

JUSTIFYING DESIRED IMPRESSIONS OF EVALUATORS: MOTIVATED  
ACTIVATION, APPLICATION, AND INHIBITION OF STEREOTYPES

by

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# Justifying Desired Impressions of Evaluators: Motivated Activation, Application, And Inhibition Of Stereotypes

## Abstract

Motivation may lead to the activation and application of stereotypes that help justify a desired conclusion and may provoke the inhibition of stereotypes which, if activated, could interfere with drawing a desired conclusion. In Study 1, participants who had been criticized by a Black manager engaged in motivated application of the activated Black stereotype to discredit this evaluator, whereas those who had been praised by a Black manager engaged in motivated inhibition of that stereotype so as to avoid discrediting the evaluator. Thus, participants viewed a Black evaluator as less competent than a White evaluator after receiving a negative evaluation from him but not after receiving a positive evaluation. The selective application and inhibition of the stereotype was due to self-protective motives of recipients; no such effects were obtained for detached observers whose own motives could not have been satisfied through such processes. Motivation may also lead perceivers to pick and choose among the many stereotypes applicable to an individual, activating those that support their desired impression of that individual and inhibiting those that might conflict with it. In Study 2, participants who wished to think poorly of a Black doctor, because he had criticized them, activated the Black stereotype and inhibited the doctor stereotype. In contrast, those who wished to think highly of this Black doctor, because he had praised them, activated the doctor stereotype and inhibited the Black stereotype. Motivation, however, will only lead to the inhibition of those stereotypes that would have otherwise been activated spontaneously and would have interfered with one's desired conclusion. In Study 3, high-prejudice recipients of praise from a Black doctor engaged in motivated inhibition of the Black stereotype, whereas low-prejudice recipients of the same praise did not. Both high- and low-prejudice recipients, however, engaged in motivated activation of the doctor stereotype.

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## Dedication

For my parents, Cathy and David Sinclair.

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## Introduction

Imagine a person who has just received a performance appraisal from a Black manager. If the feedback was unfavorable, perhaps the employee can seize upon the fact that the harsh evaluator belongs to a group whose stereotype contains some negative component, and use this stereotype to discredit the unflattering evaluator. After all one may say, my evaluator is just an incompetent Black person, or any other applicable negative stereotype. At the same time, however, it may be hard to ignore the fact that the evaluator is also a manager. Therefore, the person may want to inhibit this more positive stereotype, because if it were activated it could interfere with the goal of discrediting the evaluator. On the other hand, imagine the feedback was favorable. It seems likely that under these circumstances, even someone who had been doubting the ability of a Black person to be an effective evaluator would put these doubts to rest along with the stereotype that had prompted them. And perhaps instead, in order to think more highly of this laudatory evaluator, the person may activate the stereotype of manager, while inhibiting the stereotype of Black people.

I propose that people can selectively activate, apply, and inhibit stereotypes in order to reach a desired conclusion about an individual. When a stereotype can provide support for the desired impression, motivation may lead one to activate the stereotype, if it has not already been activated spontaneously, or to apply an activated stereotype that would otherwise not be used. On the other hand, when a stereotype can threaten a desired impression, motivation may lead one to inhibit the extent to which the stereotype is activated, or to suppress its application.

These ideas are consistent with research on motivated reasoning which has found that people attempt to retrieve recalled information that could be used to justify their desired conclusions, but draw these conclusions only if they can justify them (Kunda, 1990, in press; Sanitioso, Kunda, & Fong, 1990). If one's disapproving evaluator belongs to a

social group associated with a negative stereotype, this stereotype may provide a much needed justification for discrediting this person. Similarly, if one's laudatory evaluator belongs to a social group associated with a positive stereotype, this stereotype may provide a much needed justification for bolstering this person's capabilities, especially if the evaluator's competence is in doubt. One may therefore activate and use stereotypes so as to support a desired conclusion about a person's competency to provide feedback. However, it may be hard to justify a desired conclusion if one is aware of information that contradicts it. If one's disapproving evaluator also belongs to a group associated with a positive stereotype, it may be hard to justify discrediting the evaluator with this positive stereotype in mind. Motivation may therefore lead one to push this positive stereotype out of mind. Likewise, if one's laudatory evaluator belongs to a group associated with a negative stereotype, one may wish to inhibit this stereotype that, when activated, could undercut the glowing feedback one has received.

