown that employees who report experiencing discrimination at work have lower levels of affective commitment (Hicks-Clarke & Iles, 2000).

However, what researchers have not yet explored is whether this negative effect operates through procedural justice. Consistent with what other researchers have speculated (Dipboye & Colella, 2005), we believe that the effects of discrimination on affective commitment operate through procedural justice (Colquitt et al., 2001; Masterson et al., 2000; Malatesta & Byrne, 1997; McFarlin & Sweeney, 1992). When employees believe that they are part of an organization which subjects them to unfair treatment, they will probably dislike the organization and not feel an emotional attachment to it. Because of this, it is likely that perceived discriminatory treatment leads to perceived procedural injustice, which in turn, reduces an employee's affective commitment.

*Hypothesis 3a:* The relationship between perceived racial discrimination and affective commitment will be mediated by procedural justice.

Following a similar rationale, we also posit a mediated moderation in that the interaction effect of perceived racial discrimination and perceived organizational efforts to support diversity will be transmitted to affective commitment through procedural justice. As explained in Hypothesis 2, we believe that the level of perceived procedural justice for people who believe they have experienced racial discrimination will depend on the level of perceived organizational efforts to support diversity. For individuals who perceive discrimination but do not perceive organizational support for diversity, procedural justice will be lower and this, in turn, will lead to lower affective commitment. Conversely, individuals who perceive discrimination and do believe the organization supports diversity are more likely to perceive procedural justice and, in turn, have higher affective commitment. Therefore, we reason that

*Hypothesis 3b:* The interaction effect of perceived racial discrimination and perceived organizational efforts to support diversity on affective commitment will be mediated by procedural justice.

Finally, we examine OCBOs as our final dependent variable. Organizational citizenship behavior (OCB) is broadly defined as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and in the aggregate, promotes the efficient and effective functioning of the organization” (Organ, 1988, p. 4). In particular, OCBOs represent citizenship behavior directed at the organization (Williams & Anderson, 1991). A number of studies have documented that affective commitment is an antecedent to citizenship behavior because people who are affectively committed to an organization are more apt to exert effort on its behalf (Carmeli, 2005; Lavelle et al., 2007; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Norris-Watts & Levy, 2004; Sinclair, Tucker, Cullen, & Wright, 2005). Furthermore, a number of studies have demonstrated that procedural justice is an antecedent to affective commitment (Colquitt et al., 2001; Greenberg, 1990; Korsgaard et al., 1995; McFarlin & Sweeney, 1992). By extension, we also expect that procedural justice will influence affective commitment which, in turn, will influence OCBOs (see Figure 1 for theoretical model). Consistent with previous research, we propose

*Hypothesis 4:* The relationship between procedural justice and OCBO will be mediated by affective commitment.

## Method

### *Participants*

Employed participants were recruited from Master of Business Administration (MBA) classes and an upper division undergraduate business course at a large public university in the southern United States. This particular university is known for having an older than average student body, most of which is employed. Of the 261 participants of the study, 25 were not employed and were therefore removed from the sample. Of the remaining 236 employed participants, 55 were removed from the sample because they did not completely answer both portions of the two-phase survey. Some of these 55 people were absent from class on the day Phase 1 was administered, and others did not complete both phases of the survey. Thus, 181 employees provided a full set of data and these participants constituted the sample.

In order to check for selection bias, we ran an ANOVA (with the grouping variable representing whether participants answered Phase 1 only or both parts of the survey) to test whether participants who did not answer Phase 2 differed significantly on any variables of interest collected in Phase 1. Results showed that participants who completed both phases of the study were less likely to report discriminatory treatment at work ( $M = 2.08$ ,  $SD = .81$ ) than those who answered only the first phase ( $M = 2.50$ ,  $SD = 1.19$ ). There were no significant differences on perceptions of organizational efforts to support diversity, age, or years of full-time work experience. We also ran  $\chi$ -squared tests to determine whether there were any demographic differences between people who answered Phase 1 only compared to people who answered both phases. Results showed that there were no significant differences between groups based on sex, race, graduate student status, or full-/part-time working status.

Half (50 per cent) of the respondents were female. The majority of participants were Hispanic (77 per cent), 8 per cent were Caucasian, 7 per cent Asian, 1 per cent African-American, 1 per cent Native American, and 6 per cent were other or bi-racial minorities. The average age was 29 years, and 100 per cent of the participants were currently employed. Fifty-seven per cent of the employees worked

full-time while 43 per cent worked part-time. Mean full-time work experience was 8 years. Finally, 57 per cent of the participants were MBA students while 43 per cent were undergraduate upperclassmen.

