Reducing Approval of Benevolent Sexism:
An Educational Intervention

Jessica J. Good, M.S.
Rutgers University

Julie A. Woodzicka, Ph.D.
Washington & Lee University

The effectiveness of a brief educational intervention in reducing undergraduate participants' approval of benevolent sexism was evaluated across two studies. Results demonstrated that participants who read an intervention essay about benevolent sexism reported decreased benevolent sexism scores in both studies compared to those who read a control essay. In Study 1, participants in the intervention condition also indicated less liking for a profiled benevolent sexist than control participants, and these effects were still present at 6 month follow-up. Study 2 showed that the intervention successfully increased participants' recognition of benevolent sexism as prejudice and increased ratings of the severity of a benevolent sexist incident. Implications for implementing this type of intervention are discussed.

Key words: *sexism, benevolent sexism, intervention, prejudice*

Gender discrimination lawsuits and sexual harassment claims are widely publicized in the media, and if pressed, most individuals could provide a definition of sexism. Many of these definitions would likely include a description of hostile sexism or negative attitudes toward women and women's rights (Glick & Fiske, 1996). However, research over the past ten years has detailed a type of sexism of which many are not aware: benevolent sexism. This type of sexism involves subjectively positive attitudes toward women, with pro-social behaviors aimed at helping and protecting women. These 'benevolent' attitudes are still sexist, because they are rooted in the view of women as the weaker sex and prescribe stereotyped, restricted roles for women (Glick & Fiske, 1996). The present research explores an educational intervention aimed at increasing awareness and decreasing negative effects of benevolent sexism.

Ambivalent Sexism

A look at today's society reveals a marked improvement in the treatment of women in the United States. Women have made great strides in education, employment, and virtually all areas of society. However, women still face obstacles in achieving career success. For example, they are still underrepresented in technological science careers, the fastest growing professions. In 2002, women made up only 25-30% of computer support and computer science careers and 7% of physicists and astronomers (U.S. Department of Labor, 2002). In 2006, there were only 10 female CEO's represented in the Fortune 500 list, and only 20 in the Fortune 1000 (CNNMoney, 2006). That means that only 2% of the top grossing companies in the US were headed by women. This underrepresentation of women in the corporate workforce suggests that factors are at play, such as sexism, that still may be holding women back from reaching their potential and achieving ultimate equality."

Glick and Fiske (1996) proposed a form of sexism combining positive and negative attitudes toward women that may help explain the underrepresentation of women in these careers. Ambivalent sexism is comprised of hostile sexism, accounting for the continuing discrimination against women, and benevolent sexism, accounting for the positive feelings toward the social category of women (i.e., the "women are wonderful effect;" Eagly & Mladinic, 1989). Hostile sexism is defined by Glick and Fiske as "an adversarial view of gender relations in which women are perceived as seeking to control men, whether through sexuality or feminist ideology" (2001, p. 109). Hostile sexists feel that women enjoy refusing a man after initially wel-

coming his sexual advances, and that women advocating for women's rights are seeking power over men. Overall, hostile sexism involves negative attitudes toward women. Benevolent sexism, on the other hand, is subjectively positive, "characterizing women as pure creatures who ought to be protected, supported, and adored and whose love is necessary to make a man complete" (Glick & Fiske, 2001, p. 109). Benevolent sexists place women on a pedestal, believing that they are morally and aesthetically superior to men. This pedestal is confining, however, as benevolent sexists believe that women's nurturance and warmth makes them best suited for traditional domestic roles such as wife and mother. This type of sexism, while subjectively positive, can have negative consequences for women because both benevolent and hostile sexism are rooted in the ideology of women as the inferior sex (Glick & Fiske, 1996, 2001).

Hostile and benevolent sexism are distinct constructs but often co-occur; the two types of sexism have been found to be moderately positively correlated (.37 < r < .74; Glick & Fiske, 1996). Hostile sexism is directed at women who violate traditional gender norms (e.g. career women), while benevolent sexism is directed at women who fulfill traditional gender norms (e.g. homemakers; Glick, Diebold, Bailey-Werner, & Zhu, 1997). Thus, individuals may think of themselves as nonsexist because they feel positively about and behave prosocially toward women; however, this "woman are wonderful" effect is reserved only for those women who fulfill traditional gender norms and stay on the gender pedestal. When exposed to nontraditional women, hostile sexism is likely to rear its ugly head. Although seemingly counterintuitive, men and women who hold benevolent sexist attitudes are also likely to hold hostile sexist attitudes, and these attitudes are differentially expressed depending on the type of woman they encounter.

It is easy to see that hostile sexism hurts women through direct discrimination and non-support of women's rights, but it may be more difficult to understand how thinking of women as morally pure wives and mothers who need to be cherished and protected has negative implications for women. Indeed, benevolent sexism can sometimes provide immediate positive outcomes. For example, individual women receive immediate benefits when men insist on carrying heavy objects or when women are denied service in active combat. Although different in importance and severity, both examples demonstrate the way in which benevolent sexism provides tangible rewards to women. Levels of hostile and benevolent sexism have been found to vary somewhat across cultures, but in a study of 19 nations, researchers found that hostile and benevolent sexism existed and were significantly positively correlated in all nations studied (Glick et al., 2000). Consistent with research on American students (Glick et al., 1997), hostile sexism was found to predict negative evaluations of women, while benevolent sexism predicted positive evaluations of women in all nations studied (Glick et al., 2000). Thus, hostile and benevolent sexism appear to operate in a similar manner across many different cultures.