Whereas there is now clear evidence for the motivated activation of knowledge structures and rules (for reviews, see Kruglanski, 1996; Kunda, 1990, in press), there is no research that has examined the flip side, motivated inhibition. However, theoretical and empirical work in animal learning psychology (e.g., Williams, 1995; Williams, Overmier, & LoLordo, 1992), clinical psychology (e.g., Amir, Foa, & Coles, 1998; Beech, Powell, McWilliam, & Claridge, 1989), cognitive psychology (e.g., Anderson & Spellman, 1995; Dagenbach & Carr, 1994; Dempster & Brainerd, 1995), developmental psychology (e.g., Johnson, 1994; Lorschach & Reimer, 1997; Tipper, Bourque, Anderson, & Brehaut, 1989), evolutionary psychology (e.g., Bjorklund & Kipp, 1996), neuropsychology (e.g., Chiarello & Maxfield, 1996; Houghton & Tipper, 1996) and social psychology (e.g., Bodenhausen & Macrae, 1998; Kunda & Thagard, 1996) have all addressed the importance of inhibitory processes in mental life (for historical reviews on inhibition, see, Macmillan 1996; R. Smith, 1992). The notion that motivation may lead people to inhibit information

that could interfere with reaching a desired conclusion is a novel contribution of this dissertation.

### Motivated activation and application of stereotypes

It is important to distinguish between stereotype activation and stereotype application (Devine, 1989; Gilbert & Hixon, 1991). *Stereotype activation* refers to the extent to which a stereotype is on one's mind, activated, and accessible. *Stereotype application* refers to the extent to which a stereotype is used to make judgments about group members. For a stereotype to be applied, it must first be activated. An activated stereotype, however, is not always applied. People can exert control over the judgment process and refrain from using stereotypes in judgments of individuals (Devine, 1989). I propose that both stereotype activation and stereotype application may be influenced by motivation.

The desire to discredit a member of a negatively stereotyped group may provoke motivated activation of negative stereotypes that would otherwise not be activated spontaneously, and may also provoke motivated application of stereotypes that would otherwise not be applied to that person even if activated. These ideas are consistent with current research on the activation and use of stereotypes. There is considerable evidence that stereotypes can be activated automatically. To wit, such activation occurs even when stereotype-related words or photographs of stereotyped individuals are presented subliminally (Bargh, Chen, & Burrows, 1996; Chen & Bargh, 1997; Devine, 1989; Purdue & Gurtman, 1990) and even when the intervals between their presentation and the requisite judgment are short enough to preclude controlled processes (Blair & Banaji, 1996; Fazio, Jackson, Dunton, & Williams, 1995). However, although the activation of stereotypes can take place with little intention or awareness, such activation is neither inevitable nor universal (cf. Bargh, in press; Gollwitzer & Moskowitz, 1996). There are circumstances under which such activation does not take place, namely, when one's

cognitive resources are strained (Gilbert & Hixon, 1991; Spencer, Fein, Wolfe, Hodgson, & Dunn, in press). There also are individuals who do not automatically activate stereotypes when exposed to affectively-neutral cues such as category labels or photographs of group members, namely, nonprejudiced individuals (Fazio et al., 1995; Kawakami, Dion, & Dovidio, 1998; Lepore & Brown, 1997; Wittenbrink, Judd, & Park, 1997). Finally, even when stereotypes are spontaneously activated upon initial exposure to a stereotyped individual, their activation can recede over time (Adams & Kunda, 1996).

Thus, although stereotypes can be activated without awareness and intention, their activation is not inevitable; it is not obtained for all people, and is not obtained in all circumstances. On those occasions where people do not activate applicable stereotypes automatically, they may be able to activate these stereotypes in the service of their goals. In particular, people may activate negative stereotypes when they wish to derogate a member of a stereotyped group. This notion is consistent with earlier work stemming from social identity theory (Tajfel & Turner, 1986) which holds that people may activate and use group stereotypes so as to feel better about themselves: Identifying with one's own group can boost one's self-views, and derogating outgroups and their members can make the self look better by comparison.

There is some evidence that people are more likely to activate stereotypes when their need to boost their self-view is greatest. One study showed that, when their group membership was made salient, English-speaking Canadians whose self-views were threatened by a recent failure endorsed more extreme positive and negative attitudes and policies toward an outgroup, French-speaking Canadians, than did participants who had not recently failed (Meindl & Lerner, 1984). This implies that the failure experience may have caused participants to think in more stereotypic terms. However, the evidence for this is indirect because the stereotype itself was not assessed.



