

Overcoming Negative Reactions of Nonbeneficiaries to Employment Equity: The Effect of Participation in Policy Formulation

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In 2 experimental studies, we examined a way to overcome nonbeneficiaries' resistance to employment equity (EE) policies—participation in formulating the policy. We operationalized participation in terms of instrumental versus noninstrumental voice and proposed that nonbeneficiaries would be more likely to support an EE policy when allowed instrumental participation in the policy's development. Further, we proposed psychological ownership as the mediating mechanism underlying the effects of instrumental participation. Study 1 examined participation effects for a gender-based EE policy and Study 2 for a race-based EE policy. As predicted, we found that nonbeneficiaries (men in Study 1; Whites in Study 2) in the instrumental participation condition expressed greater behavioral intentions to promote the policy (Studies 1 and 2) and were more likely to engage in a behavior promoting the policy (Study 2). We also found support for psychological ownership as the underlying mediating mechanism in both studies. Contributions to theory and practice are discussed.

Keywords: affirmative action, employment equity, instrumental and noninstrumental voice, involvement and participation, psychological ownership

Employment equity (EE) policies (or affirmative action programs) have become important tools for promoting equal employment opportunities for women and minorities (Fletcher & Chalmers, 1991; Harrison, Kravitz, Mayer, Leslie, & Lev-Arey, 2006).¹ These policies, which have been implemented by governments worldwide, are a reaction to historical discrimination against disadvantaged groups in the workplace (Jain, Sloane, Horwitz, Taggar, & Weiner, 2003; Sowell, 2004). In addition to redressing past discrimination, these policies may be crucial for economic prosperity and growth in countries with highly diverse workforces (e.g., Pelled, Eisenhardt, & Xin, 1999).

EE policies should represent positive developments in the employment domain because they address past discrimination, promote social justice, and broaden the pool of qualified job candidates. However, these policies can be highly controversial and viewed negatively by employees (Harrison et al., 2006). In particular, research suggests that these policies are often viewed negatively by individuals who do not benefit from the policies, such as men and Whites in North America (Johnson, 1990; Tougas & Veilleux, 1988). These findings are troubling because the support of both beneficiaries and nonbeneficiaries of these policies is needed for such policies to be effective (Hitt & Keats, 1984). The negative reactions of nonbeneficiaries may have important implications for organizations, such as limiting the pool of potentially highly qualified applicants, wasting resources on developing EE policies, and potentially fines for not complying with the laws if negative reactions prompt an organization not to use these policies (e.g., Jain et al., 2003). Further, nonbeneficiaries' negative reactions to these policies may lead to demotivation, alienation, and hostility (e.g., Heilman, McCulloch, & Gilbert, 1996). Thus, finding a way to overcome resistance of nonbeneficiaries of EE policies is of utmost importance.

We propose one way to overcome resistance to EE policies among nonbeneficiaries—by allowing them to participate in the formulation of the EE policy. The purpose of this article is twofold. First, in two experimental laboratory studies, we examined

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¹ The term *affirmative action* is used in the United States, but its equivalent in Canada is *employment equity*. This study was conducted in Canada; thus, we use the term *employment equity* throughout the article.

whether nonbeneficiaries' participation in formulation of an EE policy resulted in greater support of the policy (conceptualized in terms of attitudes toward and promotion of the policy). Second, we examined one possible mechanism that underlies the relation between participation in formulating an EE policy and support of the policy: psychological ownership. In doing so, this article makes several contributions. First, this is the first examination of employee participation in EE policy formulation as a potential tool for overcoming negative reactions by nonbeneficiaries to EE policies. Second, we identified psychological ownership as an underlying mechanism of the participation effect. Third, in contrast to prior work that has primarily focused on attitudes toward EE policies (Bell, Harrison, & McLaughlin, 2000), we also examined behavioral intentions and actual behavior to promote an EE policy. Behavioral intentions and behaviors related to EE policies have been rarely studied (Bell et al., 2000) and represent important outcomes to broaden the understanding of how to successfully implement EE policies.

EE Policies

EE policies are becoming increasingly common worldwide, existing in countries such as Australia, Canada, New Zealand, India, Malaysia, South Africa, and the United States (Sowell, 2004; Yang, D'Souza, Bapat, & Colarelli, 2006). These policies aim to reduce discrimination against and enhance employment opportunities for women, minorities, and other disadvantaged groups (Kravitz & Platania, 1993; Tougas & Beaton, 1993). For example, in Canada, the Employment Equity Act of 1995 requires many employers (i.e., those that have 100 or more employees and that are regulated under the Canada Labour Code) to implement EE policies that target women, visible minorities, aboriginal people, and individuals with disabilities (Jain et al., 2003). Another example comes from the United States, where Executive Order No. 11246 (1965) requires federal contractors to take EE actions to improve employment opportunities for women and racial minorities (Spann, 2000).

Although in Canada and the United States the beneficiaries of EE policies are mostly women and ethnic/racial minorities, beneficiaries of EE policies in other countries may be disadvantaged people who are not necessarily ethnic minorities (Yang et al., 2006). For example, in India beneficiaries are castes and tribes who, although they have the same ethnic background as the upper classes, remain India's poorest groups. In Malaysia, beneficiaries are Malays and other indigenous people (*Bumiputra*) who, although they form a majority of the population, over the years have prospered less than the Chinese ethnic group (Sowell, 2004; Yang et al., 2006). Although the beneficiaries of EE policies differ across countries, the common feature is that the beneficiaries have all been disadvantaged in the past (Yang et al., 2006).

A troubling fact for organizations is that initiatives to improve the organizational opportunities of disadvantaged populations are frequently viewed negatively by employees and, in particular, by employees who do not benefit from these initiatives. Considerable research suggests that EE initiatives can produce a backlash or negative response, with many employees failing to support and promote such initiatives (Kidder, Lankau, Chrobot-Mason, Mollica, & Friedman, 2004). Meta-analytic research suggests two broad categories of causes of negative reactions to EE policies:

structural features of the policies and perceiver characteristics (Harrison et al., 2006). Structural features refer to the degree to which the EE policies consider applicants' disadvantaged group status. For example, some EE policies give minor consideration to disadvantaged group status by using group status to decide between two equally qualified candidates (i.e., weak preferential treatment); others give substantial consideration to disadvantaged group status by giving preference to disadvantaged groups with less regard to qualifications (i.e., strong preferential treatment; Harrison et al., 2006). Previous research suggests that reactions become increasingly negative as EE policies assign greater consideration to disadvantaged group status (Harrison et al., 2006; see also Konrad & Linnehan's, 1995, concept of *identity-blind* and *identity-conscious* human resource management initiatives).

Perceiver characteristics, such as race and gender, indicate the extent to which the perceiver will benefit from the EE policy or be harmed by the EE policy. Findings generally suggest that individuals who believe that these policies will benefit them (i.e., *beneficiaries*) are more likely to promote these policies. Conversely, individuals who believe that these policies will harm them (i.e., *nonbeneficiaries*) are more likely to resist these policies (Lehman & Crano, 2002). Indeed, studies have repeatedly shown that women and racial minority members typically have favorable attitudes toward EE policies. On the other hand, men and racial majority members generally have negative attitudes toward EE policies (e.g., Harrison et al., 2006; Kravitz & Klineberg, 2000), and these negative attitudes may lead to unsuccessful deployment of these policies (e.g., Tougas & Beaton, 1993). On the basis of past research findings, we expected that nonbeneficiaries of EE policies would express lower support for these policies; we also extended past research by examining behavioral intentions and actual behavior, compared with past research that has primarily focused on attitudes.

Hypothesis 1A: Nonbeneficiaries of an EE policy will express lower behavioral intentions to promote that policy than beneficiaries.

Hypothesis 1B: Nonbeneficiaries of an EE policy will express less positive attitudes toward that policy than beneficiaries.

Hypothesis 1C: Nonbeneficiaries of an EE policy will be less likely to engage in behavior that promotes that policy than beneficiaries.

Unfortunately, although past research has identified that nonbeneficiaries are more likely to object to EE policies, this work is limited in terms of providing ways to reduce this opposition. Knowing that nonbeneficiaries are most likely to resist EE policies limits the actions that individuals or organizations can take to improve reactions to EE policies, because race and gender cannot be changed. Similarly, EE policies cannot be changed to erase or dilute the favoring of one (disadvantaged) group over another without abandoning the very aims of the policy. Consequently, more research is needed on factors promoting nonbeneficiaries' acceptance of EE policies that are amenable to organizational control. We suggest that one practical tool that organizations can use is employee participation in the formulation of these policies.

Participation

Employee participation refers to employees giving their input on organizational matters, such as formulating new organizational policies (Wagner, 1994). Research in various domains, such as goal setting (e.g., Latham, Winters, & Locke, 1994), organizational change (Coch & French, 1948), reducing job-related strain (e.g., Jackson, 1983), budgeting (Searfoss & Monczka, 1973), and employee pay plans (e.g., Scanlon Plans; Cammann & Lawler, 1973; Lawler, 1976), has shown that employee participation typically leads to more positive employee reactions.

