

Group identity-based self-protective strategies: the stigma of race, gender, and garlic

CHRISTIAN S. CRANDALL,^{1*}
JO-ANN TSANG,¹ RICHARD D. HARVEY²
and THOMAS W. BRITT³

¹*University of Kansas, USA*

²*St Louis University, USA*

³*King College, USA*

Abstract

We examine the importance of group membership in stigma and its role in the effectiveness of self-protective cognitions in three experiments. In Experiment 1, men are asked to interact with an attractive female who will judge their value as a potential date, and either eat a mint or a clove of raw garlic prior to the interview. Although the stigmatized-by-garlic men discounted negative feedback and attributed it to their garlic breath, discounting and attributions were negatively correlated with self-esteem. In Experiment 2, White participants were evaluated positively or negatively by a bogus partner who the participants believed had been told that the participant was either White or Black. Although participants receiving negative feedback engaged in several self-protective cognitions, including attributing their negative feedback to racism, the strategies were uncorrelated with self-esteem. In Experiment 3, women prepared to interact via computer with a partner who expressed sexist or non-sexist beliefs. In the absence of feedback, self-esteem increased when their partner was sexist. In contrast with the first two experiments, perceiving the partner as prejudiced was significantly and positively correlated with self-esteem. Together, these experiments suggest that self-protective cognitions find their effectiveness when stigma has a basis in group membership. Copyright © 2000 John Wiley & Sons, Ltd.

Early self theories suggested that self-esteem was based on experience and reflected information from the social world about social acceptance, moral value, and personal accomplishments (see Shrauger & Schoeneman, 1979, for a review). Over the past several decades, the early theories have been shown to be over-simplified, limited, and, in some cases, simply wrong. One way in which these theories' predictions have

*Correspondence to: Christian Crandall, Department of Psychology, 426 Fraser Hall, University of Kansas, Lawrence, KS 66045, USA. e-mail: crandall@ukans.edu

failed—in a rather spectacular way—is that people who live with significant social stigmas do not suffer from a negative sense of self, despite what their cultures might say about their individual social value (Crocker & Major, 1989). Although stigmatized people suffer from a variety of social indignities (Goffman, 1963; Stangor & Crandall, in press; Wright, 1960, 1983), many people with significant, visible, and socially important stigmas do not suffer from low self-esteem or a negative sense of identity.

Crocker and Major's (1989) essay described the healthy self-esteem of stigmatized individuals and the reasons for the lack of esteem deficit; their theory has had a strong influence on subsequent research and theorizing. They argue that several self-protective cognitions provide a buffer from the negative social information individuals receive, and that these strategies are responsible for protecting their self-esteem from the negative effects of personal discrimination based on stigma. In contrast, we propose that mistreatment by an unstigmatized person can make salient a group membership that, although stigmatizing, is important and self-relevant, and this group salience is the actual force underlying the effectiveness of self-protective cognitions.

SELF-PROTECTIVE STRATEGIES

Crocker and Major suggested three strategies that help preserve high levels of self-esteem: (1) attributing negative feedback to prejudice against one's group, (2) limiting social comparison to ingroup members, and (3) selectively devaluing those dimensions on which the group stereotypically fairs poorly. For example, a businesswoman who receives negative feedback about her leadership skills from her male colleague might attribute this feedback to his sexist attitudes. Similarly, the businesswoman might decide that, although the feedback she received was negative, it was more positive than feedback given to other female employees at the company. Or she could decide that leadership skills aren't that important anyway. In each instance, the individual's self-esteem is protected from the blow that would be received by the negative feedback through the reinterpretation of damaging information. In all three cases, a cognitive strategy is used to undermine the information value of the negative feedback.

Evidence for the use of these strategies has been found in the laboratory. For example, physically attractive women were given positive feedback on an essay from an opposite sex partner who was 'romantically unattached but looking', who could either see the participant or not (Major, Carrington, & Carnevale, 1984). The attractive participants discounted the feedback when they were seen, as compared to when they were not seen. Similarly, women who received negative feedback from a sexist evaluator reported less depressive affect than women receiving negative feedback from someone who was not sexist (Crocker, Voelkl, Testa, & Major, 1991). However, the expected buffering effects with self-esteem were not found.

Self-protective Strategies Sometimes Fail

Sometimes the strategies that protect self-esteem are also directly responsible for lowering it. Crocker, Cornwell, and Major (1993) found that overweight women who

were rejected by a potential dating partner were more likely to attribute this negative feedback to their weight when compared both to overweight women who were not rejected, and normal weight women. Although they attributed the negative outcome to their stigma, they did not make attributions to prejudice. Crocker *et al.* (1993) explained these results by pointing to the perceived controllability of the stigma of weight—participants blamed their own stigma, but as part and parcel, they also blamed themselves. Not surprisingly, these overweight women had more negative affect and lower self-esteem. We suggest that the lack of success of the self-protective cognitions may not be self-perceived responsibility, but rather, fat people do not serve as a self-identifying reference group (see Crandall, 1994, for evidence on this point). It may be that the attack on self-esteem was not fended off because of a lack of meaningful group membership on the part of overweight women, and not perceived controllability.

Crocker *et al.* (1993) is the only study in this tradition to look at members of a stigmatized group who are not well identified with their group. Other studies have been done with members of relatively unstigmatized groups. Britt and Crandall (in press) compared the responses to negative feedback of African-American participants (who tend to be relatively well identified as 'Blacks') and European-American participants (who tend to be relatively poorly identified as 'Whites'). Britt and Crandall (in press) presented both African-American participants and European-American participants with positive or negative feedback on an essay-writing task. Both groups vigorously discounted negative feedback. However, discounting was related to higher levels of self-esteem for African-American participants, but was only slightly related to self-esteem for European-Americans.

Harvey and Crandall (submitted) found similar stigmatized-group effects with respect to devaluing when comparing Native-Americans with European-Americans. Both groups devalued a test more after receiving negative than positive feedback, showing that the self-protective cognition was available to them. However, only Native-American participants experienced an increase in self-esteem when told that the test was biased against them; no such self-esteem effect was found with European-Americans. Thus, although heavyweight women and European-Americans might use self-protective cognitions, use of these strategies is not associated with higher self-esteem.

The kinds of self-protective strategies that Crocker and Major (1989) reviewed are simple, straightforward, and cognitive methods of reducing the impact of negative feedback. The studies outlined above provide substantial evidence from several different labs that, in the face of negative evaluations, people engage in exactly the strategies Crocker and Major (1989) delineate. However, there exists little evidence to suggest that these cognitions are successful in directly protecting self-esteem.

THE IMPORTANCE OF GROUP MEMBERSHIP

We propose that although negative feedback can cause stigmatized individuals to engage in methods of self-protection, only when individuals have meaningful, group-based stigmas is there a relationship between self-esteem and the use of self-protective cognitions (Britt & Crandall, in press; Harvey & Crandall, submitted). In each

example of self-protective strategies mentioned by Crocker and Major (1989), group membership is an essential component. For example, when making an attribution to prejudice against one's own group, the individual needs first to consider oneself a member of a particular stigmatized group. Restricting social comparison to one's in-group logically requires group membership to be salient. Finally, valuing the things that one's group does well in devaluing dimensions on which the group does poorly both entail thinking about one's group membership. Although the importance of group membership is implicit in Crocker and Major's (1989) review of self-protective strategies, we suggest that the effectiveness of these strategies is *rooted in* their association with an identity-relevant group membership.

We propose that the reason why these strategies were not effective for overweight women and European–Americans is that these two categories of people do not identify themselves with a meaningful group. Although groups are forming to fight for civil rights and respect for overweight individuals, many people may be hesitant to identify themselves with overweight individuals as a group, possibly because they hope to escape membership in such a group in the future. In the case of European–Americans, being members of the majority ethnic group may keep them from thinking of themselves as a meaningful group. Majority group members may not always be accustomed to thinking of themselves in terms of their group identity (Abrams & Hogg, 1988). If meaningful group membership is integral to the effectiveness of Crocker and Major's (1989) self-protective strategies, then under most circumstances European–Americans would not benefit from employing these strategies. However, individuals belonging to stigmatized groups such as African–Americans or women are reminded daily of their group identity. Stigmatization based on these meaningful group memberships may make that membership salient, thus protecting self-esteem.

Hence it is possible that meaningful group membership is the driving force behind self-protective cognitions. Rather than raising self-esteem through external attributions, self-protective cognitions such as attributions to prejudice function to remind stigmatized individuals of their social identification with their in-group. This reminder of a valued in-group raises the individual's self-esteem. Therefore, it may be mechanisms associated with social identification (Oakes, Haslam, & Turner, 1994; Tajfel, 1981), not attribution, that function to preserve stigmatized individuals' self-esteem.

Therefore, we predict that individuals faced with prejudice on the basis of a meaningless group membership will engage in self-protective cognitions, but not reap the self-esteem buffering rewards of these strategies. On the other hand, individuals reminded of a meaningful group membership should experience a preservation of self-esteem in the absence of the use of any attributional, self-protective strategies.