More direct evidence that stereotype activation can be driven by the need for self-affirmation comes from studies in which cognitively busy participants were exposed to an Asian or African American experimenter (Spencer et al., in press). Under such circumstances people do not normally activate the stereotype associated with the target individual's ethnic group (Gilbert & Hixon, 1991), and this was true for participants who had just succeeded on an IQ test. However, participants who had just failed an IQ test and were therefore motivated to boost their self-views did activate the stereotype even though they were cognitively busy. This suggests that in circumstances where people do not normally activate stereotypes, motivation may lead them to do so.

Motivation may also lead to the application of group stereotypes that would otherwise not be applied to judgments of a group member. In one set of studies, participants derogated a Jewish job applicant and rated her more negatively than they rated a non-Jewish applicant under normal circumstances and following failure at an intelligence test, but not following an opportunity to affirm their central values or following success at an intelligence test (Fein & Spencer, 1997). This suggests that the derogation of stereotyped individuals may stem from a persistent need to boost one's self-esteem by appearing superior to others. When this need is satisfied by success or by other self-affirming experiences, the stereotype is not applied. In a different set of studies, Christian participants rated a Jewish person more negatively than they rated a Christian person after they were asked to contemplate their own mortality, but not otherwise (Greenberg et al., 1990). Mortality salience may have fueled participants' motivation to affirm their self-worth, thereby leading them to use the negative stereotype of a Jewish person to derogate the member of the Jewish out-group.

I have also found evidence of motivated stereotype application in research which showed selective disparagement of women evaluators (Sinclair & Kunda, 1996). In a field study where undergraduates evaluated their course instructors, and in a laboratory

experiment where people evaluated a female or male "personnel manager" who had provided them with positive or negative feedback about their interpersonal skills, it was found that women were rated as highly as men after providing favorable feedback, but as less skilled than men after providing unfavorable feedback. This suggests that participants who received a negative evaluation from a woman applied the negative stereotype of women to discredit this harsh evaluator. In support of a motivational explanation, a follow-up to the laboratory study found that detached observers who watched a female or male manager give someone else negative feedback, and whose own motives could not be served through derogation of the evaluator, did not apply the negative stereotype to the woman manager who had provided criticism. She was rated just as highly as a man who had provided the same negative feedback. In this case, female and male evaluators were rated the same regardless of whether they provided favorable or unfavorable feedback.

Note that it is unclear from these studies whether motivation led to the application of an already activated stereotype or to the activation of a stereotype that would have otherwise remained inactive. To determine whether motivated derogation of a group member resulted from motivated stereotype activation or from motivated stereotype application it is necessary to measure both stereotype activation and stereotype application in the same participants. To my knowledge, this has not yet been done. Study 1 addresses this issue.

In sum, the evidence that stereotypes can be activated and used to forward one's self-affirmation motives suggests that motivation may also prompt such activation in the interpersonal context I am interested in, to derogate a harsh evaluator. If so, it is also of interest to clarify whether such motivated derogation or enhancement of stereotyped individuals results from motivated activation of stereotypes that would otherwise remain inactive or from motivated application of already activated stereotypes. There is some evidence that motivation can provoke stereotype activation (Spencer et al., in press), but it is unclear whether motivation can also provoke the application of an already activated

stereotype. Because stereotypes that are activated automatically are not always applied, this is an important question.

### Motivated inhibition of stereotypes

The desire to think highly of a member of a negatively stereotyped group may lead people to inhibit stereotypes that, if activated, would challenge this individual's competence. These ideas are consistent with research showing that inhibition functions in the service of goals by hindering the accessibility of goal-irrelevant and distracting information which may otherwise be activated in parallel with goal-relevant information. Thus, information that is less relevant to the current task is kept from interfering with goal-directed information. For example, it has been proposed that working memory depends on inhibitory attentional mechanisms that restrict entrance to goal-relevant information (Hasher & Zacks, 1988). In support of this view, it has been demonstrated that people can inhibit irrelevant information that could interfere with the activation of goal-relevant information; they inhibit distracters presented along with relevant information, inhibit early but false interpretations of sentences, and inhibit information they are instructed to forget (for a review, see Zacks & Hasher, 1994).