Some might argue that if women are given advantages, then instances of benevolent sexism are not particularly pernicious. However, benevolent sexism, while it may provide some privileges to women, has been shown to have deleterious long term effects in the form of restricting women's roles (Gill, 2004; Viki, Abrams, & Hutchison, 2003), endorsing subtyping of women (Glick et al., 1997), and promoting gender inequality and system justifying ideology (Glick et al., 2000; Glick & Fiske, 2001; Jost & Kay, 2005). Additionally, recent research has shown that benevolent sexism can also have immediate negative effects on individual women; women exposed to benevolent sexism performed more poorly on a cognitive task (Dardenne, Dumont, & Bollier, 2007; Vescio, Gervais, Snyder, & Hoover, 2005) and indicated decreased desire to take advantage of a career advancement opportunity (Moya, Glick, Expósito, de Lemus, & Hart, 2007). Observers rated female job applicants who were targets of benevolent sexism as less competent and therefore less deserving of the job (Good & Rudman, in press). Be-

nevolent sexism, therefore, is likely just as detrimental to women as hostile sexism.

Benevolent sexism may be just as dangerous as hostile sexism due to its subtle nature. Women may easily recognize when they are the victim of hostile sexism, but find it harder to detect instances of benevolent sexism (Kilianski & Rudman, 1998; Swim, Hyers, Cohen, & Ferguson, 2001). Kilianski and Rudman (1998) found that while female college undergraduates rated a profile of a hostile sexist as very unfavorable, the benevolent sexist profile received mildly favorable ratings. Undergraduate women in this study also underestimated the prevalence with which the two types of sexism could coexist in the same person. Further, the less likely women were to see a connection between hostile and benevolent sexism, the more likely they were to disapprove of hostile sexism while approving of benevolent sexism. Thus, women did not conceptualize benevolent sexism as sexist, especially in comparison to hostile sexism.

Intervention

Because benevolent sexism is detrimental to women, reducing its prevalence would be beneficial for increasing equality among men and women. One way in which benevolent sexism could be reduced is through intervention. Research on prejudice-reducing intervention is generally positive, indicating that relatively long-term attitudinal and behavioral change is possible through intervention (see Levy, 1999 for a review). Several types of intervention have been investigated, including promoting stereotype-attenuating information processes, inducing cognitive dissonance, and highlighting stereotype-attenuating ideologies (Levy, 1999). Importantly, dissonance paradigms may be especially suited for low prejudice persons (Monteith, 1993). In this type of intervention, participants are induced to recognize a discrepancy between their prejudiced behavior and non-prejudiced attitudes. Low prejudiced persons were more likely to feel guilt and express motivation to change their behavior (Monteith, 1993). Because benevolent sexism is often viewed as polite or well-mannered behavior, many people are likely to view themselves as non-sexist or non-prejudiced. These individuals may be especially motivated to change if their benevolent sexist behavior is shown to be prejudiced.

Interventions that are less intrusive and easier to administer are more likely to be adopted for practical use. Educational interventions, similar to the dissonance interventions described above, can be utilized in school and work settings, and there is some evidence of their success. An educational intervention program specifically targeted toward benevolent sexism could increase knowledge of the topic, leading to decreased endorsement. Past research has shown that educational interventions aimed at reducing prejudice are particularly effective in producing short term, but not lasting, effects; racial prejudice and negative stereotyping was reduced immediately, but not 3 months following an educational intervention (Hill & Augoustinos, 2001). In contrast, a more recent study found that combining cognitive (information challenging stereotypes of the disabled) with behavioral intervention (engaging in paralympic activities) produced immediate reductions in prejudice toward disabled individuals as well as at three months follow-up (Krahe & Altwasser, 2006). Because of the subjectively positive nature of benevolent sexism, we do not believe that an intervention similar to Krahe and Altwasser's (2006), in which men were asked to put themselves in a woman's shoes while experiencing benevolent sexism, would improve men's recognition of benevolent sexism as sexism. The classic question would likely arise: "How can it be sexist if the behavior is positive?" Men and women in U.S. society are in contact every day, and some even theorize that this interdependence between men and women has produced benevolent sexism (Glick & Fiske, 2001). Thus, we do not believe that a behavioral intervention would be particularly effective in this context. Instead, because benevolent sexism is often not recognized as sexism, we posit that an educational intervention would be most effective at reducing benevolent sexist beliefs as well as approval of benevolent sexist behaviors. Al-

though educational interventions are commonly used in workplace and school settings, their effectiveness is not often measured. Indeed, one study found that 81% of U.S. colleges and universities had used diversity workshops, yet none had studied the effects of the interventions (McCauley, Wright, & Harris, 2000). Therefore, the current research tests the effectiveness of an educational intervention, which could be easily administered in a school or workplace setting, in reducing benevolent sexism.

In the present research, a simple educational intervention in the form of an essay about the nature of benevolent sexism was used in an attempt to stimulate awareness of a previously unrecognized form of prejudice. Across two studies, we predicted that teaching individuals about benevolent sexism and giving a name to a phenomenon commonly experienced by women would reduce acceptance of benevolent sexism by both male and female participants.

Study 1

We hypothesized that participants who read an intervention essay about benevolent sexism would report lower benevolent sexism scores and rate a benevolent sexist less favorably than those who read a control essay. We expected these effects to be present both immediately and six months following the experimental manipulation.

Method

Participants

Time 1 and 2 (two weeks prior to intervention and immediately following) participants were 59 undergraduate and law students (40 women, 19 men) from a small southeastern private university, ranging in age from 18 to 25 ($M = 19.75$, $SD = 1.49$). Participants were predominantly White (88.1% White, 3.4% African American, 1.7% Asian American, 5.1% International, and 1.7% Other). At Time 3 (six months following intervention) 41 participants (69.5% of original sample)

completed the online measures. Time 3 participants were representative of the original sample: 28 women, 13 men, ages ranging from 18 to 25 ($M = 19.89$, $SD = 1.55$), 87.8% White, 4.9% African American, 2.4% Asian American, 2.4% International, 2.4% Other. All participants were recruited through flyers posted around campus and through e-mail advertisements sent out through the campus-wide mail system. The only restriction placed on eligibility was that participants had to be at least 18 years of age.