The community in which the university resides is a city with well over half a million residents along the border of the United States and Mexico. For this city, the U.S. Census 2000 data indicate a clear difference between the races/ethnic backgrounds in overall social status, as measured in terms of participation in the labor force, family income, ownership of homes, and value of homes. Overall, minorities are in a lower socioeconomic status than Caucasians.

### *Procedure*

The study was conducted in two phases and using two different methods in order to reduce the problem of common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Podsakoff & Organ, 1986). Respondents were recruited during class time to participate in a two-phase study. The Phase 1 survey was handed out that day to the class together with postage paid envelopes addressed to the researcher. Perceived workplace racial discrimination, perceptions of organizational efforts to support diversity, and demographic variables including sex, race, employment status, and work experience were collected during Phase 1. At this time, we also collected the participants' e-mail addresses. Participants had 15 days to complete the survey and mail it back to the researcher. After 15 days, the Phase 1 participants received an e-mail with a web link to complete the Phase 2 survey. The Phase 2 web survey included measures of procedural justice, affective organizational commitment, and OCBOs.

### **Phase 1 measures**

Participants were asked to think about their current employer and answer the following questions.

*Perceived workplace racial discrimination.* We used eight items from James, Lovato, and Cropanzano's (1994) Workplace Prejudice/Discrimination Inventory. A sample item is "At work I feel socially isolated because of my racial/ethnic group." Participants indicated the extent to which they agreed with each item on a six-point Likert-type scale (1 = *strongly disagree* to 6 = *strongly agree*). The reliability for this scale was  $\alpha = .88$  (Cronbach, 1951). All the items for this measure are listed in the Appendix.

*Perceived organizational efforts to support diversity.* We used two items from Hegarty and Dalton's (1995) Organizational Diversity Inventory. A sample item is "My organization has sponsored classes, workshops, and/or seminars on diversity." We used one item from Mor Barak et al.'s (1998) Diversity Perceptions Scale "My organization spends enough money and time on diversity awareness and related training." In addition, we wrote two items which we believe help more fully capture this construct. A sample item is "My organization values diversity." Participants indicated the extent to which they agreed with each item on a six-point Likert-type scale (1 = *strongly disagree* to 6 = *strongly agree*). The reliability for this scale was  $\alpha = .84$ . All the items for this measure are listed in the Appendix.

*Control variables.* We controlled for minority status<sup>1</sup> (coded as 1 = minority and 0 = majority) because minorities have lower social status and tend to perceive more discrimination than majority group members (Goldman et al., 2006; McKay et al., 2007; Sidanius & Pratto, 1999). Previous research

<sup>1</sup>For the purposes of this study, racial minority status was defined as the protected classes that are associated with Title VII of the Civil Rights Act of 1964: African-American, Hispanic/Latino, Native American, and Asian-American.



shows that males are perceived as having higher status in society (Glick & Fiske, 1996; Sidanius & Pratto, 1999). As such, it is possible that men may experience better treatment at work and perceive fewer instances of discrimination or procedural injustice at work. Therefore, we controlled for participants' sex, which was coded as 1 = female and 0 = male. In addition, we controlled for whether the employee worked full-time (coded as 1) or part-time (coded as 0). Our rationale for this was that full-time employees spend more time at work, have more interaction at work, and hence have more opportunities to perceive discrimination at work. We included age and full-time work experience as covariates because these variables increase the amount of opportunity that someone has to experience discrimination at work. Research also suggests that the formation of social groups in organizations is influenced by both age and experience (Pfeffer, 1983). We also controlled for whether the participant was a graduate or an undergraduate student, because higher status individuals have more control and influence in groups than lower status individuals (Berger, Cohen, & Zelditch, 1972, Cleveland, Stockdale, & Murphy, 2000; Holtgraves, 1986). Graduate status was coded as 0 = undergraduate and 1 = graduate.

### Phase 2 measures

*Procedural justice.* Colquitt's (2001) seven-item measure was used. One sample item was "Has your organization's treatment of you upheld ethical and moral standards?" Participants indicated the extent to which they agreed with each item on a five-point Likert-type scale (1 = *to a small extent* to 5 = *to a large extent*). The reliability for this scale was  $\alpha = .89$ .

*Affective commitment.* This was measured using Allen and Mayer's (1990) eight-item measure. A sample item is "I would be very happy to spend the rest of my career with this organization." Participants answered these items on a six-point Likert-type scale (1 = *strongly disagree* to 6 = *strongly agree*). The reliability for this scale was  $\alpha = .83$ .

*OCBOs.* Lee and Allen's (2002) eight-item measure was used. A sample item is "I attend functions that are not required but that help the organizational image." Participants indicated the extent to which they agreed with each item on a six-point Likert-type scale (1 = *strongly disagree* to 6 = *strongly agree*). The reliability for this scale was  $\alpha = .90$ .