Inhibition has also been shown to play an instrumental role in language comprehension (Gernsbacher, 1990). For instance, when comprehenders first read or hear an ambiguous word (e.g. bank), both appropriate and inappropriate meanings (river bank vs. money bank) are momentarily activated. Ambiguous words, however, can be understood because suppression dampens the activation of the contextually inappropriate meanings. Suppression has also been shown to play a role in other comprehension phenomena such as the understanding of metaphors, the inference of information that is only implied by a text or discourse, and the comprehension of linguistic and non-linguistic media (for a review, see Gernsbacher, 1997). It has also been found that an inability to suppress distracting information can be maladaptive: Poor readers are less efficient than

good readers at inhibiting interfering information such as the inappropriate meanings of ambiguous words or the incorrect forms of homophones (Gernsbacher & Faust, 1991).

Inhibition has also been shown to play a role in a number of other cognitive tasks including analogical reasoning (e.g., Holyoak & Thagard, 1989; Spellman & Holyoak, 1996), memory (e.g., Anderson & Spellman, 1995), number processing (e.g., Clark, 1992), and selective attention (e.g., Neumann & DeSchepper, 1991, 1992). As well, inhibition helps to keep actions goal-centered by preventing the production of inappropriate responses (e.g., Logan, 1994; Logan & Cowan, 1984). Moreover, weakened inhibitory processes have been found to be at least partly responsible for impairments in cognitive functioning in children (e.g., Bjorklund, & Harnishfeger, 1990; Dempster, 1992; Zelazo, Reznick, & Spinazzola, 1998) and older adults (e.g., Connelley, & Hasher, 1993; Hasher, Stoltzfus, Zacks, & Rypma, 1991; May & Hasher, 1988), and in many special populations including individuals with Alzheimer's disease (e.g., Spieler, Balota, & Faust, 1996; Simone & Baylis, 1997), attention deficit hyperactivity disorder (e.g., Schachar, Tannock, & Logan, 1993), depression (e.g., Benoit et al., 1992; Linville, 1996), obsessive compulsive disorder (e.g., Enright & Beech, 1993), and schizophrenia (e.g., Beech, Powell, McWilliam, & Claridge, 1989). Thus, inhibition plays a pervasive role in cognition.

Distracting stereotypes may be inhibited for reasons similar to the ones discussed above. When encountering a person belonging to two different stereotyped groups (e.g., woman and Asian), people may inhibit one of the applicable stereotypes when the competing one is activated (Macrae et al., 1995). It has also been suggested that people may be able to inhibit normally activated stereotypes when their processing goals require such inhibition (Blair & Banaji, 1996), though others have argued that this conclusion was not fully supported by the data upon which it was based (Bargh, in press).

Thus, although recent research and theory point to the centrality of inhibitory mechanisms in cognition and in impression formation (Anderson & Spellman, 1995; Bodenhausen & Macrae, 1998; Clark, 1996; Kunda & Thagard, 1996), the evidence for stereotype inhibition remains scant. However, the existing evidence does suggest that such inhibition can occur and may be prompted by one's goals. Therefore, it is reasonable to assume that people may be able to strategically inhibit the activation of negative stereotypes so as to avoid discrediting stereotyped individuals. I am unaware of any evidence pointing to such motivated reduction in the level of stereotype activation or, for that matter, to motivated reduction in the activation of any cognitive structure.

There is also reason to believe that people may be able to strategically inhibit the application of activated stereotypes, that is, their use in judgments about members of stereotyped groups. Devine (1989) proposed that people may be able to curb the use of negative stereotypes in their judgments even when they are unable to inhibit the automatic activation of these stereotypes. There is some indication that people engage in less stereotypic thinking when they wish to avoid using these stereotypes because they are concerned that they may have behaved in a prejudiced manner (Monteith, 1993; Sherman & Gorkin, 1980), because they depend on the stereotyped individual for an important outcome (Neuberg & Fiske, 1987), or because they have been instructed to avoid stereotypic thoughts (Macrae, Bodenhausen, Milne, & Jetten, 1994; for a review, see Monteith, Sherman, & Devine, 1998). It has also been found that people are less likely to apply stereotypes to individuals when they are alert than when they are tired (Bodenhausen, 1990). This may be because people can inhibit their use of stereotypes when they are alert, but become incapable of such effortful inhibition when their cognitive resources are depleted by fatigue.