OVERVIEW OF THE THREE EXPERIMENTS

To test the roles of meaningful group membership and self-protective cognitions in buffering self-esteem, we report three studies that systematically varied the meaningfulness of group membership. Specifically, we were interested in two issues. First, we examined how different kinds of stigmas and situations elicited different

patterns of self-protective responses. Second, we examined the relationship between these self-protective cognitions and self-esteem: Are the cognitions sufficient in themselves to buffer self-esteem, or is a link to group membership necessary to make the strategies effective?

In the first experiment, we gave people an individualizing stigma that was devoid of plausible group identification (bad breath). This allowed participants to engage in self-protective cognitions, but afforded little access to the benefits of group membership.

In a second experiment, we gave people a stigma that carried with it a group membership with which the participants could not reasonably identify (being a member of a different race). Although group membership was central to this manipulation of stigma, the membership was not meaningful to the participants themselves, since they by definition were not members of the opposite race and therefore had low group identity with this race.

In a third experiment, we created an experimental situation that turned a genuine, but often non-stigmatizing group membership (being female) into something stigmatizing *in situ*. In this experiment, we highlighted female group membership by the presence of a sexist evaluator, but we did not provide the participant an opportunity to attribute feedback to prejudice. This allowed us to see if making a meaningful group membership salient—in and of itself—would be enough to promote individuals' self-esteem.

EXPERIMENT 1 GARLIC AND THE SINGLE MALE

In the first experiment, we give male participants an opportunity to avail themselves of the benefits of the social-cognitive strategies, by giving them a transient, novel, but non-group-based stigma: bad breath. Males engaged in a brief conversation with an attractive female, who then provided the participant with either positive, moderately negative, or very negative feedback about their suitability as a dating partner. Half of each group of participants ate a mint candy prior to interacting, the other half ate a clove of raw garlic.

Because we were studying people who were newly stigmatized, with little experience in self-protective cognitions, we measured the simplest and most elemental form of attributional mechanisms—discounting—a process that is both cognitively and logically simple. Since at least as early as Freud (1915/1963), scholars have argued that denial of information is one of the most primitive and earliest learned defense mechanisms. This ensured that participants with little experience with stigmatization would have a realistic opportunity to express self-esteem-protective cognitions.

We predict that men who have eaten garlic will discount a negative evaluation and attribute it to their breath significantly more often than men who have eaten a mint. If the social-cognitive components of Crocker and Major's (1989) strategies are sufficient to protect self-esteem, then we predict that when faced with negative feedback, the use of self-protective cognitions should lead men who have eaten garlic to have a higher level of self-esteem than men who have eaten a mint. In addition, if the attribution to the stigma (social-cognitive process) alone is effective to promote self-esteem, then we should find a correlation between self-protective cognitions and self-esteem in the negative feedback conditions. However, if an identity-relevant

group membership is necessary to protect self-esteem, then there should be no relationship between self-protective cognitions and self-esteem.

Method

Participants were 81 European-American undergraduate males who participated as part of a requirement for a psychology course. Participants were run through the procedure individually. The design of the study was a 2(garlic or mint) \times 3(positive, neutral, or negative feedback) between participants factorial.

Procedure

Participants were seated in a cubicle when they arrived and were informed that the study concerned the effects of breath on dating preferences, and that they would either eat a clove of garlic or a mint candy. Although it would have been ideal experimentally not to inform the participant of the alternative food to be eaten, we felt obligated ethically to tell the participant that he may have to eat either food. Participants were told that they could refuse to eat either food with no loss of experimental credit, and were given an opportunity to refuse prior to being informed of their assigned condition. This prevented differential drop-out rates due to the aversiveness of eating raw garlic. Only one participant refused at this point.

Participants were informed that they had been randomly assigned to the garlic (mint) condition. They were also told that after eating the garlic (mint), they would engage in a brief interaction with a member of the opposite sex. They were told that their partner had been assigned to the neutral condition, and therefore had not eaten anything that would affect her breath. Participants were informed that they would provide each other with feedback about how they came across during the interaction. Participants were told that the other participant did not know the purpose of the study, and therefore he should not tell her anything about what he had eaten.

The participant was then given either a clove of garlic or peppermint candy, along with the script of questions to ask his partner. He was told to take a few minutes and memorize the six questions while eating the garlic/mint, and that he could bring the list of questions with him.

The female confederate (who was seated in an adjacent cubicle during the early part of the experiment) was moved to a chair in the adjoining experimental room. The participant was brought in and seated in a chair 18 inches from the confederate. The confederate could not remain blind to food condition (the smell of garlic was potent), but she was trained to respond uniformly to all participants, irrespective of food condition. The confederate was blind to the feedback condition. Three different confederates were used.

The participant then asked the confederate the series of questions, and the confederate responded in a pleasant tone. The questions asked, along with the confederates' responses, are listed below:

- (1) What is your name? 'Barbara Miller'
- (2) What is your hometown? 'Atlanta, Georgia'

- (3) What is your major? ‘Undecided, but I’m thinking about elementary education or psychology’
- (4) What are your favorite hobbies? ‘Aerobics and dancing. I also like meeting people’
- (5) What qualities do you like in a person? ‘Sense of humour, sensitivity, a nice smile, and clean hair’
- (6) Are you currently dating someone? ‘No, but I’m always looking’

After the confederate answered the last question, the experimenter led the confederate and participant back to their cubicles. The experimenter then gave the participant a ‘Feedback Evaluation Sheet’ that instructed the participant to rate his partner on such items as social skill, amount of effort the partner put into the interaction, how interesting the partner was, and how good a date the partner would be. The ratings on this sheet provide pre-feedback personality evaluations of the partner.

After the participant completed the rating sheet, he was given the same ‘Feedback Evaluation Sheet’ ostensibly filled out by his partner. Participants in the Positive feedback condition received the highest or next to highest rating on each of the skills rated. Participants in the Neutral feedback condition received ratings at the midpoint across all of the skills rated. Participants in the Negative feedback condition received the lowest or next to lowest rating on all of the skills rated.

After the participants read the feedback, the experimenter then administered a series of questionnaires containing the primary dependent measures. After basic demographic questions, the questionnaire measured Discounting, a scale of three items ($\alpha = 0.53$): ‘How valid was the feedback you received from your partner?’ ‘How much was your performance in the interaction a reflection of your social skills?’ and ‘Do you think that the feedback you received from your partner was a fair reflection of your personality?’ To directly measure attributions to the stigma, participants answered the question ‘To what extent do you think your breath made the interaction go badly?’ with higher scores corresponding to greater harm.

This was followed by the State Self-Esteem Scale (Heatherton & Polivy, 1991), a scale designed to measure transient changes in self-esteem. The scale measures three facets of state self-esteem: performance, social, and appearance. Examples of items on the performance subscale are ‘I feel confident about my abilities’ and ‘I feel as smart as others’. Examples of items on the social subscale are ‘I feel self-conscious’ and ‘I feel displeased with myself’. An example of items on the appearance scale is ‘I feel unattractive’. Heatherton and Polivy (1991) found all three subscales to possess both convergent and divergent validity. Because of the nature of the feedback in this situation, the Social self-esteem subscale is most directly relevant to the hypotheses.

At the end of the packet were manipulation check questions (all measured on 1–9 Likert-type scales). At this point the participants were debriefed, and those in the garlic condition were given a small cup of mouthwash and two peppermint candies.

Results

Manipulation Checks

Both the feedback and stigma manipulations were successful. In answer to ‘How well did your partner think that you performed during the interaction?’ the means were in

the predicted order: Positive $M = 6.33$, Neutral $M = 3.67$, and Negative $M = 2.80$, $F(2,76) = 23.78$, $p < 0.0001$, $\eta = 0.62$. In answer to 'Did your partner like you?' the means were Positive $M = 6.83$, Neutral $M = 3.58$, and Negative $M = 2.44$, $F(2,76) = 59.08$, $p < 0.0001$, $\eta = 0.78$.

Self-protective Cognitions

The discounting scale was submitted to a 2(Condition: garlic, mint) \times 3(Feedback: positive, neutral, negative) ANOVA. A strong effect of feedback was observed, $F(2,75) = 32.38$, $p < 0.0001$, $\eta = 0.68$, with less discounting associated with more positive feedback. In addition, participants in the Garlic condition discounted their feedback more than participants in the Mint condition, $F(1,75) = 5.88$, $p < 0.02$, $\eta = 0.27$. There was no interaction, $F < 1$. The results are displayed in Figure 1.

Likewise, we also analyzed attribution to breath with a 2(Condition: garlic, mint) \times 3(Feedback: positive, neutral, negative) ANOVA. Only a main effect of condition emerged; participants in Garlic conditions attributed feedback to garlic ($M = 5.29$); in Mint conditions, not much attribution to breath was made ($M = 2.10$), $F(1,75) = 50.75$, $p < 0.0001$, $\eta = 0.60$.