Materials

Ambivalent sexism. The Ambivalent Sexism Inventory (ASI), (Glick & Fiske, 1996), was used to assess participants' hostile and benevolent sexism scores prior to (Time 1), immediately following the intervention (Time 2), and six months post manipulation (Time 3). The ASI includes two 11-item scales, one measuring hostile sexism (HS) (e.g., "Women are too easily offended") and the other benevolent sexism (BS) (e.g., "Women should be cherished and protected by men"). Responses were measured on a 6-point scale from 0 (*disagree strongly*) to 5 (a*gree strongly*). Scale reliability was good for both the hostile (Time 1 α = .77, Time 2 α = .88, Time 3 α = .88) and benevolent sexism subscales (Time 1 α = .78, Time 2 α = .84, Time 3 α = .77). Obtained scale reliability values were also similar to previous research on hostile (.80 < α < .92) and benevolent sexism (.73 < α < .85; Glick & Fiske, 1996).

Intervention essay. A one and a half page description of hostile sexism (HS) and benevolent sexism (BS), and relevant research findings regarding their systemic negative consequences was developed by the researchers based on several sources (Glick & Fiske, 1996; Nelson, 2006; Glick & Fiske, 2001). The reading provided definitions of HS and BS as well as evidence of the negative effects of benevolent sexism. See Appendix A for the intervention essay.

Control essay. An excerpt about the nature of insomnia was used as a control reading. The control reading was the same length and format as the intervention reading. See Appendix B for the full control essay.

Profile ratings. Participants rated their liking of three profiles of a hostile sexist, benevolent sexist, and non-sexist developed by Kilianski and Rudman (1998) on a scale of 1 (*not at all*) to 7 (*very much*). The profiles described men holding hostile, benevolent, or non-sexist beliefs, as conceptualized by Glick & Fiske (1996). Ratings were obtained both immediately following the manipulation (Time 2) and at six months follow-up (Time 3). Order of profile presentation was counterbalanced. Please see Kilianski and Rudman (1998) for the full profiles.

Demographic information. Participants were asked to indicate their gender, age, and ethnicity.

Procedure

Participants were e-mailed the ASI and informed consent two weeks prior to testing (Time 1) and were asked to return the materials via e-mail. At their assigned time, participants were individually tested in a laboratory. Participants were given either the intervention essay or control essay, instructed to read the essay carefully, and thoughtfully consider the information presented in the reading. The experimenter exited the room, leaving the participant alone to read. Following completion of the reading, participants were given a second ASI (Time 2). When the participants finished the ASI, they were provided with a stapled packet containing the three sexist profiles with rating instructions. Upon completion of the packet, participants were debriefed and thanked.

Follow-up data were obtained six months following completion of the lab portion of the study (Time 3). Participants were e-mailed a link to an online questionnaire which included the ASI and the three sexist profiles with rating questions. Informed consent was obtained via the first question on the survey, and the last page of the survey debriefed and thanked the participants for their time.

Results & Discussion

Table 1 displays the means and standard deviations

of participants' ASI scores (Time 1, Time 2, and Time 3) by gender and essay condition. Consistent with past research and ambivalent sexism theory (Glick & Fiske, 1996), HS and BS subscale scores were positively correlated at Time 1, $r(59) = .55$, $p < .001$, Time 2, $r(59) = .56$, $p < .001$, and Time 3, $r(41) = .45$, $p = .003$. No gender differences were found for any of the subscales at any of the three times of measurement, all $ps > .32$.

Time 2 Results

To determine any immediate effects of the intervention on BS scores, we computed a 2 (essay condition: intervention or control) x 2 (gender) ANCOVA, covarying out Time 1 ASI scores. Because the ASI has shown good test-retest reliability, we reasoned that initial sexism scores would be a strong predictor of later sexism scores, and therefore covaried out initial ASI scores. As discussed above, HS and BS are overlapping or correlated factors, with some amount of shared variance. It is recommended that partial correlations be used in ASI analyses (Glick & Fiske, 1996), thus for the present purposes, we regressed participants' Time 2 HS scores on Time 2 BS scores, and used the studentized residuals as our dependent measure of benevolent sexism in the ANCOVA. As expected, participants' initial ASI scores significantly predicted their Time 2 BS residual scores, $F(1,54) = 11.64$, $MS = 8.85$, $p < .01$. Supporting our hypothesis, a main effect of condition was also found, $F(1,54) = 7.55$, $MS = 5.74$, $p < .01$, such that the participants in the intervention condition reported lower Time 2 BS residual scores ($M = -.34$, $SD = 1.02$) than participants in the control condition ($M = .35$, $SD = .88$). No other main effects or interactions were found.

We next tested whether the intervention had an immediate effect on participants' ratings of the three sexist profiles using a 2 (essay condition: intervention or control) x 2 (gender) MANCOVA on ratings of the three profiles, again covarying out Time 1 ASI scores. As expected, Time 1 ASI scores significantly predicted participants' evaluations of the three profiles, BS profile $F(1,54) = 10.20$, $MS = 15.28$, $p < .01$, *HS* pro-

Table 1

Study 1 Participants' Mean Time 1, Time 2, and Time 3 ASI Subscale Scores by Gender and Essay Condition

Essay Condition			Time 1		Time 2			Time 3	
			BS	HS	BS	HS		BS	HS
Intervention	Women	(n = 20)	2.03 (.73)	1.76 (.52)	1.89 (.90)	1.67 (.79)	(n = 13)	2.39 (.72)	1.64 (.69)
	Men	(n = 10)	2.04 (.72)	1.75 (.71)	1.85 (.87)	1.52 (.80)	(n = 7)	1.66 (.79)	1.36 (.77)
	Total	(n = 30)	2.03 (.73)	1.76 (.58)	1.88 (.87)	1.62 (.78)	(n = 20)	2.14 (.81)	1.54 (.71)
Control	Women	(n = 20)	2.30 (.71)	1.66 (.75)	2.22 (.68)	1.60 (.81)	(n = 15)	2.38 (.68)	1.25 (1.02)
	Men	(n = 9)	2.62 (.82)	1.68 (.81)	2.58 (.74)	1.58 (1.01)	(n = 6)	2.68 (.55)	1.86 (.44)
	Total	(n = 29)	2.40 (.74)	1.67 (.75)	2.33 (.71)	1.59 (.86)	(n = 21)	2.46 (.65)	1.42 (.93)

Note. Standard deviations are presented in parentheses. Responses are on a scale of 0 (disagree strongly) to 5 (agree strongly). BS = benevolent sexism subscale, HS = hostile sexism subscale.