Thus, there is some evidence that people may be able to strategically inhibit the extent to which stereotypes influence their judgments about individuals. But such findings

may be due entirely to a failure to apply an activated stereotype. It remains to be seen whether the very level of stereotype activation may be reduced when one is motivated to avoid using the stereotype. As yet, there is no evidence for such motivated stereotype inhibition.

#### Motivated selection among competing stereotypes

If people can engage in motivated stereotype activation and inhibition, this has implications for how they might choose among competing stereotypes. Most research on stereotype activation has been concerned with the question of whether or not a single applicable stereotype will be activated upon exposure to a member of a stereotyped group or to related information, and, if so, under what conditions this will occur (for reviews, see Bargh, in press; Hamilton & Sherman, 1994; Kunda, in press). However, people belong to multiple social groups (e.g., age, gender, ethnicity, occupation, social class), each of which is associated with its own stereotypes; some of these stereotypes can be positive and some negative. Consequently, when one is trying to form an impression, a multitude of stereotypes applicable to an individual may come to mind, some of which may conflict with each other. When people wish to reach a particular conclusion about an individual, they may pick and choose among the many competing stereotypes available for this individual. They may activate those stereotypes that support their desired impression and inhibit those that contradict it. As a result, the same individual may be viewed quite differently by people who harbor different goals (Bruner, 1957; Hilton & Darley, 1991; Jones & Thibault, 1958). For example, people who wish to think highly of a Black manager may activate the positive stereotype of manager and inhibit the negative stereotype of Black people. In contrast, people who wish to think poorly of the same Black manager may activate the stereotype of Black people and inhibit the stereotype of manager.

Only a handful of studies have addressed the issue of multiple categorization, that is, what happens when more than one dimension is available for categorizing an individual.

Some research has shown that the characteristics of perceivers can influence their categorizations. In one study, Hispanic participants were more likely to categorize photographs of target individuals by ethnicity than by gender, whereas White participants were more likely to use gender (Zarate, Bonilla, & Luevano, 1995). Another study showed that attitude accessibility may influence categorization (E. R. Smith, Fazio, & Cejka, 1996). Thus, a multiply categorizable person, such as Mother Teresa, who is both a humanitarian and a catholic nun, will be categorized as a humanitarian by someone who has a highly accessible attitude towards humanitarians, but will be categorized as a catholic nun by someone who has a highly accessible attitude towards catholic nuns. Similarly, people for whom race is attitude-evoking have been found to be more likely to categorize photographs of target individuals by race than by occupation, but people motivated to control prejudice reactions were more likely to use occupation (Fazio & Dunton, 1997).

Other research has shown that the characteristics and behavior of the target can influence which stereotypes perceivers activate. According to one perspective, individuals are more likely to be categorized as members of groups that depart from a perceived cultural norm (E. R. Smith & Zarate, 1992; Zarate & Smith, 1990). Therefore, within North American culture, where White males are the default, individuals are more likely to be categorized by race if they are not White and by gender if they are female. Mixed support has been found for these predictions (Stroessner, 1996). A different line of research has shown that a target's behavior can influence stereotype activation (Macrae et al., 1995). In this study, participants who watched a Chinese woman perform a stereotypical Chinese behavior, eating with chopsticks, spontaneously activated the stereotype of Chinese people and, at the same time, inhibited the stereotype of women. Similarly, participants who saw the same Chinese woman perform a stereotypical female behavior, applying makeup, inhibited the stereotype of Chinese people and activated the stereotype of women. Thus, it appears that both the characteristics of the perceiver and the characteristics of the target

individual can influence which of the many applicable stereotypes will be applied to that individual.

There is also some suggestive evidence that motivation can lead to the activation of different stereotypes for the same target individual. In one study, participants watched a videotape of a businesswoman and were given one of three impression-formation goals: accountability to a third party, estimation of the target's height, or inspection of the videotape's clarity (Pendry & Macrae, 1996). Participants then performed a lexical decision task which was used to measure stereotype activation. Participants in all three conditions activated the stereotype of women. However, accountable participants also activated the subtype of businesswomen. It appears that when participants wanted to be accurate they used more differentiated categories. Although accountability and accuracy motivation are different from directional goals, this study suggests that people can be strategic in their choice of stereotypes. If they can move within a hierarchy (vertically) perhaps they can also move horizontally among stereotypes.