## Preliminary Analyses

Because we collected several scales at the same time in both Phase 1 and Phase 2 of the survey, we ran a confirmatory factor analysis (CFA) for both phases in LISREL (8.52) to establish the convergent and discriminant validity of all the measures in the study. The results for Phase 1 indicated that a two-factor solution (perceived discrimination and perceived efforts to support diversity) was a good fit for the data ( $\chi^2 = 222.84$ ,  $df = 64$ , normed  $\chi^2 = 3.48$ , CFI = .92, IFI = .92, SRMR = .10; Kline 2005). A two-factor solution was a much better fit to the data than a one-factor solution ( $\chi^2 = 539.22$ ,  $df = 65$ , CFI = .75, IFI = .75, SRMR = .18).

The results for Phase 2 indicated that a three-factor solution (procedural justice, affective commitment, OCBO) was a good fit to the data ( $\chi^2 = 481.30$ ,  $df = 227$ , normed  $\chi^2 = 2.12$ , CFI = .96, IFI = .96, SRMR = .07). A three-factor solution was also a better fit to the data than a two-factor solution where affective commitment and OCBO were combined to form one factor while procedural justice formed the other factor ( $\chi^2 = 678.50$ ,  $df = 229$ , CFI = .92, IFI = .92, SRMR = .08). A

three-factor solution was also better than a one-factor solution ( $\chi^2 = 1065.58$ ,  $df = 230$ ,  $CFI = .86$ ,  $IFI = .86$ ,  $SRMR = .12$ ).

## Results

See Table 1 for means, standard deviations, and inter-correlations for all variables. As expected, the bivariate correlations showed that perceived racial discrimination is negatively related to procedural justice ( $r = -.46$ ,  $p < .01$ ) but that perceived efforts to support diversity were positively related to procedural justice ( $r = .22$ ,  $p < .01$ ). We conducted a hierarchical multiple regression analysis to test Hypotheses 1 and 2. Following Cohen, Cohen, West, and Aiken (2003), the variables in the interaction term were centered to test for moderation. The regression analysis consisted of three steps (see Table 2 for the results). In Step 1, the control variables, sex, age, minority status, work experience, full-time work status, and graduate student status were entered. This step was statistically significant ( $R^2 = .08$ ). In Step 2, we added perceived workplace racial discrimination and perceived organizational efforts to support diversity. The results of this step were significant ( $R^2 = .27$ ;  $\Delta R^2 = .19$ ). This step demonstrated that perceived workplace racial discrimination had a significant negative relationship with perceptions of procedural justice ( $\beta = -.40$ ,  $p < .01$ ). Therefore, Hypothesis 1 was supported. In Step 3, we added the two-way interaction between perceived organizational efforts to support diversity and perceived workplace racial discrimination. The results showed that the interaction term was significantly related to procedural justice and explained an additional 2 per cent of the variance beyond the controls and main effects, which is common for interaction terms (McClelland & Judd, 1993;  $R^2 = .29$ ,  $\Delta R^2 = .02$ ). The plot of the interaction is shown in Figure 2. Following Aiken and West (1991), the end points of the lines represent the variables at  $\pm 1$  SD around the mean values. Note that because mean discrimination in the sample was 2.07 ( $SD = .81$ ), low discrimination represents no

Table 1. Means, standard deviations, and inter-correlations

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Sex	.50	.50										
2. Age	28.68	7.56	-.07									
3. Minority	.86	.35	.05	-.24**								
4. Work experience	8.00	9.93	-.06	.62**	-.19*							
5. Full-time employee	.57	.50	-.06	.38**	-.05	.41**						
6. Graduate student	.57	.50	-.01	.33**	-.19*	.19**	.43**					
7. Perceived workplace racial discrimination	2.07	.81	.04	.09	-.04	.16*	.08	-.10				
8. Perceived organizational efforts to support diversity	3.78	1.10	-.03	.04	-.09	.12	.05	.13	-.21**			
9. Procedural justice	3.18	.94	-.11	-.15*	-.05	-.18*	-.12	.05	-.46**	.22**		
10. Affective commitment	3.67	.93	.00	-.02	-.05	.02	.06	.19*	-.39**	.25**	.47**	
11. OCBO	5.05	1.24	-.06	.23**	-.07	.20**	.24**	.32**	-.19*	.18*	.31**	.63**

Note:  $N = 181$ .

Sex was coded as 0 = male, 1 = female. Minority was coded as 0 = non-minority, 1 = minority. Full time employee was coded as 0 = part-time, 1 = full-time. Graduate student was coded as 0 = undergraduate, 1 = graduate. OCBO = organizational citizenship behavior toward the organization.

\* $p \leq .05$ ; \*\* $p \leq .01$ .