Table 2

Study 1 Mean Ratings of Sexist Profiles by Gender and Essay Condition

Essay Condition			Time 2				Time 3		
			BS	HS	NS		BS	HS	NS
Intervention	Women	(n = 20)	4.45 (1.39)	2.25 (1.37)	6.00 (.86)	(n = 13)	4.31 (.75)	2.46 (1.20)	5.69 (1.18)
	Men	(n = 10)	3.30 (1.25)	2.10 (1.10)	5.50 (.85)	(n = 7)	2.86 (1.35)	2.14 (1.46)	5.57 (.79)
	Total	(n = 30)	4.07 (1.44)	2.20 (1.27)	5.83 (.87)	(n = 20)	3.80 (1.20)	2.35 (1.27)	5.65 (1.04)
Control	Women	(n = 20)	4.95 (1.47)	2.20 (.89)	6.00 (.92)	(n = 15)	4.60 (1.06)	2.07 (.80)	6.27 (.70)
	Men	(n = 9)	4.44 (.73)	3.11 (1.45)	5.44 (1.42)	(n = 6)	4.50 (1.05)	2.33 (.82)	5.00 (1.55)
	Total	(n = 29)	4.79 (1.29)	2.48 (1.15)	5.83 (1.10)	(n = 21)	4.57 (1.03)	2.14 (.79)	5.90 (1.14)

Note. Standard deviations are presented in parentheses. Responses are on a scale of 1 (not at all) to 7 (very much). BS = benevolent sexist profile, HS = hostile sexist profile, NS = nonsexist profile.

file $F(1,54) = 12.18$, $MS = 15.16$, $p < .01$, NS profile $F(1,54) = 8.30$, $MS = 7.02$, $p < .01$. Consistent with our hypothesis, a main effect of condition was found for the BS profile, $F(1,54) = 3.90$, $MS = 5.85$, $p = .05$; participants in the intervention condition ($M = 4.07$, $SD = 1.03$) liked the BS profile significantly less than participants in the control condition ($M = 4.79$, $SD = 1.29$). Additionally, women reported liking the BS profile ($M = 4.70$, $SD = 1.44$) more than men ($M = 3.84$, $SD = 1.17$), $F(1,54) = 6.86$, $MS = 10.29$, $p = .01$. Although not predicted, this gender difference is not surprising, given that BS seemingly provides benefits to women. However, caution must be used in interpreting gender effects due to the small sample size for men. No other main effects or interactions were found for any of the three sexist profiles.

Time 3 Results

To examine any lasting effects of the intervention, the same analyses as above were performed on our Time 3 measures, collected 6 months post essay manipulation. A 2 (essay condition: intervention or control) x 2 (gender) ANCOVA, covarying out Time 1 ASI scores, was performed on the Time 3 BS residuals (studentized residuals saved after regressing Time 3 HS on Time 3 BS). As expected, participants' Time 1 ASI scores remained a significant predictor of Time 3 BS residual scores, $F(1,36) = 5.09$, $MS = 4.16$, $p = .03$. In support of our hypothesis, a marginally significant main effect of essay condition was found, $F(1,36) = 3.11$, $MS = 2.54$, $p = .086$, with participants in the intervention condition reporting lower BS residual scores ($M = -.29$, $SD = 1.13$) than participants in the control condition ($M = .28$, $SD = .82$). Contrary to Time 2 results, a marginally significant main effect of gender was also found, $F(1,36) = 2.97$, $SD = 2.43$, $p = .09$; women reported higher BS residual scores ($M = .15$, $SD = .98$) than men ($M = -.33$, $SD = 1.04$). Again, gender effects must be interpreted cautiously due to gender subsample size. The interaction was not significant, $p = .44$. Although the effects described above were marginal and should be interpreted with caution, we assert that the main effect of essay condition provides some support for our hypothesis.

As at Time 2, we next computed a 2 (essay condition: intervention or control) x 2 (gender) MANCOVA on ratings of the three sexist profiles, again covarying out Time 1 ASI scores. Contrary to the Time 2 results, Time 1 ASI scores significantly predicted Time 3 ratings of the BS profile, $F(1,36) = 18.55$, $MS = 13.17$, $p < .001$, but not the HS ($p = .11$) or NS ($p = .16$) profiles. The effects for the HS and NS profiles were in the predicted direction but did not reach significance, possibly due to the smaller sample size at Time 3. Consistent with predictions, a significant main effect of essay condition was found for ratings of the BS profile, $F(1,36) = 4.91$, $MS = 3.98$, $p = .03$; six months post manipulation, participants who read the intervention essay reported liking the BS profile ($M = 3.80$, $SD = 1.20$) less than those who read the control essay ($M = 4.57$, $SD = 1.03$). A significant main effect of gender was also found, $F(1,36) = 11.08$, $MS = 7.87$, $p < .01$; as at Time 2, women at Time 3 reported liking the BS profile ($M = 4.46$, $SD = .92$) more than men ($M = 3.62$, $SD = 1.45$). No other main effects or interactions were found for any of the three profiles.

The results of Study 1 generally supported our hypotheses, though there were several limitations. In particular, participants may have experienced situational demand due to the repeated administration of the ASI. Additionally, while the ratings of the sexist profiles are one indicator of approval of benevolent sexism, reporting less liking for the BS profile may not be equivalent to recognizing BS as sexist. In Study 2, we sought to correct for these limitations by 1) obtaining a pre-measure of participants' ASI scores that was completely distinct from the laboratory study, 2) more fully disguising the true purpose of the study, 3) using a different measure of participants' approval of BS, and 4) measuring social desirability to rule out demand concerns.