In sum, there is evidence that in different circumstances, the same individual can prompt the activation and inhibition of different stereotypes. There are no studies, however, that have looked at the role of directional goals in driving excitatory and inhibitory processes when there is more than one stereotype applicable to a target individual. As well, there have been no studies that have investigated directional goals in choosing among competing stereotypes. In Studies 2 and 3, I explore the possibility that, when they are motivated to form a particular impression of an individual, people will activate those stereotypes that support their desired impression and inhibit those that interfere with it.

#### Racial prejudice and motivated inhibition of the Black stereotype

I have proposed that people will inhibit an applicable stereotype when it threatens a desired impression they wish to reach. However, a stereotype can only interfere with a



conclusion if it is on one's mind. This suggests that only people for whom a stereotype will spontaneously spring to mind should need to inhibit it when it conflicts with the impression they wish to form. Racial prejudice has been shown to moderate the automatic activation of the Black stereotype: Although high- and low-prejudice individuals are equally knowledgeable of the negative stereotype of Black people, only high-prejudice individuals endorse it (Devine, 1989; Devine & Elliot, 1995; Lepore & Brown, 1997) and only they automatically activate it when primed with African-American faces (Fazio et al., 1995) or with affectively-neutral category labels and words related to the Black stereotype (Kawakami, Dion, & Dovidio, 1998; Lepore & Brown, 1997; Wittenbrink, Judd, & Park, 1997). Low-prejudice individuals, on the other hand, do not spontaneously activate the Black stereotype when primed with the category of Black people unless they are reminded of negative aspects of this stereotype (Lepore & Brown, 1997).

The finding that only high-prejudice individuals spontaneously activate the Black stereotype under neutral condition suggests that only they may inhibit the Black stereotype when motivated to think highly of a Black person. Because low-prejudice individuals do not spontaneously activate the negative Black stereotype, it will not interfere with the positive conclusion they wish to draw about the stereotyped individual. As a result, there will be no need for them to inhibit the stereotype. Study 3 addresses this issue.

#### Overview of the present research

In this dissertation, I provide evidence that people may engage in motivated activation, application, and inhibition of stereotypes. All the studies reported herein use the scenario of a Black person providing feedback to participants about their interpersonal skills. Study 1 examines whether people can strategically activate, apply, and inhibit a single negative stereotype in order to reach a desired conclusion about a stereotyped evaluator. Studies 2 and 3 extend this research by examining whether people can pick and choose between two applicable, competing stereotypes, one negative and one positive. In

addition, Study 3 explores the relationship between racial prejudice and motivated inhibition of the Black stereotype when a Black evaluator provides praise.

**Studies 1a and 1b: Motivated application and inhibition of the Black stereotype following negative or positive feedback from a Black evaluator**

I first explored whether motivation can affect stereotype activation, inhibition, and use. Specifically, I wished to show that when one is evaluated by a member of a negatively stereotyped group, one may engage in motivated activation and/or application and motivated inhibition of that group's stereotype so as to help one deal with the implications of the evaluation to one's self-view. To do this, I created a situation in which participants were motivated to disparage or to think highly of an evaluator; they completed a test of interpersonal skills and then received feedback on this test from a White or a Black manager (Study 1a). Shortly after receiving the feedback, participants completed a measure assessing the activation of the Black stereotype and evaluated the manager. People receiving a negative evaluation should be motivated to challenge the competence of the evaluator so as to protect themselves from the self-deflating consequences of the negative evaluation. Black people are stereotyped as generally unintelligent (Devine, 1989), and their managerial skills are sometimes devalued relative to those of White managers (Landau, 1995). Therefore, I expected that participants criticized by a Black manager might rely on the race of their harsh evaluator to disparage him.

Motivation could function in one of two ways here by affecting stereotype activation or stereotype application. If the Black stereotype would not normally be activated by exposure to the Black individual, motivation may provoke its activation. Alternatively, if the Black stereotype is activated by mere exposure to a Black evaluator, but not applied to him, motivation could provoke its application. Regardless of whether motivation affects stereotype activation or stereotype application, I expected that when the Black manager provided negative feedback he would be rated lower than a White manager who had provided the same negative feedback (cf. Sinclair & Kunda, 1996) because participants will

be motivated to apply the negative stereotype of Black people in order to disparage their harsh evaluator.