Table 2. Results of regression analysis regressing procedural justice perceptions on perceptions of workplace racial discrimination and perceived organizational efforts to support diversity

Step	Variable	b (SE)	$\beta$	$R^2$	$\Delta R^2$
1	Intercept	3.89 (.39)		.08*	
	Sex	-.24 (.14)	-.13		
	Age	-.01 (.01)	-.10		
	Minority	-.19 (.21)	-.07		
	Work experience	-.01 (.01)	-.13		
	Full-time employee	-.20 (.17)	-.10		
	Graduate student	.27 (.16)	.14		
2	Intercept	3.81 (.35)		.27**	.19**
	Sex	-.19 (.12)	-.10		
	Age	-.01 (.01)	-.07		
	Minority	-.21 (.19)	-.08		
	Work experience	-.01 (.01)	-.10		
	Full-time employee	-.11 (.15)	-.06		
	Graduate student	.09 (.15)	.05		
	Workplace racial discrimination	-.46 (.08)**	-.40**		
Efforts to support diversity	.12 (.06)*	.14*			
3	Intercept	3.73 (.35)		.29*	.02*
	Sex	-.17 (.12)	-.09		
	Age	-.01 (.01)	-.05		
	Minority	-.17 (.19)	-.06		
	Work experience	-.01 (.01)	-.11		
	Full-time employee	-.12 (.15)	-.06		
	Graduate student	.07 (.14)	.04		
	Workplace racial discrimination	-.44 (.08)**	-.38**		
	Efforts to support diversity	.13 (.06)*	.16*		
	Efforts to support diversity x Workplace racial discrimination	.14 (.07)*	.14*		

Note:  $N = 181$ .

Sex was coded as 0 = male, 1 = female. Minority was coded as 0 = non minority, 1 = minority. Full-time employee was coded as 0 = part-time, 1 = full-time. Graduate student was coded as 0 = undergraduate, 1 = graduate.

\* $p \leq .05$ ; \*\* $p \leq .01$ .

reported discrimination and high discrimination represents a roughly neutral (slightly disagree) answer on the scale which ranged from 1 to 6. Therefore, as Cohen *et al.* (2003) note, the results of this figure can only be interpreted within the range of our data.

We conducted a test of the simple slopes (Aiken & West, 1991) to see whether the slope of each line was significantly different from 0. Results showed that when perceived organizational efforts to support diversity were high, perceived workplace racial discrimination had an effect on procedural justice ( $\beta = -.28, p < .01$ ). When perceived organizational efforts to support diversity were low, perceived racial discrimination had an even stronger effect on procedural justice ( $\beta = -.55, p < .01$ ). Therefore, Hypothesis 2 was supported. Note that because the perceived discrimination variable was slightly skewed right (skewness of 0.94), we transformed the variable and re-ran the analyses as a robustness check. As suggested by Field (2005), taking the square root of the variable reduced the positive skew to 0.48. We then ran the same moderated regression analysis with the transformed variable, and the results were the same. (Results available from first author upon request.)

Next, in order to test Hypotheses 3a and 3b, we conducted a path analysis including all the variables in the model. Because the model to be tested included both moderation and mediation, we relied on the

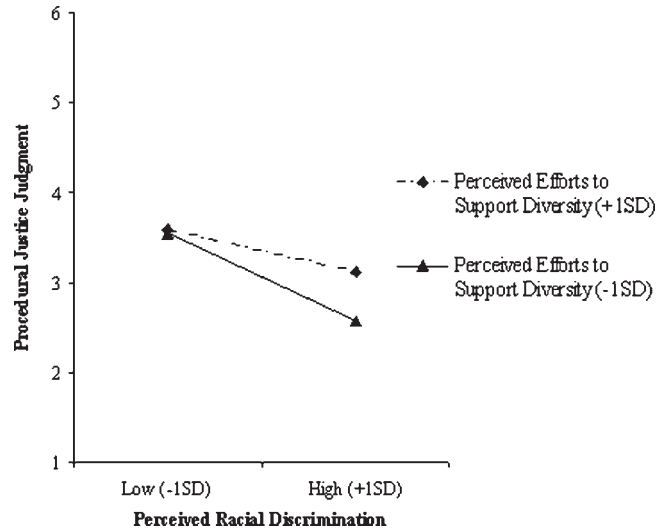


Figure 2. Interaction between perceived workplace racial discrimination and perceived organizational efforts to support diversity on procedural justice perception

work of Edwards and Lambert (2007) which provided guidelines about integrating tests of moderation and mediation in path analysis.<sup>2</sup> The model presented in Figure 1 yielded a very good fit to the data ( $\chi^2 = 2.27$ ,  $df = 3$ ,  $CFI = 1.00$ ,  $IFI = 1.00$ ,  $SRMR = .02$ ). See Figure 3 for the model with standardized path coefficients.