Self-esteem

The three self-esteem subscales were each submitted to the same 2(Condition: garlic, mint) \times 3(Feedback: positive, neutral, negative) ANOVA. There were no observable

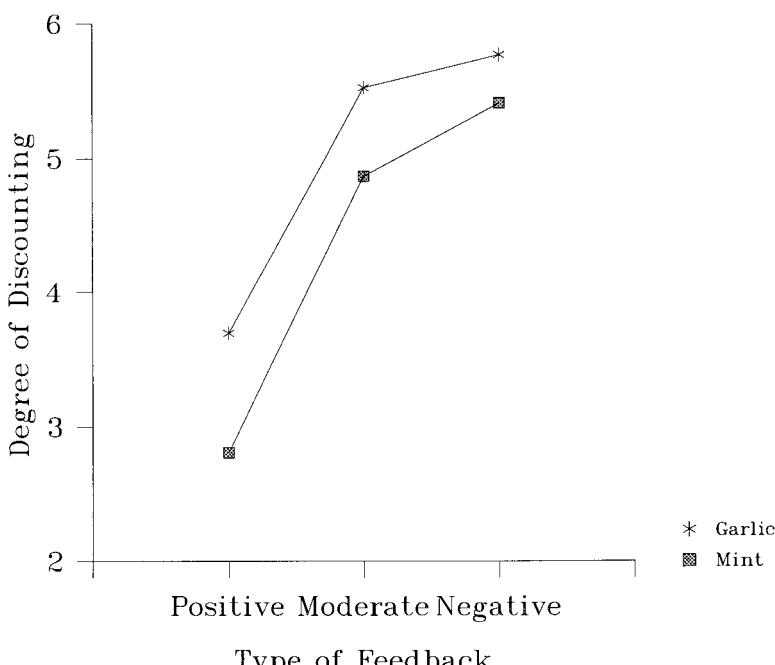


Figure 1. Discounting by feedback and food eaten

main effects or interactions of either stigma or feedback on any of the self-esteem subscales (all $p > 0.20$). Although participants who received negative feedback had slightly less self-esteem than participants receiving positive feedback ($M_s = 3.76, 3.89$, respectively), these differences were not statistically significant. However, the patterns of self-esteem within conditions proved remarkably informative about the self-protective cognitive processes, as described in the next section.

Self-protective Cognitions and Self-esteem

Next we looked at how the different self-protective cognitions affected self-esteem. Since it appeared that participants in both the Neutral and Negative feedback conditions perceived their feedback as being negative, we have collapsed across Neutral and Negative feedback to compare those conditions to the Positive feedback condition.

Discounting had little relationship to Overall self-esteem in the Neutral/Negative conditions ($r = 0.02$), but it had a significant *negative* association with self-esteem in the Positive condition ($r = -0.45, p < 0.02$). Attributions to breath were negatively correlated with Overall self-esteem in the Neutral/Negative conditions ($r = -0.13$), while in the Positive condition these attributions were positively associated with Overall self-esteem ($r = 0.09$). Neither of these correlations reached statistical significance.

It was expected that since this study was set up in the context of dating and attractiveness Social self-esteem would be the most relevant of the State Self-Esteem subscales. Table 1 presents the correlations between discounting, attributions to the stigma, and the Social self-esteem subscale.

If the cognitive processes themselves buffer and protect self-esteem, then we should expect a positive correlation between attributions to garlic and self-esteem, and a similar positive correlation between discounting and self-esteem, in the conditions of negative feedback when garlic is present. Instead, we find the exact opposite pattern. In the Garlic condition with Neutral/Negative feedback, while there were no significant effects of discounting, attributions to garlic were associated with *lower* Social self-esteem ($r = -0.39, p < 0.05$). Additionally, across all feedback conditions,

Table 1. Correlations between attributions to breath, discounting, and social self-esteem

	Feedback		
	Neutral/negative	Positive	Across feedback
Garlic			
Attribution	-0.39*	-0.64**	-0.45**
Discounting	0.08	0.27	-0.06
(N)	(29)	(17)	(45)
Mint			
Attribution	-0.01	-0.04	-0.02
Discounting	-0.03	-0.71**	-0.25†
(N)	(28)	(15)	(43)

Note: † $p < 0.10$, * $p < 0.05$, ** $p < 0.01$.

attributions to garlic were significantly negatively correlated with lower Social self-esteem ($r = -0.45$, $p < 0.01$).

Discounting the more positive feedback in the Mint conditions was associated with lower Social self-esteem ($r = -0.71$, $p < 0.01$). Attributions to breath were uncorrelated with Social self-esteem in this condition.

Discussion

The simple presence of a stigma had important effects on the interpretation of the social situation and the interpersonal feedback. The act of eating a clove of raw garlic had a direct impact on the believability of the feedback—participants in this study who ingested a clove of raw garlic engaged in more discounting than participants who had ingested a mint. People with an intrusive stigma appear to be less likely to accept social feedback at face value, regardless of its valence (see Ferrara, 1984; Kleck & Strenta, 1980).

Although feedback or stigma did not affect self-esteem, use of self-protective cognitions did have an effect on self-esteem, but in the opposite direction of Crocker and Major's (1989) predictions. In the presence of negative feedback, attributions to breath were related to lowered overall self-esteem, as well as lower social self-esteem when the participant had eaten garlic. Self-protective cognitions were being used, but rather than protecting self-esteem, they were related to decrements in self-esteem.

What can account for the failure of these strategies to buffer self-esteem? We suggest that the stigma provided to participants in this study, garlic-breath, did not provide participants with a meaningful group with which to identify, causing the self-protective cognitions to lose their effectiveness. However, this conclusion is only tentative, given the failure of feedback or garlic breath to lower self-esteem. It is possible that the absence of lowered self-esteem in this study may be due to the fact that participants did not make an internal attribution when faced with negative feedback—they were made to eat a garlic or a mint, therefore the negative feedback was not their fault. Yet we saw that external attributions to breath in the face of negative feedback was related to lower self-esteem. Paradoxically, the self-reported use of external attribution harmed rather than protected self-esteem.

Despite the fact that neither feedback nor the stigma of bad breath had any discernible effect on self-esteem, participants still noticed whether their partner gave them positive, neutral, or negative feedback, and it is clear that participants who ate garlic were aware of their stigma, since they engaged in discounting more often than participants who ate a mint. Obviously participants with garlic breath felt the need to address their stigma through discounting. Manipulating self-esteem with direct feedback is not as simple a task as one might expect. This difficulty itself supports the spirit of the argument of Crocker and Major (1989); self-esteem is not a simple summary of the positive and negative outcomes one recently experiences.

Even though negative feedback or garlic breath did not by themselves lower self-esteem, participants increased their use of self-protective cognitions in the face of negative feedback and garlic, showing that they felt a need to employ the strategies in the situation. Yet, while stigmatization of bad breath from garlic afforded plenty of opportunity for discounting and for attributing negative feedback toward prejudice against the stigma itself, it provided very little opportunity for identifying with a

group (e.g., people with chronic halitosis). Self-protective cognitions in the absence of meaningful group membership proved unsuccessful.

EXPERIMENT 2 BLACK LIKE ME

To provide stronger evidence for the necessity of meaningful group membership for the success of self-protective cognitions, we follow up the garlic experiment with a study where participants are stigmatized on the basis of a meaningful group, but it is a group of which they are not a member. In Experiment 2, we manipulated stigma by leading the European-American participants into thinking that a (bogus) partner believed that they were actually an African-American person of the same sex. They were then either given very positive, or very negative feedback, and given an opportunity to attribute their feedback to their partners' prejudice.

Although being falsely identified as an African-American person allows one to 'identify' with a stigmatized group and decide one has been a victim of anti-Black racism, in this case group identity involves actively *disidentifying* with his or her own group.

We predicted that participants who believed their partner thought they were African-American would use self-protective cognitions more often than participants who believed their partners thought they were European-American. If the mere opportunity to attribute prejudice to a meaningful group is sufficient to buffer self-esteem, then the use of self-protective cognitions should lead to higher self-esteem for participants who believed their partners thought they were African-American when compared to participants who believed their partners thought they were European-American. However, if *membership* in a meaningful group is instead needed in order for self-protective cognitions to be effective, then we do not expect a positive correlation between the cognitions and self-esteem.

Method

Participants were 93 European-American undergraduates (44 females, 49 males) from introductory psychology classes who participated in return for course credit. They were met outside the laboratory as soon as they arrived and whisked into an experimental room. They were told they were brought in quickly so that they would not meet the other participant in the experiment.

The experiment was explained to the participants as a study in how people's evaluations of another person would be affected by a certain amount of limited information: 'We have kept you in different rooms, to be able to control the amount and kind of interaction that you have with each other.'