Given the beneficial effects participation has, participation may be a powerful tool for overcoming negative reactions to EE policies. Although one might conceptualize EE policies as fixed, unchangeable, government-mandated policies, in actuality such policies have considerable opportunities for employee input. In Canada, although EE policies are required by law, how an EE policy is implemented is left up to the organization. Specifically, organizations have to design their own specific goals, timetables, and implementation plans (Jain et al., 2003). Similarly, in the United States, organizations are required to develop and implement an EE plan with goals, timetables, and specific measures to achieve the goals (Cascio, 1998; Jain et al., 2003). Thus, organizations have some degree of control over how they design and implement EE policies, providing an opportunity for soliciting employee participation in their development.

Participation may overcome negative reactions by providing an opportunity for employees to voice their opinions on organizational policies (Douthitt & Aiello, 2001; Korsgaard & Roberson, 1995). In the simplest terms, voice represents "the opportunity to participate in a decision-making process" (Roberson, Moye, & Locke, 1999, p. 586). Voice can affirm that the individual is a valued member of the group whose opinions are worth considering (Lind & Tyler, 1988) and can provide a degree of control to the individual. Voice can be further divided into two types: *Instrumental* voice refers to giving employees a certain degree of influence over the outcomes of the decision making; *noninstrumental* voice refers to being able to express an opinion without necessarily having any influence over an outcome, or "the mere opportunity to be heard" (Korsgaard & Roberson, 1995, p. 659).

An adaption of the concepts of instrumental and noninstrumental voice to participation correspondingly suggests two forms of participation. *Instrumental participation* represents participation in which the individual's input has the potential to influence an outcome (in this instance, participating in the development of an EE policy). *Noninstrumental participation* represents participation in which the individual's input is solicited, but ultimately the individual has no say over the final outcome. Integrating participation with instrumental and noninstrumental voice constructs is appealing for two reasons. First, past research has shown that the effects of participation are variable (Sagie & Koslowsky, 1994; Wagner, 1994). Differentiating between instrumental and noninstrumental participation may shed light on why such variability in results exists. For example, research has suggested that although noninstrumental voice provides symbolic benefits and is perceived as fairer than no voice, instrumental voice is perceived as the fairest option because it provides the symbolic benefits associated with noninstrumental voice and a sense of control over the outcomes (Lind, Kanfer, & Earley, 1990). Given that resistance to EE

policies stems in part from perceptions of unfairness (e.g., Kravitz & Klineberg, 2000) and a lack of control over the outcomes, instrumental participation may be an especially important route for overcoming resistance to EE policies. Accordingly, the effect of participation on outcomes may be greater when instrumental participation is used, compared with noninstrumental participation. Hence, we put forward the following hypotheses:

Hypothesis 2A: Nonbeneficiaries offered instrumental participation will express greater behavioral intentions to promote an EE policy than those offered noninstrumental participation.

Hypothesis 2B: Nonbeneficiaries offered instrumental participation will have more positive attitudes toward an EE policy than those offered noninstrumental participation.

Hypothesis 2C: Nonbeneficiaries offered instrumental participation will be more likely to engage in behavior that promotes an EE policy than those offered noninstrumental participation.

The second benefit of integrating participation with the constructs of instrumental and noninstrumental voice consists of addressing an outstanding issue in EE research: What occurs between the presentation of the EE policy and the reaction to the EE policy? In particular, Harrison et al. (2006) noted that EE research is limited because it has typically focused on main effects without considering possible mediating mechanisms, leading researchers to call for research expanding the understanding of the processes by which employees support EE policies. Consistent with instrumental and noninstrumental perspectives on participation, we propose a novel mediator of the effects of participation: *psychological ownership* (Pierce, O'Driscoll, & Coghlan, 2004).

Psychological Ownership

Psychological ownership refers to a relationship between an individual and a target of ownership in which the target is experienced as being close to the self and, thus, as part of the extended self (Pierce, Kostova, & Dirks, 2001, 2003). A sense of psychological ownership is promoted in part by the extent to which an individual has control over an outcome (Pierce et al., 2004). Outcomes over which one has control come to be viewed as part of the self, increasing psychological ownership, whereas outcomes not under one's control or under the control of others are disassociated from the self, decreasing psychological ownership (Pierce et al., 2001). In addition to having some control over the target of ownership, Pierce et al. (2001, 2004) suggested that investing oneself in a target by helping to create it is also a powerful route to psychological ownership.

Given that instrumental participation affords employees with a degree of control and that by participating in an EE policy formulation, employees inevitably invest their time to contribute to the creation of the policy, we argue that compared with noninstrumental participation, instrumental participation is particularly likely to promote a sense of psychological ownership. In particular, given that instrumental participation involves providing influence over outcomes, and psychological ownership is driven by a sense of influence over an object, it stands to reason that instrumental

participation should lead to a greater sense of psychological ownership. Supporting this notion, research has suggested that employee participation in decision making over various organizational matters (e.g., production, organizing, human resources, etc.) is positively related to psychological ownership (Chi & Han, 2008; O'Driscoll, Pierce, & Coghlan, 2006; Pierce et al., 2004).

Psychological ownership develops concomitantly with an individual's investment of himself or herself in the target (e.g., Pierce et al., 2004). As a result of this self-investment, individuals become more motivated to protect and promote the target (e.g., Pierce, Rubenfeld, & Morgan, 1991). Applied to the present situation, this suggests that nonbeneficiaries who experience a greater sense of psychological ownership over an EE policy that they helped to develop should be more positive toward and more willing to invest their time and energy in promoting it (Pierce et al., 2001). Thus, we expected that nonbeneficiaries allowed to have instrumental participation in an EE policy formulation, would have an increased sense of psychological ownership over that policy. In turn, we expected psychological ownership to lead to more favorable attitudes toward the policy and greater willingness to promote the policy. Conversely, we expected that noninstrumental participation would not enhance psychological ownership, which in turn would be associated with less favorable attitudes and less willingness to promote the policy. Hence, we offer the following hypotheses:

Hypothesis 3A: Psychological ownership will mediate the relation between instrumental participation and behavioral intentions among nonbeneficiaries.

Hypothesis 3B: Psychological ownership will mediate the relation between instrumental participation and attitudes toward an EE policy among nonbeneficiaries.

Hypothesis 3C: Psychological ownership will mediate the relation between instrumental participation and an EE policy promoting behavior among nonbeneficiaries.

Overview of the Present Research

To test our hypotheses, in two experimental laboratory studies we examined whether and why instrumental (compared with noninstrumental) participation in the formulation of an EE policy is related to nonbeneficiaries' support of the policy. In Study 1, we examined nonbeneficiaries' attitudes and behavioral intentions toward a gender-based EE policy. In this article, we conceptualize behavioral intentions as individual beliefs concerning one's willingness to promote an EE policy, which is one of the most common conceptualizations of behavioral intentions (Fishbein & Stasson, 1990; Tubbs & Ekeberg, 1991). In Study 2, we examined nonbeneficiaries' attitudes, behavioral intentions, and a specific EE behavior (i.e., whether participants sign up to volunteer to promote awareness, future development, and implementation of the EE policy) promoting a race-based EE policy. Finally, in both studies, we examined whether psychological ownership mediates the effect of instrumental participation on policy support.

Although the focus of this study was on examining nonbeneficiaries' reactions to EE policies, we also present exploratory analyses on beneficiaries' reactions to EE policies. Because past

research has consistently shown that beneficiaries tend to accept and promote EE policies (e.g., Lehman & Crano, 2002), it was possible that participation in an EE policy formulation would have no further positive effect on the beneficiaries' already positive reactions to the policy. For example, beneficiaries may already experience a sense of psychological ownership over EE policies given that EE policies specifically address beneficiaries by their very nature. Yet, given that participation is a powerful motivational tool (e.g., Coch & French, 1948), it was also possible that participation would enhance beneficiaries' reactions beyond already existing positive reactions. Because there are theoretical reasons to support each possibility and because our focus is on nonbeneficiaries, we do not offer formal hypotheses on the effect of participation for beneficiaries, but we examine it in an exploratory fashion.

Study 1

Method

Participants and design. Participants were 145 undergraduate students (78 women and 67 men) enrolled at a large Canadian university who received course credit for participation. Participants were randomly assigned to one of two experimental conditions: instrumental or noninstrumental participation (described later). All sessions included only men or only women.

Procedure. Participants were scheduled in sessions of three to eight participants and told that the general topic of the study was communication. In the first stage, participants listened to a scripted slide show presentation on EE by the experimenter, who was unaware of the experimental condition during the presentation. After the presentation, participants were told they would discuss the contents of the presentation and next received the experimental manipulation. The experimenter opened a sealed envelope and read one of two statements. The statements contained the manipulations of instrumental and noninstrumental participation, which were consistent with past operationalizations of instrumental and noninstrumental voice (e.g., Lind et al., 1990; Platow, Brewer, & Egging, 2008).

For the instrumental participation condition, participants were told that they were providing input toward a policy under development by their university. In particular, the statement read as follows:

I will collect your comments and inputs, summarize them, and post them on our Industrial/Organizational Psychology website. By posting them on our website, we will make your input and discussion products available to the decision makers for the Employment Equity Program for co-op students at [university name]. We certainly expect decision makers to look over your suggestions and take them into account during the decision-making process.