Furthermore, in order to test whether procedural justice mediated the relationships posited in Hypotheses 3a and 3b, we followed Baron and Kenny's (1986) four-step method. First, the independent variable must be related to the dependent variable (Step 1). Second, the independent variable must be related to the mediator (Step 2). Third, the mediator must be related to the dependent variable while controlling for the independent variable (Step 3). Finally, a previously significant relationship between the independent and dependent variables must be reduced in the presence of the mediator (Step 4). If the coefficient is reduced or drops in significance, then partial mediation is supported. If the coefficient loses significance, then full mediation is supported.

First, we tested Hypothesis 3a which predicted that the relationship between perceived racial discrimination and affective commitment would be mediated by procedural justice. The results of the path analysis showed that the total effect of perceived racial discrimination on affective commitment

<sup>2</sup>Recently, there has been some debate in the research methods literature about how to best conduct tests combining mediation and moderation. In what has been referred to as the "moderated causal steps approach" to testing mediated moderation (Edwards & Lambert, 2007, p. 5), some researchers have endorsed the requirement that the moderator ( $Z$ ) must moderate the relationship between the independent variable ( $X$ ) and the dependent variable ( $Y$ ) in Step 1 (Muller, Judd, & Yzerbyt, 2005). Recently, Edwards and Lambert (2007) criticized this approach by pointing out that this requirement does not allow researchers the flexibility to test how the moderating effect of  $Z$  influences the indirect effect between  $X$  and  $Y$  that is transmitted through mediator ( $M$ ). Edwards and Lambert (2007, pp. 5–6) say that "most studies examine the moderating effect of  $Z$  on the relationship between  $X$  and  $M$  . . . but studies rarely . . . consider how the product representing the indirect effect of  $X$  on  $Y$  varies across levels of  $Z$ ." In other words, Edwards and Lambert (2007) argue that requiring an interaction of  $X$  and  $Z$  on  $Y$  at Step 1 is too stringent and does not necessarily match the researcher's theory. Instead of this requirement, Edwards and Lambert (2007) present eight different variations combining tests of mediation and moderation. The method to be used should match the theory behind the research. We used one of these eight models to test our theoretical model. In particular, our test is what Edwards and Lambert (2007, p. 8) call a "first stage moderation model." This means that in a mediated test with independent variable ( $X$ ), mediator ( $M$ ), and dependent variable ( $Y$ ), depicted as this:  $X \rightarrow M \rightarrow Y$  it is the relationship between  $X$  and  $M$  that is moderated by moderator ( $Z$ ).

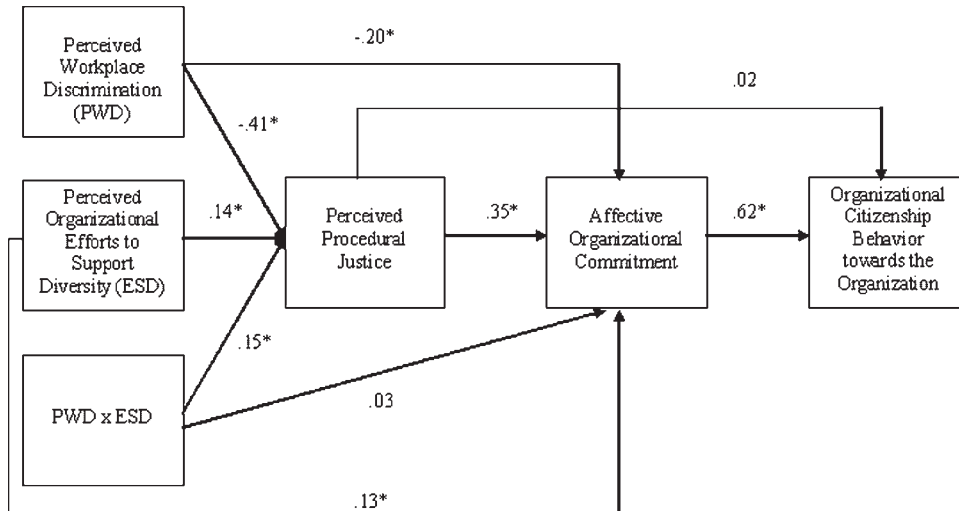


Figure 3. Path model with standardized path coefficients

was  $-.34$  ( $t = -4.87, p < .01$ ), which fulfills Step 1. The effect of perceived racial discrimination on perceived procedural justice was  $-.41$  ( $t = -6.10, p < .01$ ) which fulfills Step 2. The effect of perceived procedural justice on affective commitment was  $0.35$  ( $t = 4.71, p < .01$ ), which fulfills Step 3. Finally, in Step 4, the indirect effect of perceived racial discrimination on affective commitment through procedural justice was  $-.14$  ( $-.41 \times .35$ ) while the direct effect was  $-.20$  ( $t = -2.73, p < .01$ ). To assess whether the change in path coefficients was significant, we used the test provided by LISREL, which relies on Sobel (1982) to test the significance of the indirect effect. The indirect effect between perceived racial discrimination and affective commitment was significant ( $z = -3.73, p < .01$ ). Therefore, the relationship between perceived racial discrimination and affective commitment is partially mediated by perceived procedural justice, and Hypothesis 3a was partially supported.