Participants were told that the study was about 'how strangers form impressions of each other, and how these evaluations affect subsequent evaluations'. They were informed that they had been randomly assigned to a partner, and that both they and their partner would write an essay on parking problems on campus, and critique each other's essays. They were also told they would answer questions regarding their perceptions of their partner.

The participant was then informed that the experiment was 'really' about the effect of photographs on people's impression formation and evaluation of essay writing skills, and that the other participant was the 'true' participant in the experiment. The experimenter then showed the participant the Polaroid color photograph that the 'true' participant would see (either an African-American or European-American same-sex undergraduate was portrayed), and the experimenter commented, 'As you can see, this is not you'. They were told that their partner would see this photo, and be told that it is a photo of the participant. Two participants expressed suspicion during debriefing, and were removed from analysis.

The participants then proceeded to write their essay, and exchanged essays with their partner for evaluation. The partner's essay was written by the experimenter, and was constructed to seem reasonably well-written for an undergraduate. It contained three arguments regarding parking on campus: (a) the university sells too many stickers, (b) the price of parking should go down, and (c) parking should be open to all students after 2:00 pm.

After participants read their partners' essays, they evaluated the essay on a 1–9 Likert scale format. Examples of questions included 'How good or bad were your partner's arguments in dealing with the traffic situation on campus?' and 'How much effort do you think your partner put into writing the essay?' The feedback sheet also contained an item that asked participants to rate the quality of their partner's essay on a scale from 1 to 10, with 1 = very low quality and 10 = very high quality, and were given room to make any additional comments regarding the essay. Following the participant's evaluation of the essay, the experimenter 'exchanged' evaluations.

The evaluation sheet from the partner contained the manipulation of feedback. In the Positive Feedback condition, responses indicated that the partner thought the participant did very well in completing the essay. For example, in response to the question 'How good or bad were your partner's arguments?' the number closest to 'very good' was circled. The essay was also given a '9', on the scale from 1 to 10, in overall quality. An additional comment, 'I thought the essay was very good', was written.

In the Negative Feedback condition, responses indicated that the partner thought the participant did very poorly in writing the essay. For example, in response to the question 'How good or bad were your partner's arguments?' the number closest to 'very bad' was circled; the essay was given a '2' in quality. Finally, for additional comments 'I thought the essay was very poor' was written. After the participants read their feedback, they were given the dependent measures and manipulation checks on a questionnaire. The participants were then completely debriefed, thanked, and dismissed.

Dependent Measures

Self-protective cognitions. This study measured three self-protective cognitions: discounting, attributions to racism, and a new strategy labeled 'You just don't understand'. Three questions were used to create a single 'Discounting' scale ($\alpha = 0.61$). These questions were 'How valid was the feedback you received from your partner?' 'How much was your performance on the essay a reflection of your skill?' and 'Do you think the feedback you received from your partner was a fair reflection of

the merits of the paper?' Each of these items gets a different aspect of what it means to 'accept' the feedback, with the sum of the items representing an overall tendency to view the feedback as representing a valid versus invalid indicator of the individuals' performance.

To measure Attributions to Racism, two questions were asked ($\alpha = 0.59$). In the section involving semantic differential ratings of their partner on a 1–9 scale, we included a 'racist/non-racist' item. And near the close of the questionnaire, participants were asked on a 1–9 scale 'To what extent do you think that your partner's racial attitudes influenced your partner's ratings of your essay?' with the low end labeled 'Made absolutely no difference' and high end labeled 'Had a great deal of influence'. This question was asked after very similar questions about the effect of the photo and the partner's political attitudes on the evaluations.

In addition to investigating attributions, we conceptualized and measured a new kind of self-protective strategy, called '*You just don't understand*'. This strategy was based on observing the use of a kind of self-protective strategy exemplified by a once-popular T-shirt slogan seen around American college campuses: 'It's a Black Thing, you wouldn't understand.' This self-protective strategy is based in the belief that feedback from outgroup members is mostly nondiagnostic, and thus devoid of valuable social information about the self, because outgroup members lack the basic understanding of cultural meanings and values. To measure the protective strategy of 'Doesn't Understand', participants were asked to respond to an item which read 'To what extent do you think your partner really doesn't understand how your perspective and experiences affected your writing of the essay?' Participants responded on a 1–9 scale, with the low endpoint labeled 'Understands me' and the high endpoint labeled 'Doesn't understand me'.

Partner rating. After the discounting measure, participants rated their partners on 11 semantic differentials, including good–bad, kind–unkind, genuine–fake, close-minded–open-minded, thoughtful–not thoughtful, etc.

Self-esteem. The State Self-Esteem scale was used to measure participants' self-esteem following the experimental manipulations. In this experiment, we believed Performance self-esteem to be most relevant to positive and negative feedback.

In addition to the State Self-Esteem scale, participants rated their affect on eight semantic differentials: Happy–Sad, Proud–Ashamed, Nervous–Calm, Anxious–Related, Smart–Dumb, Good–Bad, Strong–Weak, and Fast–Slow. Scores on these items were combined to create a single scale that we call Self-Relevant Affect. Factor analysis revealed a single factor (eigenvalue = 4.5), accounting for 55.6 per cent of the variance, $\alpha = 0.88$.

Results

Manipulation Checks

In response to the question about essay performance, participants in the positive feedback conditions felt their partner on average rated their essay 2.3 on the 1–9 scale,

while participants in the negative feedback conditions felt their partner rated it 7.4, $t(93) = 12.38$, $p < 0.001$, $\eta = 0.79$ (low scores represent more positive evaluations).

Only the last 83 (out of 93) participants were asked the race and sex of the photo that was ostensibly shown to their partner. Of these, all but one indicated the correct race and sex, the mistaken participant was removed from further analysis.

Self-protective Cognitions

To test for effects of feedback and manipulated stigma, we submitted the self-protective cognitions to a 3(Protective strategy: discounting, attributions to prejudice, doesn't understand) \times 2(Feedback: positive, negative) \times 2(Race of Photo: Black, White) mixed-model of ANOVA.

All three self-protective cognitions are notably more pronounced following negative feedback. However, each self-protective strategy had a different pattern of response to the photographs and feedback, $F(2,172) = 3.09$, $p = 0.05$. To unpack the effect of the three-way interaction, we submitted each strategy separately to a 2 \times 2(Feedback \times Photograph) ANOVA.

Discounting was much greater for negative ($M = 6.01$) compared to positive ($M = 4.10$) feedback, $F(1,87) = 48.81$, $p < 0.001$, $\eta = 0.60$. Discounting was unaffected by whether the participant was presented with an African-American photograph ($M = 5.21$) or a European-American photograph ($M = 4.90$), $F < 1$, and the interaction was not significant, $F(1,87) = 1.57$, ns , $\eta = 0.13$.

Doesn't Understand was also more pronounced for negative ($M = 6.54$) than positive feedback ($M = 3.42$), $F(1,88) = 82.16$, $p < 0.001$, $\eta = 0.69$. Interestingly, participants who thought their partner was presented with a photograph of a European-American ($M = 5.30$) felt *less* understood by their partner than participants who thought their partner was presented with a photograph of an African-American ($M = 4.66$), $F(1,88) = 6.30$, $p < 0.02$, $\eta = 0.26$. There was no interaction, $F < 1$.

Attributions to Racism produced the most complicated and sophisticated pattern of endorsement. Negative feedback ($M = 4.25$) led to more attributions of racism than did positive feedback ($M = 2.85$), $F(1,87) = 22.97$, $p < 0.001$, $\eta = 0.46$. In addition, attributions to racism were higher when participants believed that their partner was presented with a photograph of an African-American ($M = 4.07$) instead of a European-American ($M = 3.03$), $F(1,87) = 12.48$, $p < 0.005$, $\eta = 0.35$. Both of these effects were qualified by a significant interaction, $F(1,87) = 4.10$, $p < 0.05$, $\eta = 0.21$. The pattern of means are displayed in Figure 2. Negative feedback increased attributions to racism, but this increase was more than twice as large among participants who thought their partner believed that they were African-American, $t(42) = 4.12$, $p < 0.001$, $d = 1.20$, than among those who thought their partner believed that they were European-American, $t(45) = 2.39$, $p < 0.03$, $d = 0.49$.