Study 2

We hypothesized that participants who read the

intervention essay would report lower benevolent sexism scores and perceive a benevolent sexist incident as greater in severity than participants who read the control essay. We also predicted that these results would be independent of social desirability concerns.

Method

Participants

Two hundred and twenty four undergraduate students (136 women, 88 men), ranging in age from 18 to 31 ($M = 18.79$, $SD = 1.44$) were recruited from the Introductory Psychology research pool at a large northeastern public university. Participants' ethnicities were as follows: 51.3% White, 32.6% Asian American, 7.6% Multiracial, 4% Hispanic/Latino American, 2.2% African American, and 2.2% Other).

Materials

Ambivalent sexism. As in Study 1, the Ambivalent Sexism Inventory (ASI) was used to measure participants' hostile and benevolent sexism prior to and following the experimental manipulation (Time 1 $\alpha = .85$, Time 2 $\alpha = .87$).

Social desirability. The 20-item Impression Management subscale of the Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1988) was used to measure participants' social desirability concerns (e.g., "I always obey laws, even if I am unlikely to get caught"). Items were rated on a scale of 1 (strongly disagree) to 6 (strongly agree). Per the scoring instructions, after reversing appropriate items, one point was added for each extreme response (5 or 6), then summed to create an overall social desirability score ($\alpha = .75$).

Intervention and control essays. The same intervention essay and control essay as in Study 1 were used as the experimental manipulation in Study 2.

Recognition of BS. Participants were asked to imagine that they were on the disciplinary board for a large company, which hears complaints from employees and decides what action should be taken. Participants then read through several employee complaints and rated whether they described instances of prejudice. One event was described as including BS:

> "COMPLAINT #4: A woman complains that her male boss is treating her differently than her male coworkers. He gives her less work to do, but praises and rewards her work more than her male coworkers' work. He also tells her to leave work earlier to be with her family, and asks her to bring refreshments for all meetings with clients and help redecorate the office."

After reading each complaint, participants were given to rate the extent to which the situation described prejudice, discrimination, and bias on a scale of 1 (*not at all*) to 7 (*definitely*). The three items were averaged to create an index of participants' recognition of BS as prejudice ($\alpha = .85$).

Severity of BS. For each workplace complaint, participants were asked to rate the severity of the incident (e.g., "If you think this situation represents an act of prejudice, how severe do you think the prejudice is?" and "If you think this situation represents an act of prejudice, how serious do you think the problem is?") on a scale of 1 (*not serious/severe*) to 7 (*very serious/severe*). The two items were averaged to create a measure of how severe participants viewed the BS incident ($\alpha = .94$).

Demographics. Participants were asked to indicate their gender, age, and ethnicity.

Procedure

Participants completed the Time 1 ASI as part of a battery of questions administered to all Introductory Psychology students at the beginning of the semester. Therefore, this pre-measure of sexism did not appear to be connected to the present study in any way. Participants were then recruited for a study on leadership skill. Specifically, we advertised the study as assessing how leadership aptitude influences perceptions of employee complaints. All materials were administered via an online survey using surveymonkey.com. After consenting to participate, students were randomly assigned to read either the intervention or control essay.

Next participants completed the Time 2 ASI, social desirability scale, and 30 other questions designed by the researchers to bolster the cover story of assessing leadership aptitude. These measures were intermixed randomly in a questionnaire labeled "Leadership Aptitude Index", so as to disguise the items from the ASI and reduce overall demand characteristics for the participants. Next participants were given descriptions of 5 employee complaints and asked to evaluate each one for the presence of prejudice or discrimination, and the severity of the prejudice if present. The complaints included allegations of racism and heterosexism, as well as two filler complaints which did not contain prejudice, and the complaint of interest which featured benevolent sexism. The final page of the survey assessed participants' demographic information and then debriefed and thanked them for participating.

Results & Discussion

Table 3 shows the means and standard deviations of participants' ASI scores at Times 1 and 2. Consistent with past research (Glick & Fiske, 1996), men reported higher HS scores than women at both Time 1, $t(212) = 4.70$, $p < .01$, and Time 2, $t(222) = 2.62$, $p = .01$. No gender differences were found for BS scores at either time. HS and BS were positively correlated both at Time 1, $r(214) = .37$, $p < .01$, and Time 2, $r(224) = .32$, $p < .01$. Zero-order correlations between all study variables are presented in Table 4. As can be seen, social desirability was not correlated with ASI subscale scores at Times 1 or 2, or with recognition of the BS complaint as prejudiced or ratings of the severity of the discrimination present in the BS complaint.

BS scores

To determine whether the intervention essay had any effect on participants' BS scores, a 2 (essay condition: intervention or control) x 2 (gender) ANCOVA was computed on participants' Time 2 BS residual scores, covarying out Time 1 ASI scores. As in Study 1, due to the shared variance between the ASI subscales,

we regressed participants' Time 2 HS scores on Time 2 BS scores, and used the residuals as a more pure measure of participants' BS. Because sexism scores at Time 1 are likely a large predictor of sexism scores at Time 2 (indeed, the ASI demonstrates good test-retest reliability), we covaried out Time 1 ASI scores. Supporting this analytical choice, Time 1 ASI scores did significantly predict Time 2 BS residual scores, $F(1, 209) = 91.01$, $MS = 63.39$, $p < .01$. Consistent with our hypothesis, a main effect of essay condition was also found, $F(1, 209) = 4.94$, $MS = 3.44$, $p = .03$; participants who read the intervention essay reported lower BS residual scores ($M = -.11$, $SD = .99$) than those who read the control essay ($M = .11$, $SD = 1.0$). Neither the main effect of gender nor the interaction were significant.