The same process was followed in order to test Hypothesis 3b which posited that the interaction effect of perceived racial discrimination and organizational efforts to support diversity on affective commitment would be mediated by procedural justice. The results of the path analysis showed that the total effect of the interaction term on affective commitment was  $0.03$  which was not significant ( $t = .41, p > .05$ ). This means that Step 1 of the Baron and Kenny method was not supported and that mediation was not supported. However, Baron and Kenny's causal steps approach to testing for mediation is just one of many ways to test for intervening variables (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). In fact, MacKinnon and coauthors reviewed 14 different tests for intervening variables and concluded that the causal steps approach was among the lowest powered of all the tests. Sobel's (1982) product of coefficients approach has much higher power to test for indirect effects (MacKinnon et al., 2002) and has been recommended for testing indirect effects when mediation cannot be fulfilled because Step 1 in Baron and Kenny's causal steps approach is not supported (Collins, Graham, & Flaherty, 1998; Shrout & Bolger, 2002). Results of the path analysis showed that the indirect effect of the interaction term on affective commitment was  $0.05$  ( $0.15 \times 0.35$ ) which is statistically significant according to Sobel's test ( $z = 2.07, p < .05$ ). Therefore, we found mixed support for Hypothesis 3b. While mediation was not supported, we did find support for an indirect effect.

In order to test Hypothesis 4, that affective commitment would mediate the relationship between procedural justice and OCBO, we followed Baron and Kenny's causal steps approach. The results of the

path analysis showed that the total effect of procedural justice on OCBO was 0.23 ( $t = 3.13, p < .01$ ), which fulfills Step 1. The effect of procedural justice on affective commitment was 0.35 ( $t = 4.71, p < .01$ ) which fulfills Step 2. The effect of affective commitment on OCBO controlling for procedural justice was 0.62 ( $t = 9.42, p < .01$ ), which fulfills Step 3. Finally, in Step 4, the indirect effect of procedural justice on OCBO through affective commitment was 0.22 ( $0.35 \times 0.62$ ) and was significant using Sobel's test ( $z = 4.21, p < .01$ ) while the direct effect dropped to 0.02 and was not significant ( $t = .26, p > .05$ ). Therefore, affective commitment fully mediates the relationship between procedural justice and OCBO, supporting Hypothesis 4.

## Discussion

Overall, the results of the study show support for our hypotheses. Consistent with Hypothesis 1 and Leventhal's (1980) criteria for procedural justice, perceived racial discrimination at work is related to feelings of procedural injustice from the organization. However, as predicted by Hypothesis 2, this negative outcome is attenuated by the presence of perceived organizational efforts to support diversity. This is consistent with the group-value model of procedural justice (Tyler & Lind, 1992) which maintains that people look to the procedures that authority figures put in place as a means of understanding their standing and worth within the group. The results of the path analysis also show that procedural justice partially mediates the relationship between perceived racial discrimination and affective commitment and that there is a significant and positive indirect effect of the interaction term (perceived racial discrimination  $\times$  organizational efforts to support diversity) on affective commitment. Finally, procedural justice ultimately impacts OCBOs mediated by affective commitment. We found these effects even with relatively low levels of perceived racial discrimination reported and limited variance in the sample ( $M = 2.07, SD = .81$ ). Therefore, our results should be interpreted within this range of low amounts of perceived discrimination. Furthermore, it is possible that what we present is a conservative test of the phenomenon due to the limited range in our data.

A theoretical implication of our findings is that the group-value model of procedural justice can be extended to explain how being valued by a group influences outcomes of procedural justice, including affective commitment and OCBO. In fact, our findings are consistent with recent theoretical work expanding the group-model to show that the way people are treated by authorities' influences procedural justice which, in turn, influences identification with the organization and ultimately involvement in the organization including discretionary behavior (Tyler & Blader, 2003).

These findings also relate to other research on team diversity which shows that individual beliefs about the value of diversity versus homogeneity in teams influence identification with the team (van Knippenberg, Haslam, & Platow, 2007; van Dick, van Knippenberg, Hägele, Guillaume, & Brodbeck, 2008). In particular, these two studies found that when the members of diverse teams believe that diversity is good for teams and adds value, the reported team identification is higher. Taken together, the results of these studies and the present study imply that both individual beliefs about the value of diversity as well as organizational efforts to support diversity affect psychological attachment (identification and commitment) among a diverse workforce.