Self-esteem and Self-related Affect

Effects of feedback on the self. To test the effects of the feedback on measures of self-esteem and self-related affect, we calculated a 3(Self-Esteem Subscale: performance,

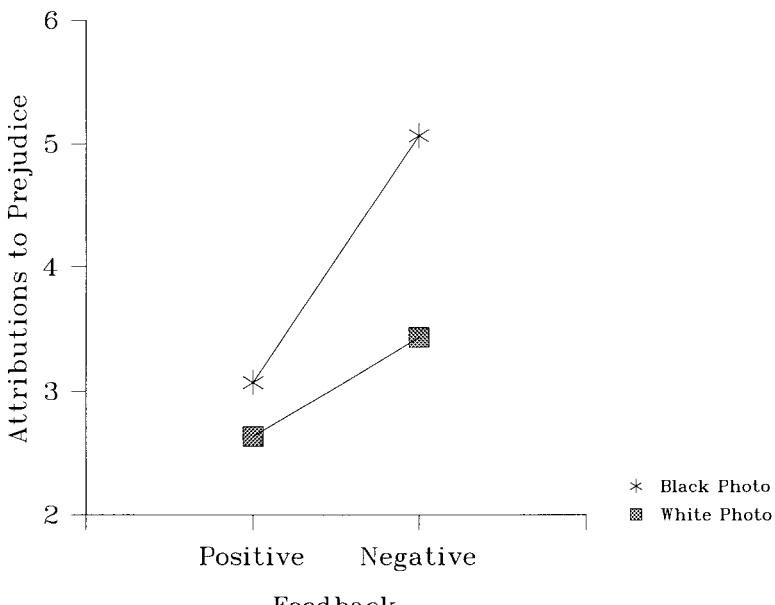


Figure 2. Attributions to prejudice by race of photograph and valence of feedback

social, appearance) \times 2(Race of Photo: Black, White) \times 2(Feedback: positive, negative) mixed-model ANOVA. Similar to Experiment 1, negative feedback reduced Overall self-esteem scores slightly, $F(1,88) = 2.89, p < 0.10, \eta = 0.18$. There was a significant effect of Self-Esteem Subscale, with participants scoring highest on Performance self-esteem, $F(2,176) = 28.08, p < 0.001$. Post-hoc *t*-tests showed that participants scored higher on Performance self-esteem ($M = 4.05$) than either Social self-esteem ($M = 3.61$), $t(88) = 6.45, p < 0.001, \eta = 0.57$, or Appearance self-esteem ($M = 3.53$), $t(88) = 7.05, p < 0.001, \eta = 0.60$. Appearance and Social self-esteem did not differ from each other, $t < 1$. These effects were qualified by a Self-Esteem Scale by Photo interaction $F(2,180) = 2.98, p < 0.05, \eta = 0.18$; this effect is described in the next section. No other effects were significant (all $p > 0.25$).

Similar to previous research (e.g. Crocker *et al.*, 1993), feedback did affect Self-Relevant Affect. A 2 \times 2(Race of Photograph \times Feedback) ANOVA uncovered a significant effect of feedback, $F(1,90) = 11.60, p < 0.001, \eta = 0.34$, with those in the Negative conditions reporting less positive affect ($M = 4.58$) than those in the Positive conditions ($M = 5.33$). Neither the effect of Race of Photograph nor the interaction were significant (both $Fs < 1$). The weak effect of feedback on State Self-Esteem and its stronger effect on Self-Relevant Affect suggest that the feedback manipulation did change, slightly, people's self-conceptions.

Effects of photo on the self. The effects of the photo on self were modeled in the same two ANOVAs described above. There were no effects of the Race of Photograph on Self-Relevant Affect; for both the main effect and interaction, $Fs < 1$.

However, the Self-Esteem Scale by Photo interaction described above is displayed in Figure 3. Leading the participants to believe that their partner thought they were African-American had differential effects on the State self-esteem subscales;

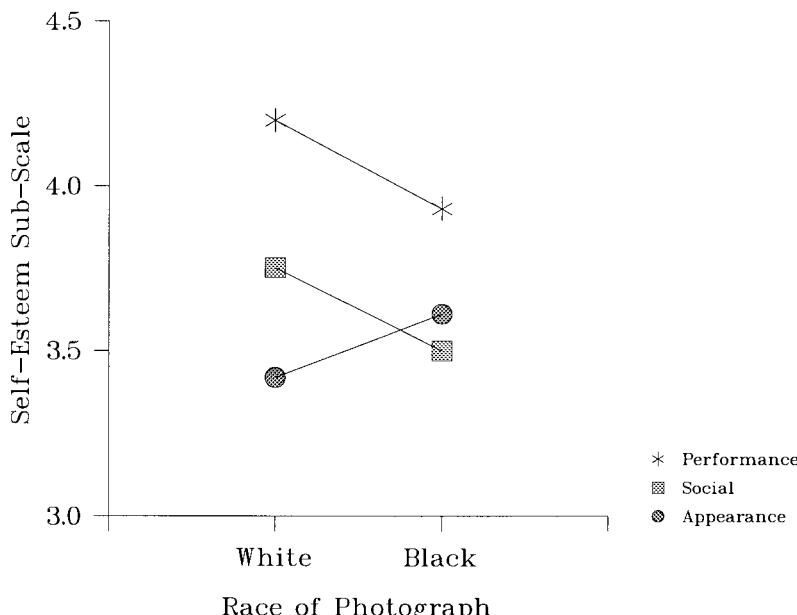


Figure 3. Self-esteem scale by race of photograph

presentation of a photograph of an African-American led to slightly lower Performance and Social self-esteem scores, and an elevated Appearance self-esteem score. Subsequent *t*-tests of the subscales by photograph showed that none of the scales were significantly different by photo, all $p > 0.20$. These data, in concert with the fact that in the overall ANOVA the Race of Photograph effect was not significant, $F < 1$, suggests that being shown the photograph effected a subtle re-ordering of the value of traits, somewhat downplacing Performance and Social self-esteem, and resulting in an emphasis on Appearance self-esteem.

Self-protective Cognitions and Self-concept

To determine whether the self-protective cognitions were associated with current self-concept, we correlated the three cognitions with the State Self-Esteem subscales and Self-Relevant Affect. The results are displayed by feedback in Table 2. There is little evidence that the use of self-protective cognitions is associated with the self-concept variables. (Note that calculating correlations collapsed across feedback is not appropriate, because the feedback manipulation simultaneously decreased self-esteem and increased self-protective strategy use, which would create a spurious negative correlation.)

To determine whether the presence of a potential stigma (i.e. African-American Photograph conditions) had any effect, we calculated the same correlations in the table by Condition and Race of Photograph. Of the 48 correlations, only one correlation was significant. Participants in the African-American Photograph/Positive Feedback condition showed a negative correlation between Performance self-esteem and Doesn't Understand, $r = -0.43$, $n = 21$, $p = 0.05$. We interpret these

Table 2. Correlations between self-protective cognitions and self-esteem variables across race of photographs

Self-esteem measure	Self-protective strategy		
	Racism	Discount	Understand
Negative feedback			
Social self-esteem	-0.19	-0.05	0.10
Appearance self-esteem	-0.12	-0.04	0.04
Performance self-esteem	-0.12	0.01	0.18
Self-relevant affect	-0.02	0.07	0.11
Positive feedback			
Social self-esteem	-0.01	-0.05	-0.11
Appearance self-esteem	-0.02	0.02	-0.07
Performance self-esteem	-0.12	-0.15	-0.21
Self-relevant affect	-0.24	-0.03	-0.19

Note: N's = 44 to 47. All p's > 0.10. Racism = Attributions to racism, Discount = Discounting, Understand = You Don't Understand.

data to suggest that the use of self-protective cognitions had few immediate implications for the self-concept in this study.

Discussion

Once again, feedback manipulations had little effect on self-esteem *per se*, but negative feedback reduced positive self-relevant affect (the same results reported by Crocker *et al.*, 1991, Study 1). On the other hand, all of the self-protective cognitions were vigorously endorsed in the face of negative feedback, as numerous self-enhancement theories would predict. Discounting was a straightforward result of negative feedback; similar to a wide range of previous studies, the more negative the feedback, the more it is denied. It seems that participants were more concerned with the feedback they received than the race of the photograph that their partner was shown, since the expected effect of the race of the photograph on discounting did not appear.

Perhaps the lack of stigma effects on discounting occurred because it was easier to attribute negative feedback to racism rather than discount it. Participants attributed negative feedback to their partner's racism when they thought their partner was shown an African-American photograph. Hence, when participants believed they were being negatively evaluated as an African-American person, they reported being evaluated, not based on the content of their character, but by the color of their skin. Although the participants had had only a few moments' experience as a member of a stigmatized racial group, they rapidly claimed victim status.

Participants used the 'You just don't understand' strategy as well, when confronted with negative feedback. They endorsed this strategy more when confronted with a photograph of a European-American than with a photograph of an African-American, although this was a much smaller effect. Feeling understood rapidly diminished with negative feedback, and to a lesser extent with the manipulation of stigma. We encourage others to think about this self-protective strategy, which had

the largest mean difference between positive and negative feedback of all the measured strategies.

Finally, as in Experiment 1, we did not find evidence that the use of the self-protective cognitions themselves were associated with high levels of self-esteem. In Experiment 1, discounting and attributions to the stigma were negatively correlated with self-esteem; in Experiment 2, there was no correlation at all.