This manipulation involved giving some control over the EE policy formulation to the participants in the instrumental participation condition. Students were led to believe they were giving input on a policy that was a work in progress but within the realm of the Canadian EE legislation.

For the noninstrumental participation condition, the statement instead read as follows:

After the discussion is finished, you can keep your sheets, because they will not be collected. The reason why your sheets will not be collected is that this study is only a communication study and your discussion products regarding the Employment Equity program will have no influence over the implementation of the Employment Equity program for co-op students at [university name].

This manipulation did not give any control over the EE policy formulation to the participants.

At this point in the procedure, participants were divided into pairs or three-member groups and were given discussion guidelines with instructions to record the comments they generated. The discussion guideline asked participants to comment on various parts of the presentation, such as target-hiring rate for women. At the end of the discussion, the experimenter either collected the written notes (instrumental participation condition) or reminded participants that they would be keeping the notes (noninstrumental participation condition). Afterward, the participants completed the questionnaires and were debriefed.

Materials. Participants viewed a slide show presentation of an EE policy for women. Using a script and computer-projected slides, the experimenter described the various aspects and the rationale of a new EE policy for women, ostensibly under development at the university. The policy specifically involved hiring students into co-operative (co-op) and internship job placements through the university's co-op educational program. The university where the study was conducted has an extensive co-op education program, which means that the majority of students have had some direct or indirect experience with co-op hiring. Thus, participants would have perceived that that this policy had important implications for their own future co-op employment and potentially had long-term consequences for their career. Early job experiences could influence the prestige of the jobs students obtain after graduation and, hence, could affect students' career paths.

The EE policy presentation began by mentioning that women are currently underrepresented in managerial, professional, and supervisory positions. A brief overview of the EE concept followed (rationale, approach, etc.). Then, a comparison of hiring rates for men and women in managerial, professional, and supervisory positions in the region was displayed. Specifically, participants were told that the proportions of men and women in professional and managerial positions were 65% and 35%, respectively. They were told that these proportions would be 45% for men and 55% for women if women were hired at rates equal to their rates of university graduation and other related factors. The participants were told that in the proposed EE policy, a woman would be hired over a man only if she had equal qualifications. Thus, the policy did not involve a strong preferential treatment but a weak preferential treatment.

Measures. All measures in this study used a 7-point Likert response scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) unless otherwise noted.

Manipulation checks. Four items assessed the degree to which participants perceived that they were involved in formulating the EE policy and, thus, that they received instrumental participation (e.g., "My involvement in this study may have some influence over the final outcomes of the proposed policy"). A composite score was created by averaging the four items ($\alpha = .90$). In addition, one item, "I enjoyed participating in this experiment," was included to address the possibility that discussing the

EE policy would be frustrating (e.g., Lind et al., 1990) or otherwise unpleasant when discussion notes were not collected in the non-instrumental participation condition.

Behavioral intentions. Participants were asked whether they would be willing to implement a range of behaviors that would promote the EE policy using a yes–no format (see the first six items in the Appendix). Measures of this kind have been used in research on behavioral intentions for a policy (Ratner & Miller, 2001). *Yes* responses were coded as 1, and *no* responses were coded as zero. A composite score was created for each participant by averaging *yes* responses ($\alpha = .67$).

Attitudes toward the EE policy. Three items, "My opinion of developing an Employment Equity program for Women for [university name]'s co-op employers is favorable," "The proposed Employment Equity program is fair," and "The potential benefits of the proposed Employment Equity program may outweigh the potential administrative costs" assessed participants' attitudes toward the proposed EE policy. A composite score was computed by averaging the three items ($\alpha = .75$).

Psychological ownership. Two items were developed for this study, "This proposed Employment Equity for Women policy has no meaning for me" (reversed scored) and "I would be proud if my university created a policy for Employment Equity for Women" ($\alpha = .62$). This was the lowest α among the study's measures. Given that this was only a two-item measure, it was appropriate to assess reliability with the interitem correlation (Nunnally, 1978). The Pearson r of .45 between the two items exceeded the $r = .25$ recommended as a minimum r between the items of a two-item composite (Gregersen & Black, 1990; Nunnally, 1978).

Results

In all analyses, we controlled for group size; however, it had no effect on our results. For parsimony, we present analyses without controlling for group size.

Manipulation checks. Participants in the instrumental participation condition perceived higher involvement in the EE policy formulation ($M = 5.12$, $SD = 0.89$) than did participants in the noninstrumental participation condition ($M = 3.83$, $SD = 1.45$), $t(143) = -6.40$, $p < .001$ ($d = 1.06$). Furthermore, participants did not differ in their enjoyment of the experiment (instrumental participation condition: $M = 4.95$, $SD = 1.30$; noninstrumental participation condition: $M = 4.83$, $SD = 1.25$), $t(143) = -0.617$, ns ($d = 0.03$). A one-sample t test showed that the participants enjoyed the experiment significantly above the midpoint of the scale (i.e., 4), $t(144) = 8.44$, $p < .001$ ($d = 0.70$), suggesting that they were engaged in the presentation and discussion.

The effect of gender on behavioral intentions and attitudes. To test whether nonbeneficiaries of the policy (men) were less likely to support the EE policy than beneficiaries (women; Hypothesis 1) we conducted t tests with gender as a grouping variable and behavioral intentions and attitudes as outcomes. As expected, men (a) expressed lower behavioral intentions to promote the policy ($M = 0.33$, $SD = 0.27$) than did women ($M = 0.50$, $SD = 0.28$), $t(143) = -3.72$, $p < .001$ ($d = 0.65$) and (b) showed less favorable attitudes toward the EE policy ($M = 3.96$, $SD = 1.34$)

than did women ($M = 4.72, SD = 1.06$), $t(143) = -3.80, p < .001$ ($d = 0.64$). Thus, Hypotheses 1A and 1B were supported.

The effect of participation on nonbeneficiaries' support for a gender-based EE policy. To test the main effects of instrumental participation for nonbeneficiaries (Hypothesis 2), we conducted t tests with the participation type (i.e., condition) as a grouping variable and behavioral intentions and attitudes as outcomes. To test the mediation role of psychological ownership (Hypothesis 3), we used Baron and Kenny's (1986) causal steps approach and Sobel's test of indirect effects (Sobel, 1982).

The effect of participation on behavioral intentions. Table 1 provides the means of the behavioral intention scores. The effect of participation was significant for men, $t(65) = -2.66, p < .05$ ($d = 0.65$). Supporting Hypothesis 2A, men expressed greater behavioral intentions to promote the policy in the instrumental than in the noninstrumental participation condition.

We next tested whether the relation between participation and behavioral intentions for men was mediated by psychological ownership (see Table 2 for zero-order correlations). All requirements for mediation according to Baron and Kenny (1986) were met: (a) psychological ownership was positively related to participation, ($b = .71, p < .05$), (b) participation was positively related to behavioral intentions, ($b = .17, p < .05$), and (c) when both psychological ownership and participation were entered into the regression, participation's estimated effect dropped (becoming nonsignificant, $b = .10, ns$), and psychological ownership remained significant ($b = .09, p < .05$). Sobel's test confirmed the significant indirect effect of psychological ownership ($Z = 2.08, p < .05$). Thus, Hypothesis 3A was supported.

The effect of participation on attitudes. Mean ratings of attitudes appear in Table 1. Contrary to our expectations, the effect of participation was not significant for men, $t(65) = 1.51, ns$ ($d = 0.37$). Therefore, Hypothesis 2B was not supported. Given the lack of the effect of participation on attitudes, Hypothesis 3B (mediation) was also not supported.

Supplemental analyses for beneficiaries (women). In an exploratory fashion, we examined the effects of participation on women's support for the EE policy. As suggested in the introduction, it was unclear whether participation would have an effect for beneficiaries because research has shown that they already support EE policies; yet, participation, as a powerful motivation tool, may be able to move beneficiaries' reaction beyond their already pos-

Table 2
Study 1: Zero-Order Correlations

Variable	1	2	3	4
1. Condition	—	.13	.03	.15
2. Psychological ownership	.25*	—	.59**	.48**
3. Behavioral intentions	.31**	.30*	—	.56**
4. Attitudes	.18	.16	.48**	—

Note. Correlations for women ($n = 78$) are presented above the diagonal, and correlations for men ($n = 67$) are presented below the diagonal. Condition was coded: 0 = noninstrumental participation and 1 = instrumental participation.

* $p < .05$. ** $p < .01$.

itive reactions. The analyses indicated that there was no significant effect of participation on behavioral intentions, $t(76) = -0.24, ns$ ($d = 0.05$), or attitudes, $t(76) = -1.28, ns$ ($d = 0.29$). As seen in Table 1, mean behavioral intentions and attitudes for women were relatively high (compared with men) in both conditions, suggesting that beneficiaries may support EE policies regardless of the participation condition.