Theoretically, the evidence from this study also suggests that by improving procedural justice perceptions for employees who feel discriminated against at work, employers should be able to keep them more committed to the organization, which in turn, should reduce turnover. This is because affective commitment is a proximal indicator of turnover (Griffeth, Hom, & Gaertner, 2000). This finding is particularly interesting within a sample of predominately minority employees, because prior

research has shown that those who are most likely to experience discrimination at work also tend to have higher turnover rates (Griffeth & Hom, 2001; McKay et al., 2007; Robinson & Dechant, 1997). Our findings imply, theoretically, that this does not have to be so and that the negative effects of perceived racial discrimination do not have to escalate to such an extent provided that the organization values diversity.

The practical implication of this study is that, through linking perceived racial discrimination with procedural justice and perceived efforts to support diversity, we have identified a way to reduce the harmful effects of perceived discrimination in the workplace. Procedural justice has repeatedly been shown to relate to numerous positive organizational outcomes including satisfaction, commitment, and job performance (Colquitt et al., 2001). By restoring a sense of procedural justice among employees who have experienced racial discrimination at work, organizations make it much more likely that these employees will obtain these positive outcomes and be productive members of the organization (Cox, 1993). This is interesting in light of recent findings on team diversity which showed that diverse teams performed better when they held pro-diversity beliefs instead of pro-similarity beliefs (Homan, van Knippenberg, Van Kleef, & De Dreu, 2007). In particular, Homan and coauthors found that when diverse teams held pro-diversity beliefs, they engaged in an information elaboration process and shared information which, in turn, improved performance. While Homan et al.'s study focused on individual-level pro-diversity beliefs (i.e., the belief that when diverse teams work together they perform better and have a more pleasant experience than homogenous teams), the present study focused on individual perceptions that their organizations support and value diversity. Although the pro-diversity beliefs originate at different levels, taken together these studies imply that pro-diversity beliefs (from the self or the organization) can help diverse individuals achieve positive attitudes, and ultimately may improve work performance. In addition, another practical implication of the present study is that to the degree that organizations show sincere efforts to support diversity, they are less likely to be sued by their employees. Therefore, our data provide evidence to suggest that investing in diversity programs can be worthwhile.

One limitation of this study is that because our scope was limited to general perceptions of workplace racial discrimination, efforts to support diversity, and procedural justice, we can only draw general conclusions about the relationships between these three constructs. In order to gain access to our sample of MBA students, we had to keep the survey very short. As such, we picked three general and well-known measures. However, the tradeoff that we made was that we cannot make more nuanced predictions and conclusions about where the discrimination is coming from and how that affects procedural justice. In reality, discrimination in organizations can occur at various levels: the individual level (Dovidio & Hebl, 2005), the group level (Thomas & Chrobot-Mason, 2005), and the organizational level (Gelfand et al., 2005). Even at the individual level, discrimination could be coming from the supervisor, coworkers, or even one's customers (Gettman, Gelfand, Leslie, Schneider, & Salvaggio, 2004; Schneider, Bowen, Ehrhart, & Holcombe, 2000). It is possible that the source of the discrimination could affect the nature and the magnitude of the relationships reported in this study. In order to disentangle all the possible sources of the discrimination, however, one would need a much longer and more detailed survey instrument than the one used in this study. Since this is the first study to link perceived discrimination, perceived efforts to support diversity, and procedural justice, we opted for more generic measures of these constructs.

A second limitation is that the sample was predominately Hispanic. Although a limitation, having a largely Hispanic sample provides insight into a minority group for which relatively little research exists. While other researchers have lamented that their sample "did not include enough individuals from ethnic minority backgrounds" (Hicks-Clarke & Iles, 2000, p. 336), we contribute to discrimination research by providing a sample of mostly ethnic minorities. Still, the fact that our sample was mostly Hispanic limits the generalizability of the study to other racial groups. We

acknowledge that other racial groups may respond differently to perceived racial discrimination and organizational efforts to support diversity (McKay et al., 2007). Therefore, our results are best generalized to Hispanic employees. Future research can rectify this limitation in our study by sampling other minority groups.

A third limitation of our study is that we only measured one form of discrimination, racial discrimination. Future research should endeavor to investigate whether our results generalize to sex or age discrimination. We believe that our results should hold for other types of discrimination as well. Perceiving discrimination, regardless of the kind of discrimination, means that a person is being treated badly and in a way that is different from others based on their group membership. Regardless of the kind of discrimination, we believe that perceived discrimination should lead to feelings of procedural injustice and ultimately reduce an employee's attitudes toward the organization and willingness to engage in discretionary behaviors. However, we also believe that organizational efforts to support diversity should generally lead to feelings of being valued and help redeem the organization's image which would reduce the harmful effects of discrimination on procedural justice and ultimately on affective commitment and OCBO. Ideally, future research could test these speculations empirically.