Table 3

Means and Standard Deviations for All Study 2 Variables by Essay Condition

Variable	Intervention Essay	Control Essay
	($n = 115$)	($n = 109$)
Time 1 BS	2.67	2.64
	(.82)	(.72)
Time 1 HS	2.47	2.42
	(.80)	(.74)
Time 2 BS	2.58	2.66
	(.82)	(.82)
Time 2 HS	2.51	2.32
	(.86)	(.77)
Social Desirability	4.19	4.24
	(3.25)	(3.29)
Recognition of BS	4.64	4.33
	(1.66)	(1.59)
Severity of BS	4.16	3.56
	(1.72)	(1.78)

Note. Standard deviations are presented in parentheses. HS and BS subscale responses ranged from 0 (disagree strongly) to 5 (agree strongly). Social Desirability is a summary score ranging from 0 to 20. Recognition and severity of BS were rated on a scale of 1 to 7.

Table 4
Zero-order Correlations Among all Study 2 Variables

	Variable	1.	2.	3.	4.	5.	6.	7.
1.	Time 1 BS	---						
2.	Time 1 HS	.37**	---					
3.	Time 2 BS	.83**	.33**	---				
4.	Time 2 HS	.33**	.78**	.32**	---			
5.	Social Desirability	.09	-.19**	.06	-.16*	---		
6.	Recognition of BS	-.18**	-.18**	-.24**	-.25**	.11	---	
7.	Severity of BS	-.22**	-.20**	-.27**	-.25**	.07	.78**	---

Note. *p < .05, **p < .01

Recognition and Severity of BS

To test whether the intervention influenced recognition of a BS complaint as prejudiced and ratings of the severity of that prejudice, we computed a 2 (essay condition: intervention or control) x 2 (gender) MANCOVA, covarying out Time 1 ASI scores. As expected, Time 1 ASI scores significantly predicted both recognition of BS, $F(1, 208) = 15.28$, $MS = 36.59$, $p < .01$, and the severity of BS, $F(1, 208) = 17.86$, $MS = 49.82$, $p < .01$. A main effect of condition was also found for ratings of the severity of the BS complaint, $F(1, 208) = 4.16$, $MS = 11.62$, $p = .04$, with participants in the intervention condition evaluating the BS complaint as more severely prejudiced than those in the control condition. Essay condition by gender interactions were also found for both dependent variables, $F_{recognition}(1, 208) = 7.03$, $MS = 16.82$, $p < .01$, $F_{severity}(1, 208) = 4.06$, $MS = 11.32$, $p = .05$.

To examine these interactions, we conducted the above analysis separately for women and men. Women in the intervention condition were more likely to recognize the BS complaint as containing prejudice ($M = 4.80$, $SD = .51$) and rate the prejudice as more severe ($M = 4.24$, $SD = 1.66$) than women in the control condition ($M_{recognition} = 4.08$, $SD = 1.08$, $M_{severity} = 3.30$, $SD = 1.74$), $F_{recognition}(1, 127) = 6.92$, $MS = 16.94$, $p = .01$, $F_{severity}(1, 127) = 10.85$, $MS = 29.56$, $p < .01$. For men however, no effects of the essay condition were found,

both $ps > .21$.

The results of Study 2 supported our predictions that participants in the intervention condition would report lower BS scores than those in the control condition, and that ASI scores and ratings of the BS complaint would be independent of social desirability concerns. Contrary to predictions, the intervention essay only affected women's evaluations of the BS complaint as prejudiced and severe. It is possible that because men are not the targets of BS, they did not perceive the BS incident as discriminatory. Additionally, it is possible that men may have identified more with the accused male boss rather than the complainant, making it more difficult to recognize that seemingly positive behavior directed toward women can still be a form of sexism. Future research should be directed toward testing the validity of these explanations by collecting men's qualitative responses to complaints or other BS scenarios. Additional research testing the effectiveness of alternate intervention strategies aimed at increasing men's recognition of benevolent sexism is also needed.

General Discussion

Across two studies, we have shown that reading an educational essay about BS and HS was sufficient to reduce participants' reported BS attitudes. Study 1 demonstrated that these effects lasted 6 months, and Study 2 showed that the initial effects were independent of

social desirability concerns or demand characteristics of the experimental design. These studies also show that the intervention essay reduced both men and women's liking of a benevolent sexist profile, and increased women's recognition of a BS incident as prejudiced and severe.

It is likely that most of participants were aware that hostile sexism exists even before reading the intervention reading. However, although many of the participants may have been on the sending or receiving end of benevolent sexism, they may not have had a name for it or known how it can be harmful to women. As reviewed earlier, many men and women are aware that hostile sexism jeopardizes gender equality. In developing the ASI, Glick and Fiske (2001) found that questions more blatantly addressing hostile sexism were soundly rejected by participants, either out of a desire for gender equality, or potentially a desire to appear politically correct and unprejudiced. In our samples, pre-intervention hostile sexism scores and liking of the hostile sexist were much lower than scores related to benevolent sexism. We would expect that the educational essay would be most effective for changing attitudes concerning a type of sexism that some individuals may not have previously considered sexist.

In Study 1, the purpose of the study was somewhat obvious to participants. It is possible that participants in the intervention essay condition initially rated the benevolent sexist profile lower than in the control condition because they felt they should do so in order to appear non-sexist. In this case, however, social desirability effects may not be so detrimental. Even if the intervention was only successful at changing participants' outward expressions of sexism, those outward behaviors may eventually lead to a change in internal beliefs. The saying-is-believing effect may allow expressed opinions to later become internalized attitudes (Higgins & Rholes, 1978). Indeed, this may have been the case in the present research where effects of the intervention were still present six months later. Even if the initial attitude change reported immediately following the intervention reflected only a change in outward

expression of sexism, the long term effects found seem to indicate a lasting change in participants' internal beliefs regarding benevolent sexism. It is doubtful that participants experienced as much demand six months following the laboratory portion of the experiment, while completing the survey in the privacy of their own home. Thus, although demand characteristics may have impacted the results somewhat, we believe that the intervention did have a lasting impact on participants.