Although participants were provided with the opportunity to use numerous self-protective cognitions, these cognitions in the absence of group identification were not correlated with self-esteem or self-relevant affect. In contrast to the stigma of garlic breath in Experiment 1, these participants were able to use a real and plausible (albeit temporary) stigmatized group membership as a way to defend their self-concepts. Still, the group membership of another race had little relevance to their self-concept, and its endorsement would have required a denial of their own relatively privileged group status. As in Experiment 1, the absence of meaningful group membership could be the cause of the ineffectiveness of the self-protective cognitions. However, these conclusions are tentative, as they are based on null results. A further test of the hypothesis would be to compare these outcomes to a situation where individuals have access to meaningful group membership in their use of self-protective cognitions.

EXPERIMENT 3 SELF-PROTECTIVE PROPERTIES OF PREJUDICE

To provide an additional test of the hypothesis that self-protective cognitions derive their potency from meaningful group membership, we created a third experiment in which an important and genuine group membership (gender) is made acutely stigmatizing. Women faced evaluation from a partner who was described as either prejudiced against women, or not. While in the two previous experiments, the sufficiency of self-protective cognitions was tested in the absence of group membership, this experiment made group membership salient to participants without the opportunity to engage in self-protective cognitions.

Attributions of negative feedback to prejudice should bolster the self-esteem of a member of a stigmatized, but meaningful, group. As an extension of this, we predicted that mere knowledge that an evaluator is prejudiced, *in the absence of negative feedback*, will lead to an increase in self-esteem. Thus, women who believe that their evaluator is prejudiced against members of their gender group should exhibit the same or higher level of self-esteem than women who do not believe their evaluator is prejudiced.

Thus, this study is different from the previous two studies in that no negative feedback is given, and no opportunity to display the self-protective cognitions is afforded. Instead, a meaningful group membership is made salient. We predict that the self-protective nature of cognitions like attributions to prejudice and discounting buffer self-esteem primarily through the power of making group membership salient, rather than as a rational cognitive process. If group membership is indeed the driving force behind self-protective cognitions, making membership in a group salient should enhance individuals' self-esteem.

In Experiment 3, female participants discovered that their anonymous communication partner was either prejudiced against women or not. They were then asked

questions about their motivation to make a good impression on the partner in an impending communication exercise, whether they thought their partners were biased against them, and how well they thought they would do on the upcoming exercise. Participants also filled out the State Self-Esteem scale.

Method

Participants

Participants were 45 women recruited from introductory psychology classes and were given partial class credit for their participation. We chose female participants in this study to look at whether prejudice against a stigmatized but meaningful group was sufficient to increase participants' self-esteem, because women more often than men experience gender-based stigma.

Procedure

Participants were run either one or two at a time. Participants were met by a female experimenter singly on a different floor from where the experiment was taking place and were escorted to the research room, where they were seated in separate cubicles that were each equipped with a computer and a modem line. They were told that the study was about the role of communication skills and information control in impression formation on the Internet. The experimenter informed them that they would be interacting over the Internet with a communication partner, and that their exchange would be anonymous, except for certain types of information that would be exchanged beforehand. Specifically, partners would exchange Internet opinion information with each other before communicating with each other over the computers. When participants were run singly, the experimenter opened and shut another cubicle door at different times during the experiment in order for it to seem like there was another participant there. Participants who were run two at a time were told that the other participant (whom they never saw) was their communication partner. In reality, these two participants never interacted.

Participants in all conditions were first given items from the Miller's Analogy Test (Sternberg, 1974), which they were told was a written measure of their Internet communication abilities. After completing the test, participants were given an opinion form to fill out while the experimenter 'computed' their score. Participants answered the items by circling a number from 0 to 100. The important item was 'How well do women communicate clearly and successfully on the Internet in comparison to men?' (0—not well at all, to 100—equally well). They were told that this questionnaire would be exchanged with their communication partner, and that they would be able to see how their partner responded for these items.

After a short period, the experimenter returned to the cubicle with the participant's Internet communication score. The experimenter took the participant's opinion questionnaire and left her to read a sheet explaining her score. All participants received a high score on their written Internet communication test.

Prejudice manipulation. The experimenter then randomly assigned each participant to either a prejudice or no-prejudice condition. The experimenter selected a prewritten opinion questionnaire for the participant and re-entered the cubicle. Participants were told that this was the opinion questionnaire of their communication partner. They were asked to read it over carefully as they would be asked questions about their partner's responses later in the study.

For participants in the prejudice condition, the item asking about women's Internet communication ability when compared to men was rated '10' on the 0 to 100 scale, which was one step above 'not well at all'. For participants in the tolerance condition, the same item was rated '100', which corresponded to 'equally well'.

Dependent measures. After the participant filled out unrelated questionnaires, the experimenter gave her a 'Mid-Study Questionnaire'. This contained manipulation checks asking her to list her score on the written Internet communication test, and her partner's responses on the opinion questionnaire. Following these items were questions asking about the participant's perceptions and motivations: 'After the computer interaction, how well do you think your partner will rate you on Internet communication ability?' (1 = very poorly, 9 = very well), 'How motivated are you to make a good impression on your communication partner?' (1 = not at all motivated, 9 = extremely motivated), and 'How biased do you think your partner might be against you?' (1 = not at all biased, 9 = extremely biased). Lastly, participants filled out the State Self-Esteem Scale (Heatherton & Polivy, 1991) and answered questions that probed for suspicion.

When the participant had completed the 'Mid-Study Questionnaire' the experimenter re-entered the cubicle and informed her that the study was over. She then proceeded to debrief the participant as to the exact nature of the study and the reasons for deception. The participant was then thanked and excused.¹

Results

Manipulation Checks

The second item on the 'Mid-Study Questionnaire' contained an item asking participants how well their partners felt women communicated over the Internet compared to men (1 = Women do worse than men, 5 = Women do half as well, 9 = Women do just as well). Participants in the prejudice condition correctly perceived their communication partner as believing that women do not communicate as well as men ($M = 1.57$, $N = 23$), and participants in the tolerant condition correctly stated that their partner thought women communicated just as well as men ($M = 9.00$, $N = 21$), $t(42) = -70.35$, $p < 0.0001$, $\eta = 0.99$.

¹This study also included an opportunity for participants to reveal their gender to a prejudiced or non-prejudiced partner. Revelation of gender was not effected by prejudice and had no effect on self-esteem. Therefore, we do not discuss it further.

Prejudice and Self-esteem

Participants' self-esteem was increased by the perception of prejudiced attitudes in their communication partners. Individuals who thought that their partners were prejudiced against women had higher Overall scores on the State Self-Esteem scale ($M = 4.13, N = 23$) than the baseline of participants who thought that their partner was not prejudiced ($M = 3.89, N = 21$), $t(42) = 2.76, p < 0.01, \eta = 0.39$. In a subsequent 2(Condition: prejudiced, tolerant) \times 3(Self-Esteem Subscale: performance, social, appearance) ANOVA, we determined that the Subscale \times Condition was not significant, $F < 1$. In general, these data support the hypothesis that being confronted with prejudice toward one's group, in the absence of feedback, can serve to increase self-esteem across appearance, social, and performance subscales.

Answers to the question 'How biased do you think your partner might be against you?' (1 = not at all biased, 9 = extremely biased) can be thought of as a measure of anticipatory 'attributions' to prejudice ('anticipatory' because participants had not received any performance feedback from their partner with which to make attributions). Participants in the prejudice condition thought that their partner was significantly more biased than participants in the no-prejudice condition ($M_s = 6.14, 3.33$, respectively), $t(42) = 4.60, p < 0.0001, \eta = 0.58$. Therefore, participants inferred from their partners' biased statements about women in general that the partners would also be biased against them as individuals.

Self-protective Cognitions and Self-esteem

Looking at the most relevant measure of self-esteem in this study—Performance self-esteem—when participants were faced with a partner who was not prejudiced, perception of bias was not correlated with Performance self-esteem ($r = 0.03, N = 21, p > 0.50$). However, when the partner was prejudiced, perception of bias was marginally *positively* correlated to Performance self-esteem ($r = 0.36, N = 23, p < 0.10$). These correlations were even stronger with overall self-esteem: when participants faced a non-prejudiced partner, perception of bias was at best modestly correlated with self-esteem ($r = 0.23, p > 0.25$), but when the partner was prejudiced, the correlation was strong, positive ($r = 0.53$), and significant ($p < 0.01$). Due to our relatively small N per cell, these differences between the correlations are only marginally statistically significant from each other (Fisher's $Z = -1.07$ and -1.10 , respectively, both $ps < 0.15$).

Motivation and Prejudice

The prejudiced attitudes of one's partner also affected participants' motivation to make a good impression, in the opposite direction of self-esteem. Participants who thought their partners were prejudiced were *less* motivated to make a good impression on their partners than those who did not think their partners were prejudiced ($M_s = 6.70, 7.43$ respectively), $t(42) = 2.07, p < 0.05, \eta = 0.18$.

Discussion

When women encountered someone who expressed sexist attitudes about women's Internet skills, their self-esteem increased. At the same time, their motivation to make a good impression suffered. In contrast to Experiments 1 and 2, the anticipation of negative feedback from a prejudiced evaluator was significantly correlated with self-esteem.