As noted earlier, this lack of participation effects for beneficiaries may occur if beneficiaries already experience a relatively high level of psychological ownership over EE policies regardless of participation. Supporting this notion, we found that the levels of psychological ownership for women did not differ between the instrumental participation condition ($M = 5.26, SD = 1.28$) and the noninstrumental participation condition ($M = 5.02, SD = 1.50$), $t(76) = -0.75, ns$ ($d = 0.12$) and that women's levels of psychological ownership were higher ($M = 5.14, SD = 1.39$) than those of men ($M = 4.44, SD = 1.20$) across both conditions, $t(143) = -3.21, p < .001$ ($d = 0.41$). Finally, we conducted analyses of variance (ANOVAs) to test whether there were Participation \times Gender interactions. The analyses indicated nonsignificant interactions in predicting both behavioral intentions, $F(1, 141) = 2.82, ns$ ($\eta^2 = .020$), and attitudes, $F(1, 141) = 0.22, ns$ ($\eta^2 = .002$).

Discussion

In Study 1, we examined whether instrumental participation in formulation of a gender-based EE policy would lead to greater

Table 1
Mean Ratings of Attitude and Proportion of Behavioral Intentions That Promote the Gender-Based Employment Equity Policy, by Condition and Gender

Dependent variable	Men		Women	
	Noninstrumental participation	Instrumental participation	Noninstrumental participation	Instrumental participation
Behavioral intentions				
<i>M</i>	.25 _a	.42 _b	.49 _b	.51 _b
<i>SD</i>	.21	.30	.30	.26
Attitude				
<i>M</i>	3.73 _a	4.22 _{a,c}	4.57 _{b,c}	4.89 _b
<i>SD</i>	1.26	1.40	1.09	1.01

Note. In each row, means with different subscripts differ significantly at $p < .05$ in planned contrast tests.

support of the policy by nonbeneficiaries (men). We first found that men endorsed a policy promoting behavioral intentions to a lesser degree and had less favorable attitudes toward the EE policy than women. This finding is consistent with past research that has found that nonbeneficiaries have more aversive reactions toward EE policies than beneficiaries (e.g., Harrison et al., 2006). It also extends past research by showing that nonbeneficiaries not only hold less favorable attitudes but are also less likely to express behavioral intentions to promote the policy compared with beneficiaries.

However, although we found that men, in general, were less supportive of the EE policy than women, we found that when men were afforded instrumental participation in formulating the policy, they expressed greater behavioral intentions to promote the policy than when they were given noninstrumental participation. Our meditational hypotheses provide one indication of why this was so: Men who engaged in instrumental participation were more likely to feel a sense of psychological ownership over the EE policy. Taken together, these results provide preliminary evidence that using instrumental participation is one way to increase promotion of EE policies among nonbeneficiaries. However, we did not find an effect of participation on the attitudes of men toward the EE policy. We also found participation had no significant effects on women's behavioral intentions or attitudes.

This study is the first to examine participation as a way to improve nonbeneficiaries' reactions to EE policies. Yet, this study is not without limitations. First, given that it represents a novel finding, it is important to replicate and extend our model with an EE policy based on characteristics other than gender (e.g., race). Second, although we focused on behavioral intentions, demonstrating that our effects generalize to actual behavior would be similarly beneficial. Third, the reliability of the measures for behavioral intentions ($\alpha = .67$) and psychological ownership ($\alpha = .62$) were slightly below conventional cutoff values. Finally, it was possible that our separation of beneficiaries and nonbeneficiaries in experimental sessions could have affected our results.

In Study 2, we sought to address those limitations as well as expand the generalizability of our results to different types of EE policies. The first goal of Study 2 was to examine the effect of participation in a race-based policy. It has been suggested that employees may be more hostile to race-based EE policies than gender-based EE policies (Clayton, 1992). Thus, using a race-based EE policy in our experimental paradigm provided an opportunity to replicate and expand our findings in what may be considered a more challenging context. The second goal was to extend the breadth of our dependent variables by focusing on an actual behavior that promoted the EE policy—whether participants volunteered to help further promote and develop the EE policy—in addition to attitudes and behavioral intentions. Third, we also sought to address the problem of low reliabilities for behavioral intentions and psychological ownership, which may have been due to the relatively small number of items used to assess behavioral intentions (six) and psychological ownership (two) in Study 1. This limited the sampling of the construct domain for the scales, which led to measurement error (Hinkin, 1998); hence, including more scale items to broadly assess the construct domain may help improve scale reliability. Finally, in

contrast to Study 1, we also sought to include beneficiaries and nonbeneficiaries in the same sessions.

Study 2

Method

Participants and design. Participants were 262 undergraduate students (177 women and 90 men) enrolled at two large Canadian universities located in communities with large visible minority populations (racial minorities are called *visible minorities* in official statistics in Canada; Jain et al., 2003). Fifty-five participants were White, and 207 were visible minority students (77% East Asian; 17% Southeast Asian; 6% other). Participants received course credit for participation. They were randomly assigned to one of two experimental conditions: instrumental or noninstrumental participation. The manipulation of the conditions and the procedure were the same as in Study 1, with one exception. In contrast to Study 1, where beneficiaries and nonbeneficiaries of the policy participated in separate experimental sessions, in Study 2 beneficiaries and nonbeneficiaries of the policy were in the same session.

Procedure and materials. The procedure and materials were the same as in Study 1, with the following exceptions. First, the EE presentation referred to Whites and visible minorities instead of men and women, respectively. Second, in addition to the questionnaire package containing the measures (see Study 1's Procedure section), participants were given a separate sign-up sheet that asked them whether they wished to volunteer to promote awareness of the program and participate in future sessions regarding development and implementation of the EE policy.

Measures.

Manipulation checks. We used the same four items as in Study 1 ($\alpha = .87$). As in Study 1, we also included an item to address the possibility that the discussion of the EE policy would be frustrating in the noninstrumental participation condition (e.g., Lind et al., 1990).

Behavioral intentions. In addition to the six items used in Study 1, we added two additional items to more comprehensively assess the behavioral intentions construct, Items 7 and 8 in the Appendix ($\alpha = .78$).

Attitudes toward the EE policy. We used the same three items as in Study 1 ($\alpha = .76$).

EE-related behavior. At the end of the study, participants were given a sign-up sheet that asked them whether they wished to volunteer to promote awareness of the EE policy and to participate in future sessions on the development and implementation of the policy. Participants who wished to volunteer were asked to provide their name and e-mail address where they could be contacted. Data were coded such that individuals who provided their name and e-mail address received a score of one, and those who did not provide their name and email address received a score of zero.

Psychological ownership. In addition to the two items used in Study 1, we added five items adapted from a psychological ownership scale in Avey, Avolio, Crossley, and Luthans (2009) to increase the breadth and reliability of the measure (e.g., "I would be happy to have other people know that I support the EE program presented in this session today" and "I would feel embarrassed if

[university name] did not support this presented EE program"; $\alpha = .77$).²

Results

Manipulation checks. Participants in the instrumental participation condition perceived higher involvement in the EE policy formulation ($M = 4.96$, $SD = 1.03$) than did participants in the noninstrumental participation condition ($M = 4.34$, $SD = 1.38$), $t(260) = -4.15$, $p < .001$ ($d = 0.51$).³ Furthermore, participants did not differ in their enjoyment of the experiment (instrumental participation condition: $M = 5.00$, $SD = 1.47$; noninstrumental participation condition: $M = 5.26$, $SD = 1.19$), $t(26) = 1.58$, ns ($d = 0.19$). A one-sample t test showed that the participants enjoyed the experiment significantly above the midpoint of the scale (i.e., 4), $t(261) = 13.51$, $p < .001$ ($d = 0.84$), suggesting that they were engaged in the presentation and discussion.

The effect of race on behavioral intentions, attitudes, and an EE-related behavior. To test whether nonbeneficiaries of the policy (Whites) were less likely to support the EE policy than beneficiaries (visible minorities; Hypothesis 1) we conducted t tests with race as a grouping variable and behavioral intentions and attitudes as outcomes. For the dichotomous EE-related behavior variable, we used a log-linear analysis instead of t tests. As expected, Whites (a) expressed lower behavioral intentions to promote the policy ($M = 0.41$, $SD = 0.28$) than visible minorities ($M = 0.68$, $SD = 0.28$), $t(260) = -6.36$, $p < .001$ ($d = 0.99$); (b) showed less favorable attitudes toward the EE policy ($M = 4.06$, $SD = 1.45$) than visible minorities ($M = 5.17$, $SD = 1.62$), $t(260) = -4.60$, $p < .001$ ($d = 0.70$); and (c) showed a lower likelihood of engaging in behavior to promote the policy (23.6%) than visible minorities (60.65%; $Z = 4.56$, $p < .001$). Thus, Hypotheses 1A, 1B, and 1C were supported.

The effect of participation on nonbeneficiaries' support for a race-based EE policy. To test the main effect of participation for nonbeneficiaries (Hypothesis 2), we conducted t tests with the participation type (i.e., condition) as a grouping variable and behavioral intentions and attitudes as outcomes. We also conducted a log-linear analysis for the EE-related behavior. To test the mediation role of psychological ownership (Hypothesis 3), we used Baron and Kenny's (1986) causal steps approach and Sobel's test of indirect effects (Sobel, 1982).