In Study 2, we disguised the true purpose of the study much more thoroughly by collecting Time 1 ASI measurements completely separately from the laboratory portion of the study, and creating filler measures supporting the cover story about our interest in leadership skill. Additionally, our dependent measures of recognition and severity of BS were interspersed with filler employee complaints and were in keeping with our cover story of how participants might act in a leadership role, such as evaluating employees. When demand characteristics were reduced, we still found evidence that the intervention essay reduced participants' BS scores, however the intervention was only successful at increasing women's recognition of BS as prejudice. This gender difference was unexpected; perhaps men's expressed disapproval of benevolent sexism is more dependent on social desirability concerns, as may have been the case in Study 1. Future research should attempt to determine the cause of this gender discrepancy and find more effective ways to increase men's recognition of BS as sexist.

Overall, the research presented here demonstrates that educational intervention is one means of reducing approval of benevolent sexism. Although our conclusions are somewhat limited by the small sample size of Study 1 and the inability to collect longitudinal data in Study 2, the success of this simple educational intervention shows promise for greater and more lasting change with stronger intervention. Future research should be directed toward assessing the effectiveness of intervention programs designed to reduce sexist beliefs; for example, are short educational sessions the most effective, or is intensified intervention a better

strategy? Many professional environments host diversity training programs to encourage cooperation between coworkers and prevent any acts of discrimination from occurring. A simple change such as incorporating information about benevolent sexism into existing sexism and sexual harassment programs could potentially reduce benevolent sexist interactions between coworkers and managerial professionals. Although the current research demonstrates a reduction in cognitive or affective response to benevolent sexism, future research needs to address behavioral change. What types of intervention produce observable reduction in benevolent sexist comments and actions? The research presented here provides a strong base for further concentration on methods of intervention to reduce both cognitive approval of and behavioral engagement in benevolent sexism.

References

CNNMoney (2006, April 17). Women CEO's of FORTUNE 500 companies. Retrieved October 25, 2007 from http://money.cnn.com/magazines/fortune/fortune500/womenceos/.

Dardenne, B., Dumont, M., & Bollier, T. (2007). Insidious dangers of benevolent sexism: Consequences for women's performance. *Journal of Personality and Social Psychology*, 93, 764-779.

Eagly, A. H., & Mladinic, A. (1989). Gender stereotypes and attitudes toward women and men. *Personality and Social Psychology Bulletin*, 15, 543-558.

Gill, M. J. (2004). When information does not deter stereotyping: Prescriptive stereotyping can foster bias under conditions that deter descriptive stereotyping. *Journal of Experimental Social Psychology*, 40, 619-632.

Glick, P., Diebold, J., Bailey-Werner, B., & Zhu, L. (1997). The two faces of Adam: Ambivalent sexism and polarized attitudes toward women. *Personality and Social Psychology Bulletin*, 23, 1323-1334.

Glick, P., & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, 70, 491-512.

Glick, P. & Fiske, S. T. (2001). An ambivalent alliance: Hostile and benevolent sexism as complementary justifications for gender inequality. *American Psychologist*, 56, 109-118.

Glick, P., Fiske, S. T., Mladinic, A., Saiz, J. L., Abrams, D., Masser, B., et al. (2000). Beyond prejudice as simple antipathy: Hostile and benevolent sexism across cultures. *Journal of Personality and Social Psychology*, 79, 763-775.

Good, J. J., & Rudman, L. A. (in press). When female applicants meet sexist interviewers: The costs to a target of benevolent sexism. *Sex Roles*.

Higgins, E. T., & Rholes, W. S. (1978). Saying is believing: Effects of message modification on memory and liking for the person described. *Journal of Experimental Social Psychology*, 14, 363-378.

Hill, M. E., & Augoustinos, M. (2001). Stereotype change and prejudice reduction: Short- and long-term evaluation of a cross-cultural awareness programme. *Journal of Community & Applied Social Psychology*, 11, 243-262.

Jost, J. T., & Kay, A. C. (2005). Exposure to benevolent sexism and complementary gender stereotypes: Consequences for specific and diffuse forms of system justification. *Journal of Personality and Social Psychology*, 88, 498-509.

Kilianski, S. E. & Rudman, L. A. (1998). Wanting it both ways: Do women approve of benevolent sexism? *Sex Roles*, 39, 333-353.

Krahe, B., & Altwasser, C. (2006). Changing Negative Attitudes Towards Persons with Physical Disabilities: An Experimental Intervention. *Journal of Community & Applied Social Psychology*, 16, 59-69.

Levy, S. R. (1999). Reducing prejudice: Lessons from social-cognitive factors underlying perceiver differences in prejudice. *Journal of Social Issues*, 55, 745-765.

McCauley, C., Wright, M., & Harris, M. E. (2000). Diversity workshops on campus: A survey of current practice at U.S. colleges and universities. *College Student Journal*, 34, 100–114.

Monteith, M. J. (1993). Self-regulation of prejudiced responses: Implications for progress in prejudice-reduction efforts. *Journal of Personality and Social Psychology*, 65, 469-485.

Moya, M., Glick, P., Expósito, F., de Lemus, S., & Hart, J. (2007). It's for your own good: Benevolent sexism and women's reactions to protectively justified restrictions. *Personality and Social Psychology Bulletin*, 33, 1421-1434.

Nelson, T. D. (2006). *The psychology of prejudice* (2nd ed.). Boston: Pearson Education, Inc.

Paulhus, D. L. (1988). *Assessing self-deception and impression management in self-reports: The Balanced Inventory of Desirable Responding.* (Manual available from the author at the Department of Psychology, University of British Columbia, Vancouver, B. C., Canada V6T 1Y7.)

Swim, J. K., Hyers, L. L., Cohen, L. L., & Ferguson, M. J. (2001). Everyday sexism: Evidence for its incidence, nature, and psychological impact from three daily diary studies. *Journal of Social Issues*, 57, 31-53.

U.S. Department of Labor, Women's Bureau. (2002). *Facts on working women: Women in high tech jobs.* Retrieved January 31, 2007 from http://www.dol.gov/wb/factsheets/hitech02.htm.

Vescio, T. K., Gervais, S. J., Snyder, M., & Hoover, A. (2005). Power and the creation of patronizing environments: The stereotype-based behaviors of the powerful and their effects on female performance in masculine domains. *Journal of Personality and Social Psychology*, 88, 658-672.