Perceptions of gender prejudice served to bolster participants' self-esteem, even when the 'prejudiced partner' did not know that the participant was a woman, and so could not realistically discriminate against her because of her gender. Because attributions to prejudice were therefore irrelevant and premature, the most plausible mechanism behind this increase in self-esteem is group membership.

This effect of heightened self-esteem in the face of prejudice is similar to Harvey and Crandall's (submitted) finding of increased self-esteem in Native-American participants when they were told that a test was biased against their ethnic group. This effect was found regardless of the type of test performance feedback participants were given. Harvey and Crandall pointed to discounting and augmentation processes to account for the increase in self-esteem. In the present study, we also found increases in self-esteem, but in the face of a total lack of feedback information. This finding suggests that salience of group identity leads to the bolstering of self-esteem.

Jetten, Branscombe, Spears, and Schmitt (submitted) also found that, in the absence of feedback, when individuals with body piercings expect that they will experience future instances of group-based discrimination, their group identification increases. Similarly, in the present experiment it is possible that the increase in self-esteem in the presence of a prejudiced evaluator was mediated by participants' identification with their gender group, instead of mere salience of group membership (see Branscombe, Schmitt, & Harvey, 1999; Brown, 1988; Brown, Condor, Matthews, Wade, & Williams, 1986; Britt and Crandall, in press; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). In support of the importance of group identification, Branscombe *et al.* (1999) found that attributions to pervasive prejudice by African-Americans, in and of themselves, was associated with negative affect rather than positive affect. In contrast, these attributions increased minority group identification, which was related to positive affect. Their 'rejection-identification' model posited that it is minority group identification, rather than external attributions, that protect stigmatized individuals' self-esteem.

Since there were no measures of gender group identification in the present experiment, one can only speculate on the exact mechanism of the increase in participants' self-esteem. It remains a question for future research whether group identification or group salience or both are mediators of a relationship between perceived prejudice and increased self-esteem. Yet the presence of a meaningful group membership is important for either factor.

GENERAL DISCUSSION

These three experiments helped delineate the relative contributions made by self-protective cognitions and group membership to the buffering of self-esteem in

stigmatized group members. Experiments 1 and 2 demonstrated that self-protective cognitions alone are not associated with increased self-esteem in the face of negative feedback. Experiment 3 showed that being a member of a meaningful group is sufficient to increase self-esteem when faced with a prejudiced evaluator. While the patterns of discounting, attributions, and other self-protective cognitions differed between experimental situations, the critical issue is that in both Experiments 1 and 2, a number of self-protective cognitions are reported, but they are not positively correlated with self-esteem.

Both newly stigmatized individuals and individuals with a group-based stigma engaged in self-protective cognitions. However correlations between these cognitions and self-esteem appeared only when the stigma was group-based. When participants were given a stigma (garlic-breath) but no stigmatized group, or given a stigmatized group (being identified as African-American) but without legitimate membership, participants engaged in self-protective cognitions, but did not reap the predicted self-esteem benefits. Only when the stigma (gender) was related to an important group membership did self-esteem rise in the face of prejudice, and the self-protective cognitions were correlated with self-esteem. The data reported here, in conjunction with those of Britt and Crandall (in press) and Harvey and Crandall (submitted), suggest that the self-protective cognitions, in and of themselves, are insufficient to protect self-esteem. Instead, these cognitions can only play a role when they exist in the context of a social identity with a meaningful group.

An alternative explanation might posit that only members of groups which have a history of discrimination are able to use self-protective cognitions effectively. Perhaps individuals need practice in the use of self-protective strategies before they are able to buffer self-esteem. Unfortunately, having a history of discrimination is confounded with being a member of a meaningful group in this set of studies—future research to tease apart discrimination history and meaningful group membership would need to examine a group that had little experience with discrimination, but provided stigmatized individuals with a meaningful group, or conversely a group that had experience with discrimination but failed to provide meaningful group membership. However, if one considers heavyweight women to fit in the category of a group with a history of discrimination, but no meaningful group membership (Crocker *et al.*, 1993), then it is possible that having a history of discrimination is not sufficient to buffer a stigmatized individual's self-esteem.

Another possible puzzle in these sets of studies is the fact that the use of self-protective cognitions was negatively associated with self-esteem when the stigma was garlic breath (Experiment 1) and uncorrelated with self-esteem when the stigma was being mistaken for a different race (Experiment 2). However, this fact is not as puzzling as it may seem. In fact, a positive aspect of this group of studies is the use of many different, nonconventional stigmas. Garlic breath is very much a different stigma from being mistaken for a person of a minority racial group. Therefore, one would expect the patterns of strategy use and their relationship to self-esteem to differ. More importantly, while these two very different stigmas did elicit the use of self-protective cognitions, they did not serve to protect self-esteem. What these two stigmas do share are the ineffectiveness of their respective self-protective cognitions, and a lack of meaningful group membership.

Not all stigmas are linked to meaningful groups. Some stigmas are highly individuating, for example people with severe facial disfigurements tend not to be seen

collectively as a group, and there is little interaction among the potential group members (Goffman, 1963). These stigmas are individuating; they make people feel unique, separate, lonely (Crandall & Coleman, 1992), and vigilant (Frable, Blackstone, & Scherbaum, 1990). Individuating stigmas lack connection to a meaningful group, and we would therefore expect that self-protective cognitions related to these stigmas would be ineffective in protecting self-esteem.

Other stigmas have the potential for group-based identity, but the members avoid identification because of low perceived status of the group, or members may perceive the group boundary as permeable, and the possibility of escaping the stigma may hinder group identification (Ellemers, 1993). For example, fat people tend not to identify highly with their weight group (Crandall, 1994), in part because they believe that they could lose weight and evade the perception of stigma. It is not surprising then, to discover that Crocker *et al.* (1993) found that attributions to the stigma of being overweight were associated with *negative* affect among heavyweight women. Without the benefits of identification with a meaningful group, the self-protective strategy of attributing outcomes to prejudice provides scant protection against the loss of self-esteem.

Although the importance of group membership has not been much discussed in the context of self-protective cognitions, there is much precedent in the literature for linking meaningful group membership with self-esteem. Identification with a meaningful group has been shown to maintain personal and collective self-esteem (Branscombe *et al.*, 1999; Jetten, Spears, & Manstead, 1997; Turner *et al.*, 1987). According to social identity theory, attributions and stereotypes are not isolated events in the individual, but are motivated processes that reflect relationships among groups (Oakes *et al.*, 1994; Tajfel, 1981). These motivations associated with group membership may work in concert with attributions in order to protect the self-concept of stigmatized individuals. For example, Taylor and Jaggi (1974) demonstrated that group membership affects attributions of socially undesirable behaviors, with external attributions being made for ingroup members, and internal attributions being made for outgroup members performing the same act. Additionally, individuals who have high ethnic identity (Phinney, Cantu, & Kurtz, 1997) or who show ingroup favoritism tend to have higher self-esteem (Hogg & Abrams, 1990; Oakes & Turner, 1980). Research on social identity has found results similar to Crocker and Major's (1989) idea of selective devaluing, with individuals whose ingroup has been derogated on a particular characteristic down-playing that characteristic's importance to their ingroup (Wagner, Lampen, & Syllwasschy, 1986).

Stigmatized group identification has also been shown to directly affect self-esteem. Among Hispanic students at predominantly European-American universities, students with stronger ethnic identification perceive less threat in the university environment and exhibit increases in their self-esteem (Ethier & Deaux, 1994). Similarly, among the deaf community, group identification predicts high self-esteem (Bat-Chava, 1994). This relationship between self-esteem and group identity holds true more often for members of stigmatized groups than for members of relatively nonstigmatized groups. For example, racial and ethnic identity predict self-esteem in African-Americans, but not European-Americans (Goodstein & Ponterotto, 1997). Thus group identification, especially when it entails membership in a stigmatized group, can work to preserve and enhance self-esteem (Tajfel, 1981).

The mobilization of group identification may help group members' use of self-protective cognitions. In the USA, both the civil rights movement and the women's movement are examples of group identification interventions that increased the salience of group membership, and also challenged the justification of discrimination directed toward women and minorities. When women and minorities strongly identified with their groups, and labeled their treatment as discrimination, they increased the cohesion and meaningfulness of their group, which increased self-esteem (e.g. de Beauvoir, 1968; Carmichael & Hamilton, 1967). Politicization includes identification, which in turn reduces the justification of discrimination. Once politicized, and hence identified, a stigmatized person can reap the benefits of the self-protective cognitions.

Stigmatized group members do not often show the low self-esteem that one would expect from the negative feedback that accompanies stigmatization. However, rather than simply being buffered by self-protective mechanisms such as attributions to prejudice, maintenance of stigmatized individuals's self-esteem seems to require membership in an important identity group. Rather than being a curious attributional puzzle, the self-protective properties available to stigmatized groups may be based on the high identification of their members and strong cohesion within the group (Bat-Chava, 1994; Branscombe *et al.*, 1999; Ethier & Deaux, 1994; Phinney *et al.*, 1997).