The effect of participation on behavioral intentions. Table 3 provides the means of the behavioral intention scores. The effect of participation was significant for Whites, $t(53) = -2.24$, $p < .05$ ($d = 0.60$). Supporting Hypothesis 2A, Whites expressed greater behavioral intentions to promote the policy in the instrumental than in the noninstrumental participation condition.

We next tested whether the relation between participation and behavioral intentions for Whites was mediated by psychological ownership (see Table 4 for zero-order correlations). All requirements for mediation according to Baron and Kenny (1986) were met: (a) psychological ownership was positively related to participation ($b = .90$, $p < .001$), (b) participation was positively related to behavioral intentions ($b = .16$, $p < .05$), and (c) when both psychological ownership and participation were entered into the regression, the estimate of participation's effect dropped (becoming nonsignificant; $b = -.011$, ns) and psychological ownership remained significant ($b = .19$, $p < .001$). Sobel's test confirmed

the significant indirect effect of psychological ownership ($Z = 3.20$, $p < .001$). Thus, Hypothesis 3A was supported.

The effect of participation on attitudes. Mean ratings of attitudes appear in Table 3. Contrary to our expectations, the effect of participation was not significant for Whites, $t(53) = -1.33$, ns ($d = 0.35$). Thus, Hypothesis 2B was not supported. Given the lack of the effect of participation on attitudes, Hypothesis 3B (mediation) was also not supported.

The effect of participation on the EE-related behavior. Table 5 displays the results of the log-linear analysis analyzing the pattern of responses to whether the participant did (coded 1) or did not (coded 0) sign up to promote the EE policy as a cross-tabulation, converted to column percentages separately for the four combinations of condition and race. Analysis of the four cells in the top half of Table 5, for Whites, yielded a likelihood ratio chi-square of 8.50 ($p < .05$). Supporting Hypothesis 2C, Whites' rate of *yes* responses was significantly higher in the instrumental than in the noninstrumental participation condition.

We next tested whether the relation between participation and the EE-related behavior for Whites was mediated by psychological ownership. All requirements for mediation according to Baron and Kenny (1986) were met: (a) psychological ownership was positively related to participation ($b = .90$, $p < .001$), (b) participation was positively related to the behavioral response ($b = .32$, $p < .05$), and (c) when both psychological ownership and participation were entered into the regression, participation's effect dropped ($b = .20$, ns), whereas psychological ownership remained significant ($b = .13$, $p < .05$). Sobel's test confirmed the significant indirect effect of psychological ownership ($Z = 1.92$, $p < .05$). Thus, Hypothesis 3C was supported.

Supplemental analyses for beneficiaries (visible minorities). In an exploratory fashion, we examined the effects of participation on visible minorities' support for the EE policy. The results showed that there was no significant effect of participation on behavioral intentions, $t(205) = -1.74$, ns ($d = 0.25$), or attitudes, $t(205) = -0.036$, ns ($d = 0.01$). As seen in Table 3, mean behavioral intentions and attitudes of visible minorities were relatively high (compared with Whites) in both conditions, suggesting that beneficiaries may promote EE policies regardless of the participation condition. However, a likelihood ratio chi-square of 7.43 ($p < .05$) based on findings in the lower half of Table 5 showed that visible minorities' *yes* responses (EE-related behavior) were significantly higher in the instrumental than in the noninstrumental participation condition. However, this relation between instrumental participation and the EE behavior was not mediated by psychological ownership for visible minorities, because there was no significant relation between participation condition and psychological ownership. Specifically, our analyses showed that the levels of psychological ownership for visible minorities did not differ between the instrumental ($M = 4.83$, $SD = 0.92$) and the noninstrumental participation condition ($M =$

² The results with a five-item psychological ownership scale from Avey et al. (2009) were comparable with the results with a combined seven-item psychological ownership scale.

³ We conducted separate analyses controlling for participants' university and group size, but that had no effect on our results. For parsimony, we present analyses without controlling for university and group size.

Table 3
Mean Ratings of Attitude and Proportion of Behavioral Intentions That Promote the Race-Based Employment Equity Policy, by Condition and Race

Dependent variable	Whites		Visible minorities	
	Noninstrumental participation	Instrumental participation	Noninstrumental participation	Instrumental participation
Behavioral intentions				
<i>M</i>	.33 _a	.50 _b	.64 _c	.71 _c
<i>SD</i>	.26	.28	.30	.24
Attitude				
<i>M</i>	3.82 _a	4.33 _a	5.16 _b	5.17 _b
<i>SD</i>	1.22	1.65	2.09	1.04

Note. In each row, means with different subscripts differ significantly at $p < .05$ in planned contrast tests.

4.58, $SD = 1.05$), $t(205) = -1.81$, ns ($d = 0.26$). In addition, we found that visible minorities had higher psychological ownership ($M = 4.71$, $SD = 0.99$) compared with Whites ($M = 3.80$, $SD = 0.96$) across both conditions, $t(260) = -6.09$, $p < .001$ ($d = 0.47$). These findings suggest that one of the reasons for different effects of participation for beneficiaries and nonbeneficiaries may be a relatively high sense of psychological ownership by beneficiaries across conditions.

We conducted ANOVAs to test whether there were Participation \times Race interactions in predicting behavioral intentions and attitudes. The results showed nonsignificant interactions in predicting both behavioral intentions, $F(1, 270) = 1.45$, ns , $\eta^2 = .005$, and attitudes, $F(1, 270) = 1.25$, ns ($\eta^2 = .005$). In a log-linear analysis, a Participation \times Race interaction in predicting the EE-related behavior was also nonsignificant ($Z = -1.03$, ns).

Discussion

The results of Study 2 replicated those of Study 1 in a race-based EE policy. First, we found that Whites (compared with visible minorities) expressed lower behavioral intentions to promote the EE policy, had less favorable attitudes toward the EE policy, and were less likely to engage in an EE-promoting behavior. Building on and extending past research that showed that nonbeneficiaries have less favorable attitudes toward EE policies (e.g., Harrison et al., 2006), Study 2 shows that negative reactions of nonbeneficiaries also extend to behavioral intentions and an actual EE-promoting behavior.

Further replicating Study 1 results, we found that instrumental participation had an effect on behavioral intentions for nonbeneficiaries. Specifically, Whites expressed greater behavioral intentions to promote the policy in the instrumental participation condition, and this relation was mediated by psychological ownership. The results also indicated that Whites in the instrumental participation condition were more likely to sign up to volunteer to promote awareness and future development of the EE policy than Whites in the noninstrumental participation condition. This relation was also mediated by psychological ownership. Finally, we found no effects of participation on attitudes toward the EE policy for Whites. With respect to exploratory analyses of beneficiaries' (visible minorities) support for the EE policy, in separate group analyses participation had no effects on either behavioral intentions or attitudes, suggesting that the participative initiative had an effect only for nonbeneficiaries (Whites).

In contrast to the nonsignificant findings for behavioral intentions and attitudes for beneficiaries, there was a statistically significant finding for behavior. Like Whites, visible minorities were more likely to sign up to volunteer to promote awareness and future development of the EE policy in the instrumental than in the noninstrumental participation condition. At the same time, that effect was different. Psychological ownership did not differ by

Table 4
Study 2: Zero-Order Correlations

Variable	1	2	3	4	5
1. Condition	—	.13	.12	.003	.19**
2. Psychological ownership	.47**	—	.65**	.27**	.27**
3. Behavioral intentions	.29*	.66**	—	.26**	.35**
4. Attitudes	.18	.58**	.70**	—	.10
5. EE-related behavior	.38**	.41**	.45**	.44**	—

Note. Correlations for visible minorities ($n = 207$) are presented above the diagonal, and correlations for Whites ($n = 55$) are presented below the diagonal. Condition was coded: 0 = noninstrumental participation and 1 = instrumental participation. EE = employment equity.

* $p < .05$. ** $p < .01$.

Table 5
Study 2: Percentages of Participants in Each Condition Who Engaged or Did Not Engage in an Employment Equity Promotion Behavior, Cross-Tabulated Separately by Race

Group and response	Condition	
	Noninstrumental participation	Instrumental participation
White		
No	91.7	61.1
Yes	8.3	38.9
Visible minority		
No	48.5	30.2
Yes	51.5	69.8

Note. Raw counts may be recovered by applying the following N s: 29 for White, noninstrumental participation; 26 for White, instrumental participation; 97 for visible minority, noninstrumental participation; 110 for visible minority, instrumental participation.

participation condition for visible minorities; hence, it did not mediate that relation for visible minorities.

General Discussion

This research makes several important contributions to the literature on EE. Whereas past research has mostly identified stable, unchanging factors (e.g., race, gender) that relate to lack of support and promotion of EE policies, in the current research, we identify an organizational tool—*instrumental participation*—that can be used by organizations to enhance promotion of EE policies. Of importance, our study indicates that people who traditionally resist these policies (i.e., men and Whites) can be influenced to promote EE policies—even though such policies might hurt their employment prospects.