Although the demographics in the sample were limited, the sample also provided several strengths. This sample of working adults was selected because it provides the essential characteristics of the intended target population to which we wish to generalize our findings (Sackett & Larson, 1990). This study answers calls for discrimination research to involve employed participants drawing from real-world interactions (Dipboye, 1985; Dipboye & Colella, 2005; Goldman et al., 2006). It was important to have a sample of employed people so that they could answer the survey instrument based on real experiences, not imagined scenarios. The sample of minority employees also allowed us to understand the experiences of lower status group members (Sidanius & Pratto, 1999). This is important because lower status group members are more likely to experience discrimination than majority group members (Benokraitis & Feagin, 1995; Feagin & Sikes, 1994; McConahay, 1983). As the workplace in the U.S. becomes increasingly diverse, it is important to conduct research on minority groups in order to understand their experiences at work and how best to manage groups of diverse employees.

Another strength pertains to the study design including the data collection across two points in time and using two different methods which helps lessen common method variance, a problem common in discrimination research (Goldman et al., 2006). This also helps establish a temporal precedent between the independent and dependent variables in the study (Cook & Campbell, 1979; Hume, 1977). Although data collection at two points is a strength of this study, we still cannot establish causality with certainty. While some argued (and found) that perceived discrimination should lead to justice perceptions (Foley & Kidder, 2002; Foley, Kidder, & Powell, 2002), others have theorized that perceived injustice leads to perceptions of discrimination (Goldman et al., 2006; Harris, Lievens, & Van Hoye, 2004). In our case, we think reverse causality is unlikely. Our measure of perceived discrimination, the Workplace Prejudice/Discrimination Inventory, asks about specific instances in which the employees were singled out because of their ethnicity. For example, one item states "At my present place of employment, people of other racial/ethnic groups do not tell me some job-related information that they share with members of their own group." Theoretically, it makes sense that these types of actions would lead to perceived procedural injustice. However, it makes less sense that an employee perceives procedural injustice at work and that then leads to perceptions that those around them are committing acts of ethnic discrimination toward them. Still, because we collected survey data we cannot establish causality with certainty. Perhaps experimental research could address this in the future.

Finally, although our sample was comprised of working individuals, these participants came from many different organizations. Thus, one logical extension for future research is to compare effects of organizational efforts to support diversity across organizations. Organization-level analysis across



different organizations with varying attitudes toward diversity could demonstrate whether important outcomes such as turnover rates and organizational performance vary as a function of organizational policies and attitudes toward diversity. Qualitative work in organizations by Ely and Thomas (2001) suggests that organizational outcomes should vary depending on organizational attitudes toward diversity. Empirical work also shows that company diversity policies influence the number of minorities in management positions (Kalev, Dobbin, & Kelly, 2006). Future empirical research along these lines should be fruitful.

## Conclusion

Workplace discrimination symbolizes behavior of the worst character and leads to many negative outcomes for both the employees and the organization. It then becomes critical for organizations to combat discrimination in any way they can. Bowen and Ostroff (2004) describe a strong HR system as one that unambiguously creates an environment that endorses certain kinds of behavior. The more that organizations are able to create a strong HR system that shows a strong commitment to supporting diversity and fostering the belief that diversity is an opportunity rather than a problem (Cox & Blake, 1991), the more likely it is that the harmful consequences of discrimination will be relieved. In this study, we have demonstrated how perceiving organizational efforts to support diversity can counteract the harm caused by perceived acts of racial discrimination and improve perceptions of procedural justice. This is an important finding, because procedural justice influences several other variables including affective commitment and OCBOs. It is our hope that this study is just one of many steps that diversity researchers will take to reduce the negative effects of discrimination at work and help solve this important organizational problem.

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## Appendix

### Perceived workplace racial discrimination items

1. At work I am treated poorly because of my racial/ethnic group.
2. At work I feel socially isolated because of my racial/ethnic group.
3. I have sometimes been unfairly singled out because of my racial/ethnic group.
4. At my present place of employment, people of other racial/ethnic groups do not tell me some job-related information that they share with members of their own group.
5. I have experienced discrimination at work.
6. At my present job, some people get better treatment because of their racial/ethnic group.
7. Where I work all people are treated the same, regardless of their racial/ethnic group.
8. Where I work promotions and rewards are not influenced by racial or ethnic group membership.

### Perceived organizational efforts to support diversity items

1. Managing diversity helped my organization to be more effective.
2. My organization has sponsored classes, workshops, and/or seminars on diversity.
3. My organization puts a lot of effort into diversity management.
4. My organization spends enough money and time on diversity awareness and related training.
5. My organization values diversity.