Typically, one finds a trade-off between self-esteem enhancement and motivation (e.g. Harvey & Crandall, submitted). In contrast, meaningful group identification can serve not only to protect individuals' self-esteem, but may also be a precursor to social change (Branscombe & Ellemers, 1998). The use of self-protective cognitions paired with a high group identity might both motivate group members toward social action while simultaneously enhancing self-esteem.

ACKNOWLEDGEMENTS

The authors wish to thank Paige Katz, Barbara Henris, Kevin Norr, and Kerry O'Brien for their assistance in running these studies. We thank Monica Biernat, Peggy Moore and several anonymous reviewers for their helpful comments on an earlier version of this manuscript. A conversation with Marilyn Brewer was particularly helpful in conceptualizing some of our results.

REFERENCES

- Abrams D, Hogg MA. 1988. Comments on the motivational status of self-esteem in social identity and intergroup discrimination. *European Journal of Social Psychology* **18**: 317–334.
- Alloy LB, Tabachnik N. 1984. Assessment of covariation by humans and animals: the joint influence of prior expectations and current situational information. *Psychological Review* **91**: 112–149.
- Bat-Chava Y. 1994. Group identification and self-esteem for deaf adults. *Personality and Social Psychology Bulletin* **20**: 494–502.

- Branscombe NR, Ellemers N. 1998. Coping with group-based discrimination: individualistic versus group-level strategies. In *Prejudice: The Target's Perspective*, Swim JK, Stangor C (eds); Academic Press: New York.
- Branscombe NR, Schmitt MT, Harvey R. 1999. Perceiving pervasive discrimination among African-Americans: implications for group identification and well-being. *Journal of Personality and Social Psychology* **77**: 135–149.
- Britt TW, Crandall CS in press. Acceptance of feedback by the stigmatized and non-stigmatized: the mediating role of the motive of the evaluator. *Group Processes and Intergroup Relations*.
- Brown RJ. 1988. Intergroup relations. In *Introduction to Social Psychology: A European Perspective*, Hewstone M, Stroebe W, Codol JP, Stepheson GM (eds); Blackwell: Oxford; 381–411.
- Brown RJ, Condon S, Matthews A, Wade G, Williams JA. 1986. Explaining intergroup differentiation in industrial organization. *Journal of Occupational Psychology* **59**: 273–286.
- Campbell JD. 1986. Similarity and uniqueness: the effects of attribute type, relevance, and individual differences in self-esteem and depression. *Journal of Personality and Social Psychology* **50**: 281–294.
- Carmichael S, Hamilton CV. 1967. *Black Power: The Politics of Liberation in America*. Vintage: New York.
- Crandall CS. 1994. Prejudice against fat people: Ideology and self-interest. *Journal of Personality and Social Psychology* **66**: 882–894.
- Crandall CS, Coleman R. 1992. AIDS-related stigmatization and the disruption of social relationships. *Journal of Social and Personal Relationships* **9**: 163–177.
- Crocker J, Cornwell B, Major B. 1993. The affective consequences of attributional ambiguity: the case of overweight women. *Journal of Personality and Social Psychology* **64**: 60–70.
- Crocker J, Major B. 1989. Social stigma and self-esteem: the self-protective properties of stigma. *Psychological Review* **96**: 608–630.
- Crocker J, Major B. 1994. Reactions to stigma: the moderating role of justification. In *The Psychology of Prejudice*, Vol. 7, Zanna MP, Olsen JM (eds); Erlbaum: Hillsdale, NJ.
- Crocker J, Voelkl K, Testa M, Major B. 1991. Social stigma: affective consequences for attributional ambiguity. *Journal of Personality and Social Psychology* **60**: 218–228.
- de Beauvoir S. 1968. *The Second Sex*. Alfred A. Knopf: New York.
- Ellemers N. 1993. The influence of socio-structural variables on identity management strategies. In *European Review of Social Psychology*, Vol. 4, Stroebe W, Hewstone M (eds); Wiley: New York.
- Ethier KA, Deaux K. 1994. Negotiating social identity when contexts change: maintaining identification and responding to threat. *Journal of Personality and Social Psychology* **67**: 243–251.
- Ferrara AJ. 1984. My personal experience with AIDS. *American Psychologist* **39**: 1285–1287.
- Fiske ST, Taylor SE. 1991. *Social Cognition*, (2nd edn). McGraw-Hill: New York.
- Frable DE, Blackstone T, Scherbaum C. 1990. Marginal and mindful: deviants in social interaction. *Journal of Personality and Social Psychology* **59**: 140–149.
- Freud S. 1915/1963. Repression. In *General Psychological Theory: Papers on Metapsychology*. Collier: New York.
- Goffman E. 1963. *Stigma: Notes on the Management of Spoiled Identity*. Simon & Schuster: New York.
- Goodstein R, Ponterotto JG. 1997. Racial and ethnic identity: their relationship and their contribution to self-esteem. *Journal of Black Psychology* **23**: 275–292.
- Harvey R, Crandall CS. Selective developing in the face of negative feedback: Native and European Americans. Submitted to *Journal of Experimental Social Psychology*.
- Heatherton T, Polivy J. 1991. Development and validation of a scale for measuring state self-esteem. *Journal of Personality and Social Psychology* **60**: 895–910.
- Hogg MA, Abrams D. 1990. Social motivation, self-esteem and social identity. In *Social Identity Theory: Constructive and Critical Advances*, Abrams D, Hogg MA (eds); Harvester Wheatsheaf: London; 28–47.

- Hunter JA, Platow MJ, Howard ML, Stringer M. 1996. Social identity and intergroup evaluative bias: realistic categories and domain specific self-esteem in a conflict setting. *European Journal of Social Psychology* **26**: 631–647.
- Jetten J, Spears R, Manstead ASR. 1997. Distinctiveness threat and prototypicality: combined effects on intergroup discrimination and collective self-esteem. *European Journal of Social Psychology* **27**: 635–657.
- Kleck RE, Streata A. 1980. Perceptions of the impact of negatively valued physical characteristics on social interaction. *Journal of Personality and Social Psychology* **39**: 861–873.
- Lemyre L, Smith PM. 1985. Intergroup discrimination and self-esteem in the minimal group paradigm. *Journal of Personality and Social Psychology* **29**: 660–670.
- Major B, Carrington PI, Carnevale PJ. 1984. Physical attractiveness and self-esteem: attributions for praise from an other-sex evaluator. *Personality and Social Psychology Bulletin* **10**: 43–50.
- Marks G. 1984. Thinking one's abilities are unique and one's opinions are common. *Personality and Social Psychology Bulletin* **10**: 203–208.
- Oakes PJ, Haslam SA, Turner JC. 1994. *Stereotyping and Social Reality*. Blackwell: Oxford.
- Oakes PJ, Turner JC. 1980. Social categorization and intergroup behaviour: does minimal intergroup discrimination make social identity more positive? *European Journal of Social Psychology* **10**: 295–301.
- Peterson C, Seligman MEP. 1984. Causal explanation as a risk factor for depression: theory and evidence. *Psychological Review* **91**: 347–374.
- Phinney JS, Cantu CL, Kurtz DA. 1997. Ethnic and American identity as predictors of self-esteem among African-Americans, Latino, and White adolescents. *Journal of Youth and Adolescence* **26**: 165–185.
- Shrauger JS, Schoeneman TJ. 1979. Symbolic interactionist view of self-concept: through the looking glass darkly. *Psychological Bulletin* **86**: 549–573.
- Stangor C, Crandall CS in press. Threat and the social construction of stigma. In *The Social Psychology of Stigma*, Heatherton T, Hull J, Kleck R, Hebl M (eds); Guilford: New York.
- Sternberg RJ. 1974. *Barron's How to Prepare for the Miller Analogies Test*. Barron's Educational Series, Inc.: Woodbury, New York.
- Tajfel H. 1981. Social stereotypes and social groups. In *Intergroup Behaviour*, Turner JC, Giles H (eds); Blackwell: Oxford; 144–167.
- Taylor DM, Jaggi V. 1974. Ethnocentrism and causal attribution in a south Indian context. *Journal of Cross Cultural Psychology* **5**: 162–171.
- Turner JC, Hogg MA, Oakes PJ, Reicher SD, Wetherell MS. 1987. *Rediscovering the Social Group: A Self-categorizing Theory*. Blackwell: Oxford.
- Wagner U, Lampen L, Syllwasschy J. 1986. In-group inferiority, social identity, and out-group devaluation in a modified minimal group study. *British Journal of Social Psychology* **25**: 15–23.
- Wright BA. 1960. *Physical Disability—A Psychological Approach*. Harper & Row: New York.
- Wright BA. 1983. *Physical Disability—A Psychosocial Approach*. Harper & Row: New York.

Copyright of European Journal of Social Psychology is the property of John Wiley & Sons Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.