Our study also identifies a key variable in the process that mediates between instrumental participation in formulating EE policies and promotion of those policies: psychological ownership. This finding represents a theoretically important aspect of our study because it helps illuminate why nonbeneficiaries would support a policy that presumably goes against their self-interest. By fostering a sense of psychological ownership over the policy, nonbeneficiaries invest themselves in the policy and see it as an extension of themselves (Pierce et al., 1991, 2001). In a sense, instrumental participation may provide an alternate route for self-interest to be served. That is, by promoting a sense of ownership over the policy, it is in the self-interest of nonbeneficiaries to see the policy succeed, in that it validates their contributions (Pierce et al., 1991, 2001).

One way to interpret our findings is through an evolutionary psychological perspective on reactions to EE policies (Yang et al., 2006). This perspective suggests that EE policies make in-group/out-group distinctions particularly salient because they tend to pit the self-interest of one group against the interests of another group, which causes conflict (e.g., Cosmides & Tooby, 2004; Lowery, Unzueta, Knowles, & Goff, 2006). However, the sense of psychological ownership that was seen to accrue from involving employees in the formulation of these policies may diminish these in-group/out-group distinctions and in turn, may lead to reduced negative reactions. In particular, when nonbeneficiaries experience psychological ownership over the policy, the policy is not just for beneficiaries anymore; it is also a policy by nonbeneficiaries (at least in part). Hence, both nonbeneficiaries and beneficiaries have a common goal that they strive to protect and advance—the goal of seeing a policy succeed.

Thus, our identified mechanism involving psychological ownership not only represents a novel finding in and of itself, but it may also speak to the higher level processes operating in EE policies, such as in-group/out-group distinction and conflict. In this sense, our results can provide an important link to broader motivational theories, such as social identity and self-categorization processes (Hogg & Terry, 2000), which in turn can inform future EE research. For example, another way of prompting nonbeneficiaries to similarly categorize themselves and beneficiaries is uncertainty reduction (e.g., Hogg & Abrams, 1993). An implementation of an EE policy may bring many uncertainties for nonbeneficiaries (i.e., reduction in employment rates) and beneficiaries (i.e., potential stigma for being hired under EE policies; Heilman, Block, & Stathatos, 1997). Involving nonbeneficiaries

and beneficiaries in the policy formulation reduces their uncertainty because they have some say over the policy; moreover, they create a policy together, which may bond them. Ultimately, identification of psychological ownership as a mechanism is an important step in building a theoretical account of participative effects in EE context, although it is just the beginning of this line of inquiry.

Aside from these theoretical contributions, our study also answers calls to go beyond examining attitudes toward these policies (Harrison et al., 2006) and examined behavioral intentions and an actual behavior to promote the EE policy. Past EE research has rarely examined behavioral outcomes (Bell et al., 2000), and although people may have positive attitudes toward EE policies, this does not necessarily mean they would be willing to promote these policies. When EE policies are being developed and implemented in organizations, positive attitudes may not be sufficient to successfully and effectively implement these policies. Thus, our study contributes to the small but emerging literature on behavioral reactions to EE policies.

Another contribution of our research is that, in contrast to past research that has mostly compared strong preferential treatment policies with weak preferential treatment policies, our study specifically examined a weak preferential policy. Strong preferential treatment policies are illegal in many countries (Pyburn, Ployhart, & Kravitz, 2008); hence, the practical implications of such work are limited. Indeed, following a meta-analysis of EE research, Harrison et al. (2006) decried the lack of research on more realistic weak preferential treatment policies and challenged researchers to examine such policies. Our work answers the call for examining more realistic EE policies.

Although our study makes a number of contributions to the literature, we would be remiss if we did not acknowledge that, contrary to expectations, our manipulation of participation had no effect on attitudes toward the EE policy for nonbeneficiaries of the policy. There are several potential reasons for this lack of participation effects on attitudes. First, social desirability concerns could have prompted participants in the noninstrumental participation condition to respond more favorably than they truly felt (e.g., Carlsmith, Ellsworth, & Aronson, 1976; Paulhus, 1984). Given that EE policies are mandated by law in Canada, the participants could have inferred that a socially desirable response would be to agree with these policies. In addition, our attitude items were transparent (i.e., directly assessing participants' attitudes toward EE policies), and past research has suggested that transparent and direct measures of attitudes are highly susceptible to social desirability biases (e.g., Fisher, 1993). Finally, our attitude scale was positively worded, potentially suggesting that agreeing with these items was an appropriate response.⁴

Furthermore, the EE policy examined in our study was identical in both conditions, and it involved a weak preferential treatment. Past research has shown differences in EE policy attitudes when experiments systematically vary these policies along dimensions such as extent of preferential treatment (e.g., Bobocel, Son Hing, Davey, Stanley, & Zanna, 1998; Kravitz & Klineberg, 2000); research has also shown that reactions to weak preferential policies are relatively more favorable than reactions to strong preferential

⁴ We thank an anonymous reviewer for these suggestions.

policies (e.g., Bobocel et al., 1998). Therefore, it could be that our participants' attitudes toward this particular policy were more positive regardless of the condition because of the structural form of the policy. As previously mentioned, one of the aims of our research was to investigate this relatively unexamined type of EE policy; as such, our results contribute to the literature by indicating that although more positive attitudes may be observed for weak preferential policies, such attitudes do not necessarily translate into behaviors.

Finally, we should also note that the results of our exploratory analyses on participation effects for beneficiaries were less straightforward. Subgroup analyses showed no significant effects of participation on behavioral intentions and attitudes for women in Study 1 and visible minorities in Study 2; this would suggest an interaction between beneficiary versus no beneficiary status and participation condition (instrumental/noninstrumental condition) such that the greatest effects would be seen for nonbeneficiaries who engage in instrumental participation. Yet, the corresponding interactions in ANOVAs were nonsignificant. One potential explanation for the lack of interactions is that the expected pattern of interaction would not be a crossover interaction (i.e., effects working in opposite directions for nonbeneficiaries and beneficiaries) but would rather be an ordinal interaction (i.e., effects working in the same direction). When the expected interaction is not a crossover interaction, it is more difficult to detect that interaction statistically (McClelland & Judd, 1993; Strube & Bobko, 1989).

Limitations and Future Directions

Our research is not without limitations. First, our participants were undergraduate students, inviting questions about the generalizability of the results to the experiences of employees. For example, our participants may have been less invested in the issues at hand because they might have had less at stake than employees in terms of livelihood, welfare of families, status, career progression, and money. However, the EE policy proposed was not without consequences for our participants. Participants were led to believe that the policy they were working on would have a very real impact on their co-op and internship job placements. Although internships may not have the same stakes as full-time jobs, their effects are not negligible: Internships influence employability, which ultimately leads to the very stakes just described (Callanan & Benzing, 2004; Knouse & Fontenot, 2008). Further, the proposed EE policy could have had a long-term impact on students' future career by increasing or decreasing students' chances of obtaining high-quality work experience, which ultimately would have consequences for students' jobs and careers after school. Thus, the consequences of the EE policy were real and relevant in our samples.

Another limitation is that the relation between participation and policy support and promotion may be bounded by factors such as how much employees take participative efforts on the behalf of an organization seriously. For example, if employees believe that no matter what they say, their inputs will not be implemented, they may not be supportive of that policy. Thus, employee distrust in management is a likely moderator in that distrust may decrease the likelihood that instrumental participation will lead to EE policies being supported by employees (e.g., Holtz & Harold, 2008). The focus of our article was to establish whether participation may be

a powerful tool for overcoming negative reactions of nonbeneficiaries to EE policies (main effects) and why participation may have its proposed beneficial effects (mediation). However, we believe that examining the factors that moderate the effect of participation on EE policy support (such as distrust) represents an intriguing direction for future research.

We mentioned that one purpose of our study was to focus on a characteristic of EE policies (instrumental participation) that is more amenable to organizational control than employee traits. However, one potential limitation of our studies is that we did not control for potentially relevant individual traits that may have affected reactions to the EE policies (e.g., sexist or racist attitudes or political ideology; Harrison et al., 2006). That being said, our use of an experimental design reduces the likelihood that such participant characteristics could account for our findings through the use of random assignment of participants to experimental conditions (Cook & Campbell, 1979). Random assignment reduces the possibility that, for example, highly sexist or racist individuals were all placed in the noninstrumental participation condition.

Finally, another important future research direction is examining whether there are other mediating processes engaged by instrumental participation besides those connected with impacts on psychological ownership. Research on processes and outcomes connected with perceived control may be fruitful, given the way instrumental participation was varied here and given the many impacts of perceived control that have been evident in other lines of research (e.g., Spector, 1986). For example, perceptions of self-interest may be connected with perceived control (as would be the case if nonbeneficiaries perceived the possibility of changing the policy to be more favorable to themselves through participation). Thus, these perceptions may be worth investigating as well.