Viki, G., Abrams, D., & Hutchison, P. (2003). The "true" romantic: Benevolent sexism and paternalistic chivalry. *Sex Roles*, 49, 533-537.

Appendix A

Intervention Essay

Many people think of sexism as negative or discriminatory beliefs about women. Researchers have also proposed a more subtle form of sexism, called benevolent sexism, which involves subjectively positive attitudes about women, but ultimately is based on the premise that women are inferior to men. The following is a summary of research findings by psychologists Peter Glick and Susan Fiske on the topic of sexism. Please read it carefully and thoughtfully.

Sexism, defined as discrimination or prejudice against someone because of their sex, usually has a negative connotation and is used to describe prejudice against women. Recently, researchers have identified two types of sexism: hostile and benevolent. Hostile sexism is what one would normally think of as sexism: a negative attitude toward women which includes beliefs that women are inferior to men, that they have lower intelligence and competence than men, and that they are seeking to control men. Benevolent sexism, on the other hand, encompasses subjectively positive beliefs about women such as that women are pure and morally superior to men, and should be protected, supported, and adored by men. Benevolent sexism can seem to be beneficial for individual women, but in reality is negative. This is because both forms of sexism are rooted in the beliefs that women are the weaker sex, and that they should occupy the domestic roles in society. A man who carries a heavy package for a woman because women should not have to carry such things is helping her in a positive way, but is also reinforcing that women, as the weaker sex, cannot be expected to lift or carry their own belongings. Benevolent sexists want to protect women, they respect and admire women's roles as mothers and wives, and they idealize women as objects of romantic love. Hostile sexists view women as being unfit to hold positions of power, are more tolerant of wife abuse, and are more likely to blame the victim of acquaintance rape.

It may seem like these two types of sexism describe completely different individuals, but in reality there is a strong relationship between the two. Thus, people who are high in hostile sexism are likely to also be high in benevolent sexism. How could this be? Instead of thinking about women in general, sexists tend to sub-type women. Benevolent sexism predicts positive attitudes about traditional women (housewives, mothers, wives, good girls) and hostile sexism predicts negative attitudes about nontraditional women (career women, feminists, sluts, athletes, lesbians). Do you see the relationship? A woman conforming to traditional gender norms is likely to elicit benevolent sexism from a man, while a nontraditional woman is likely to elicit hostile sexism from the same man. Benevolent sexism rewards women for conforming to traditional female stereotypes, and hostile sexism punishes them for not conforming.

Most women perceive hostile sexists as challenging women's rights and gender equality and consequently disapprove of outright hostile sexism. However, many women approve of benevolent sexism. This may be because benevolent sexism offers real benefits to women, such as protection, financial security, and love, as long as they fulfill their "correct" roles as wives and mothers. Thus, benevolent sexism, by rewarding women for enacting traditional roles, serves to maintain the status quo and prevent social change. In the words of two prominent sexism researchers:

"The idealization of women who fulfill male-defined roles and needs is a crucial complement to the demonization of those who defy male power and authority, creating a particularly effective system of social control whose grip women in many societies are still struggling to break" (p. 773, Glick et al., 2000).

Appendix B

Control Essay

Insomnia is caused by everyday situations involving emotional extremes of happiness or anxiety. Although the term insomnia literally translates into "no sleep", it is used by most people to describe trouble falling asleep or staying asleep. The consequence of this is being unable to function as well as usual the following day. About one in three American adults says he or she is a poor sleeper and one in six says the problem is quite serious. Insomnia knows no bounds - it can affect the young and old, male or female. Sleep specialists distinguish among three types of insomnia: transient, short term and chronic. Transient insomnia is the experience of a night or two of poor sleep. Probably everyone suffers from it now and then. Often people who experience transient insomnia complain of difficulty in concentrating, weariness and irritability the following day. Sleeping in a strange bed may even bring on transient insomnia. Most people do not sleep quite as well as usual their first night away from home, whether it is a pleasant visit to a friends house or a vacation or under the stressful conditions of a hospital stay. Short-term insomnia involves sleep disturbances that last for two to three weeks. Here, ongoing stress at school, work or home is often the reason: worrying about grades, learning of your parents impending divorce, or having a serious illness or death in the family are all events that trigger short-term insomnia.

Chronic insomnia is poor sleep that lasts longer than three weeks. This form of insomnia is a complex disorder with many possible causes and afflicts more than 35 million Americans. While most people blame this on stress, the use of stimulants may also be at fault. It is relatively easy to pinpoint the reasons for transient and short-term insomnia. That is not the case for chronic insomnia, which may last for years, disrupting sleep most or every night. Rapid travel across many time zones upsets the inner clock that regulates the timing of sleeping and waking. As a result, trouble in sleeping at night as well as staying awake throughout the day is commonly called jet lag but is actually a form of insomnia. Stress undoubtedly plays a key role in insomnia, particularly for teenagers and people in their 20's and 30's, but is by no means the only culprit.

As mentioned before, stimulants are also responsible for cases of insomnia. Even though caffeine near bedtime may not interfere with falling asleep, it may trigger awakenings later. Caffeine related ingredients are found in soft drinks, chocolate, coffee and strong tea. Nicotine is also a stimulant and it has been shown that smokers take longer to fall asleep and sleep more lightly than non-smokers. Nicotine may be found in many commonly used drugs, including non-prescription drugs for weight loss, asthma and colds. Alcohol, which is sometimes used as a nightcap to induce sleep, may also act to make sleep more fragile throughout the night. Sleeping pills are thought to be a cure for insomnia but they unfortunately are not. When sleeping pills are used every night, they cease to benefit sleep after a few weeks, due to the fact that the body becomes used to the pills and they have no effect. Abruptly discontinuing their use, however may lead to a worsening form of insomnia called "rebound wakefulness". This problem can be fixed by a gradual reduction of the amount of medication taken nightly until no forms of medications are consumed.