Practical Implications

A straightforward implication of this research is that organizations should involve employees who do not stand to benefit from EE policies in the formulation of these policies when they are being developed and implemented. This involvement gives nonbeneficiaries a certain amount of control over the outcomes to instill in them a sense of psychological ownership. An interesting question from a practical viewpoint is how an organization can instill a sense of psychological ownership for new employees who were not members of the organization during the development of an EE policy (presumably once the policy is developed, it will not be redeveloped repeatedly). Our identification of psychological ownership as the mechanism responsible for the effects of instrumental participation suggests a possible answer: coming to know the target (Pierce et al., 2001). The more information people possess about the target of ownership and the more they are exposed to it, the more they are likely to associate themselves with the target and form a sense of psychological ownership (Beggan & Brown, 1994). Applying this logic to organizations would mean that new employees should be provided with detailed information about the EE policy, including the process through which it was developed (i.e., with employee participation). Further, to the extent that organizations are required to monitor the success of these policies as well as potential changes in demographics of the community, policy updates may periodically be required (Jain et al., 2003). Thus, in addition to informing new employees about

these policies, organizations may involve them in subsequent monitoring and future updates and modifications of the policy.

More broadly, our results suggest countries that do not provide freedom to organizations in designing their EE policies (e.g., countries that use quotas, such as India does for government jobs; Jain et al., 2003) may be at a disadvantage. Officials in these countries may wish to consider making EE legislation more flexible to allow for reasonable employee participation in these policies to ensure their success. In this regard, we advise caution when participative initiatives are being implemented in different countries when beneficiaries are not women and ethnic/racial minorities. Our results show that employee participation is an effective tool for overcoming resistance to EE policies when beneficiaries are women and ethnic/racial minorities. However, it is an empirical question whether these results would replicate when beneficiaries are either of the same ethnic background as nonbeneficiaries, as in India, or when they are the majority of the population, as in Malaysia.

Another implication of this research is that organizations may design and implement more creative and viable EE programs through employee participation. According to theories of distributive intelligence (Hutchins, 1995; Pea, 1993; Salomon, 1993), people's collaborative effort to achieve shared aims is a key element in constructing shared knowledge and consequently arriving at better solutions. Thus, involving employees in the process of formulating EE policies may lead to the contribution of unique employee knowledge and insights regarding EE issues, leading to a larger pool of knowledge and solutions. In turn, this may lead to implementation of more elegant and creative EE policies. Thus, in addition to engaging employees in face-to-face participation sessions (as was done in the research for this article), organizations could create secure online forums where employees can contribute their knowledge, opinions, and insights regarding an EE policy design and implementation. Employee participation through technology may ensure anonymity of employee responses, which may be a crucial element in eliciting honest responses when discussing controversial topics, such as EE policies.⁵

Conclusion

EE programs are required by law in many countries, but a major problem with their implementation lies in negative employee reactions to these policies, especially from nonbeneficiaries. To address this problem, organizations need to find ways to increase the endorsement of EE policies by those who most resist them. This research proposed and tested the viability of using a well-established organizational tool—employee participation—in solving the problem of overcoming negative reactions of nonbeneficiaries to gender- and race-based EE policies. We specifically found that one form of participation, instrumental participation—through which some degree of influence is given to employees over the policy—instills psychological ownership in nonbeneficiaries, which in turn leads to greater promotion of these policies.

⁵ We thank an anonymous reviewer for this suggestion.

References

- Avey, J. B., Avolio, B. J., Crossley, C. D., & Luthans, F. (2009). Psychological ownership: Theoretical extensions, measurement and relation to work outcomes. *Journal of Organizational Behavior, 30*, 173–191. doi:10.1002/job.583
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173–1182. doi:10.1037/0022-3514.51.6.1173
- Beggs, J. K., & Brown, E. M. (1994). Association as a psychological justification for ownership. *Journal of Psychology: Interdisciplinary and Applied, 128*, 365–380.
- Bell, M. P., Harrison, D. A., & McLaughlin, M. E. (2000). Forming, changing, and acting on attitude toward affirmative action programs in employment: A theory-driven approach. *Journal of Applied Psychology, 85*, 784–798. doi:10.1037/0021-9010.85.5.784
- Bobocel, D. R., Son Hing, L. S., Davey, L. M., Stanley, D. J., & Zanna, M. P. (1998). Justice-based opposition to social policies: Is it genuine? *Journal of Personality and Social Psychology, 75*, 653–669. doi: 10.1037/0022-3514.75.3.653
- Callanan, G., & Benzing, C. (2004). Assessing the role of internships in the career-oriented employment of graduating college students. *Education and Training, 46*, 82–89. doi:10.1108/00400910410525261
- Cammann, C., & Lawler, E. E. (1973). Employee reactions to a pay incentive plan. *Journal of Applied Psychology, 58*, 163–172. doi: 10.1037/h0035661
- Carlsmith, J. M., Ellsworth, P. C., & Aronson, E. (1976). *Methods of research in social psychology*. Reading, MA: Addison-Wesley.
- Cascio, W. F. (1998). *Managing human resources: Productivity, quality of work life, and profits*. Boston, MA: McGraw-Hill.
- Chi, N., & Han, T. (2008). Exploring the linkages between formal ownership and psychological ownership for the organization: The mediating role of organizational justice. *Journal of Occupational and Organizational Psychology, 81*, 691–711. doi:10.1348/096317907X262314
- Clayton, S. D. (1992). Remedies for discrimination: Race, sex and affirmative action. *Behavioral Sciences and the Law, 10*, 245–257. doi: 10.1002/bsl.2370100208
- Coch, L., & French, J. R. P. J. (1948). Overcoming resistance to change. *Human Relations, 1*, 512–532. doi:10.1177/001872674800100408
- Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation: Design and analysis for field settings*. Chicago, IL: Rand McNally.
- Cosmides, L., & Tooby, J. (2004). Social exchange: The evolutionary design of a neurocognitive system. In M. S. Gazzaniga (Ed.), *The cognitive neurosciences* (pp. 1295–1308). Cambridge, MA: MIT Press.
- Douthitt, E. A., & Aiello, J. R. (2001). The role of participation and control in the effects of computer monitoring on fairness perceptions, task satisfaction, and performance. *Journal of Applied Psychology, 86*, 867–874. doi:10.1037/0021-9010.86.5.867
- Fishbein, M., & Stasson, M. (1990). The role of desires, self-predictions, and perceived control in the prediction of training session attendance. *Journal of Applied Social Psychology, 20*, 173–198. doi:10.1111/j.1559-1816.1990.tb00406.x
- Fisher, R. J. (1993). Social desirability bias and the validity of indirect questioning. *Journal of Consumer Research, 20*, 303–315. doi:10.1086/209351
- Fletcher, J. F., & Chalmers, M. (1991). Attitudes of Canadians toward affirmative action: Opposition, value pluralism, and nonattitudes. *Political Behavior, 13*, 67–95. doi:10.1007/BF00996999
- Gregersen, H. B., & Black, J. S. (1990). A multifaceted approach to expatriate retention in international assignments. *Group and Organization Studies, 15*, 461–485. doi:10.1177/105960119001500409
- Harrison, D. A., Kravitz, D. A., Mayer, D. M., Leslie, L. M., & Lev-Arey, D. (2006). Understanding attitudes toward affirmative action programs in employment: Summary and meta-analysis of 35 years of research. *Journal of Applied Psychology, 91*, 1013–1036. doi:10.1037/0021-9010.91.5.1013
- Heilman, M. E., Block, C. J., & Stathatos, P. (1997). The affirmative action

- stigma of incompetence: Effects of performance information ambiguity. *Academy of Management Journal*, 40, 603–625. doi:10.2307/257055
- Heilman, M. E., McCullough, W. F., & Gilbert, D. (1996). The other side of affirmative action: Reactions of nonbeneficiaries to sex-based preferential selection. *Journal of Applied Psychology*, 81, 346–357. doi:10.1037/0021-9010.81.4.346
- Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods*, 1, 104–121. doi:10.1177/109442819800100106
- Hitt, M. A., & Keats, B. W. (1984). Empirical identification of the criteria for effective affirmative action programs. *Journal of Applied Behavioral Science*, 20, 203–222. doi:10.1177/002188638402000302
- Hogg, M. A., & Abrams, D. (1993). Towards a single-process uncertainty-reduction model of social motivation in groups. In M. A. Hogg & D. Abrams (Eds.), *Group motivation: Social psychological perspectives* (pp. 173–190). London, England: Harvester-Wheatsheaf.
- Hogg, M. A., & Terry, D. J. (2000). Social identity and self-categorization processes in organizational contexts. *Academy of Management Review*, 25, 121–140. doi:10.2307/259266
- Holtz, B. C., & Harold, C. M. (2008). When your boss says no! The effects of leadership style and trust on employee reactions to managerial explanations. *Journal of Occupational and Organizational Psychology*, 81, 777–802. doi:10.1348/096317907X251569
- Hutchins, E. (1995). *Cognition in the wild*. Cambridge, MA: MIT Press.
- Jackson, S. E. (1983). Participation in decision making as a strategy for reducing job-related strain. *Journal of Applied Psychology*, 68, 3–19. doi:10.1037/0021-9010.68.1.3
- Jain, H. C., Sloane, P. J., Horwitz, F. M., Taggar, S., & Weiner, N. (2003). *Employment equity and affirmative action: An international comparison*. Armonk, NY: Sharpe.
- Johnson, R. A. (1990). Affirmative action policy in the United States: Its impact on women. *Policy and Politics*, 18, 77–90. doi:10.1332/030557390782454585
- Kidder, D. L., Lankau, M. J., Chrobot-Mason, D., Mollica, K. A., & Friedman, R. A. (2004). Backlash toward diversity initiatives: Examining the impact of diversity program justification, personal and group outcomes. *International Journal of Conflict Management*, 15, 77–102. doi:10.1108/eb022908
- Knouse, S. B., & Fontenot, G. (2008). Benefits of the business college internship: A research review. *Journal of Employment Counseling*, 45, 61–66.
- Konrad, A. M., & Linnehan, F. (1995). Race and sex differences in line managers' reactions to equal employment opportunity and affirmative action interventions. *Group and Organization Management*, 20, 409–439. doi:10.1177/1059601195204003
- Korsgaard, M. A., & Roberson, L. (1995). Procedural justice in performance evaluation: The role of instrumental and non-instrumental voice in performance appraisal discussions. *Journal of Management*, 21, 657–669. doi:10.1177/014920639502100404
- Kravitz, D. A., & Klineberg, S. L. (2000). Reactions to two versions of affirmative action among Whites, Blacks, and Hispanics. *Journal of Applied Psychology*, 85, 597–611. doi:10.1037/0021-9010.85.4.597
- Kravitz, D. A., & Platania, J. (1993). Attitudes and beliefs about affirmative action: Effects of target and of respondent sex and ethnicity. *Journal of Applied Psychology*, 78, 928–938. doi:10.1037/0021-9010.78.6.928
- Latham, G. P., Winters, D. C., & Locke, E. A. (1994). Cognitive and motivational effects of participation: A mediator study. *Journal of Organizational Behavior*, 15, 49–63. doi:10.1002/job.4030150106
- Lawler, E. E. (1976). Participation and pay. *International Journal of Production Research*, 14, 367–372. doi:10.1080/00207547608956609
- Lehman, B. J., & Crano, W. D. (2002). The pervasive effects of vested interest on attitude-criterion consistency in political judgment. *Journal of Experimental Social Psychology*, 38, 101–112. doi:10.1006/jesp.2001.1489
- Lind, E. A., Kanfer, R., & Earley, P. C. (1990). Voice, control, and procedural justice: Instrumental and noninstrumental concerns in fairness judgments. *Journal of Personality and Social Psychology*, 59, 952–959. doi:10.1037/0022-3514.59.5.952
- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York, NY: Plenum Press.
- Lowery, B. S., Unzueta, M. M., Knowles, E. D., & Goff, P. A. (2006). Concern for the in-group and opposition to affirmative action. *Journal of Personality and Social Psychology*, 90, 961–974. doi:10.1037/0022-3514.90.6.961
- McClelland, G. H., & Judd, C. M. (1993). Statistical difficulties of detecting interactions and moderator effects. *Psychological Bulletin*, 114, 376–390. doi:10.1037/0033-2909.114.2.376
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York, NY: McGraw-Hill.
- O'Driscoll, M. P., Pierce, J. L., & Coghlan, A. (2006). The psychology of ownership: Work environment structure, organizational commitment, and citizenship behaviors. *Group and Organization Management*, 31, 388–416. doi:10.1177/1059601104273066
- Paulhus, D. L. (1984). Two-component models of socially desirable responding. *Journal of Personality and Social Psychology*, 46, 598–609. doi:10.1037/0022-3514.46.3.598
- Pea, R. D. (1993). Practices of distributed intelligence and designs for education. In G. Salomon (Ed.), *Distributed cognitions* (pp. 47–87). New York, NY: Cambridge University Press.
- 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, 1–28. doi:10.2307/2667029
- Pierce, J. L., Kostova, T., & Dirks, K. T. (2001). Toward a theory of psychological ownership in organizations. *Academy of Management Review*, 26, 298–310. doi:10.2307/259124
- Pierce, J. L., Kostova, T., & Dirks, K. T. (2003). The state of psychological ownership: Integrating and extending a century of research. *Review of General Psychology*, 7, 84–107. doi:10.1037/1089-2680.7.1.84
- Pierce, J. L., O'Driscoll, M. P., & Coghlan, A. (2004). Work environment structure and psychological ownership: The mediating effects of control. *Journal of Social Psychology*, 144, 507–534. doi:10.3200/SOCP.144.5.507-534
- Pierce, J. L., Rubinfeld, S. A., & Morgan, S. (1991). Employee ownership: A conceptual model of process and effects. *Academy of Management Review*, 16, 121–144. doi:10.2307/258609
- Platow, M. J., Brewer, G., & Egings, R. A. (2008). Authorities' knowledge of shared group membership and its effects on the respect-informing properties of procedural fairness. *Journal of Experimental Social Psychology*, 44, 743–750. doi:10.1016/j.jesp.2007.06.003
- Pyburn, K. M., Jr., Ployhart, R. E., & Kravitz, D. A. (2008). The diversity-validity dilemma: Overview and legal context. *Personnel Psychology*, 61, 143–151. doi:10.1111/j.1744-6570.2008.00108.x
- Ratner, R. K., & Miller, D. T. (2001). The norm of self-interest and its effects on social action. *Journal of Personality and Social Psychology*, 81, 5–16. doi:10.1037/0022-3514.81.1.5
- Roberson, Q. M., Moye, N. A., & Locke, E. A. (1999). Identifying a missing link between participation and satisfaction: The mediating role of procedural justice perceptions. *Journal of Applied Psychology*, 84, 585–593. doi:10.1037/0021-9010.84.4.585
- Sagie, A., & Koslowsky, M. (1994). Organizational attitudes and behaviors as a function of participation in strategic and tactical change decisions: An application of path-goal theory. *Journal of Organizational Behavior*, 15, 37–47. doi:10.1002/job.4030150105
- Salomon, G. (1993). No distribution without individuals' cognition: A dynamic interactional view. In G. Salomon (Ed.), *Distributed cognitions* (pp. 111–138). Cambridge, England: Cambridge University Press.
- Searfoss, D. G., & Monczka, R. M. (1973). Perceived participation in the

- budget process and motivation to achieve the budget. *Academy of Management Journal*, 16, 541–554. doi:10.2307/254689
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. In S. Leinhardt (Ed.), *Sociological methodology* (pp. 290–312). San Francisco, CA: Jossey-Bass.
- Sowell, T. (2004). *Affirmative action around the world: An empirical study*. New Haven, CT: Yale University Press.
- Spann, G. A. (2000). *The law of affirmative action: Twenty-five years of Supreme Court decisions on race and remedies*. New York, NY: New York University Press.
- Spector, P. E. (1986). Perceived control by employees: A meta-analysis of studies concerning autonomy and participation at work. *Human Relations*, 39, 1005–1016. doi:10.1177/001872678603901104
- Strube, M. J., & Bobko, P. (1989). Testing hypotheses about ordinal interactions: Simulations and further comments. *Journal of Applied Psychology*, 74, 247–252. doi:10.1037/0021-9010.74.2.247
- Tougas, F., & Beaton, A. M. (1993). Affirmative action in the work place: For better or for worse. *Applied Psychology: An International Review*, 42, 253–264. doi:10.1111/j.1464-0597.1993.tb00741.x
- Tougas, F., & Veilleux, F. (1988). The influence of identification, collective relative deprivation, and procedure of implementation on women's response to affirmative action: A causal modeling approach. *Canadian Journal of Behavioural Science*, 20, 15–28. doi:10.1037/h0079920
- Tubbs, M. E., & Ekeberg, S. E. (1991). The role of intentions in work motivation: Implications for goal-setting theory and research. *Academy of Management Review*, 16, 180–199. doi:10.2307/258611
- Wagner, J. A. (1994). Participation's effects on performance and satisfaction: A reconsideration of research evidence. *Academy of Management Review*, 19, 312–330. doi:10.2307/258707
- Yang, C., D'Souza, G. C., Bapat, A. S., & Colarelli, S. M. (2006). A cross-national analysis of affirmative action: An evolutionary psychological perspective. *Managerial and Decision Economics*, 27, 203–216. doi:10.1002/mde.1293

Appendix

Employment Equity Questionnaire

If there were an opportunity for [university name] students to assist with the promotion of this proposed Employment Equity program, do you think you would be willing to . . .

1. Join a student committee and attend biweekly forum sessions for one school term to get involved in a visioning process for the Employment Equity program;
2. Volunteer for one day at an information booth to create public awareness about the Employment Equity vision;
3. Distribute and post flyers on the [university name] campus regarding the Employment Equity vision;
4. Ask students in my classes to sign a petition to support the creation of the Employment Equity vision;
5. Sign a petition to promote the visioning and implementation of the Employment Equity program;

6. Add my e-mail address to a mailing list to receive recent updates about the Employment Equity program;
7. Say positive things about the Employment Equity program to your friends and family;
8. Try to convince others that the Employment Equity program is fair.

Note that Items 1–6 were used in Study 1, and Items 1–8 were used in Study 2.

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