In contrast, people receiving positive feedback from a Black person should be motivated to maintain a view of their evaluator as competent so as to maximize the self-enhancing potential of the praise. Consequently, they may want to suppress any information that could threaten this goal. The fact that their evaluator was Black could raise suspicions about his competency. Therefore, I expected that these participants would inhibit the negative Black stereotype that, if activated, would challenge their evaluator's competency. If it is found that the level of stereotype activation for participants who had received positive feedback from a Black manager is even lower than for participants who had received comparable feedback from a White evaluator, this would provide compelling evidence for motivated inhibition. The Black evaluator who should have cued the Black stereotype would instead have cued its suppression. As a result, the Black manager should be rated at least as highly as the White manager providing the same feedback (cf. Sinclair & Kunda, 1996) because participants will have inhibited the Black stereotype in order to avoid discrediting their laudatory evaluator. Put differently, these participants will not have activated the Black stereotype, therefore, it cannot be used in their judgments of the Black manager.

There are, however, alternative, non-motivational explanations for these predictions. Perhaps Black people are not expected to deliver negative feedback. Therefore, when they do, this surprising, counterstereotypic behavior triggers the activation and use of their group stereotype. This account cannot readily explain why the Black stereotype would be inhibited by participants receiving positive feedback from a Black manager. Nevertheless, because it can account for much of the remaining predictions it is important to rule it out. As well, because all participants were non-Black men, another explanation could be based on the fact that the Black man was a member of the participants' out-group

whereas the White man was a member of their in-group. Other research has shown that members of out-groups are often evaluated more extremely than members of in-groups because in-groups and out-groups are represented differently (e.g., Linville & Jones, 1980), or because people hold ambivalent attitudes towards out-groups (e.g., Katz, Glass, & Cohen, 1973).

If the predicted effects of stereotype activation, inhibition, and use are due to the motivation to view a group member in a particular way, they should be restricted to individuals harboring this motivation, that is, to those whose own self-views are at stake. No such effects should be found for detached observers who watch a stranger receive positive or negative feedback. Therefore, to rule out the alternative accounts and, thereby, strengthen the motivational one, I conducted a yoked-observer study (Study 1b)

In Study 1b, each recipient participant (Study 1a) was yoked to an observer participant. Observers listened to an audiotape of the response given by one of the recipients, and then viewed the same videotape of the feedback that the recipient had received. Observers were exposed to the same information as the recipients, but their own self-worth was not at stake. Therefore, if selective stereotype activation and/or application is found for recipients and is a result of the content of the feedback rather than from self-protective motives evoked by this feedback, then similar selective stereotype activation and/or application should be found for these observers, because these participants will have observed the same Black evaluator deliver the same evaluations. Similarly, if the predicted results are due to the Black evaluator's out-group status, similar findings should be obtained for observers because they, too, should view this evaluator as a member of an out-group. However, if the predicted selective stereotype activation and/or application resulted from the motivation to protect and enhance the self, as I have suggested, then no such selective stereotype activation and application should occur for observer participants whose own self-views are not at stake.

Examining the activation of the Black stereotype among observers of negative feedback delivered by a Black individual would also clarify the results obtained for recipients of negative feedback from a Black individual in Study 1a. It is expected that these participants will show greater stereotype activation than do participants who receive comparable feedback from a White individual. It will be unclear, however, whether motivation played any role in increasing stereotype activation, or whether the increase was simply due to exposure to a Black individual. Therefore, it is of great interest to determine whether detached participants who observe a Black manager delivering negative feedback to someone else will also activate the Black stereotype.

In my earlier studies, a woman was viewed as less competent than a man after providing negative feedback but not after providing positive feedback (Sinclair & Kunda, 1996). I expected that the same will be true for a Black man: A Black manager will be viewed as less competent than a White manager when providing negative feedback but not when providing positive feedback. I propose further that this effect may be due to motivated activation, application, and inhibition of negative stereotypes: People may activate and apply negative stereotypes so as to discredit a harsh evaluator, and may inhibit the same stereotypes so as to avoid discrediting a laudatory evaluator. This effect should be restricted to individuals harboring these motivations, that is, to those whose own self-views are at stake. No such effect should be found for detached observers watching a stranger receive positive or negative feedback.

#### Method

I first present the method for the recipient study in which participants received positive or negative feedback from a White or a Black manager. I then present the method for the observer study in which participants watched someone else receive positive or negative feedback from a White or a Black manager.

## Study 1a: Recipients

### Overview

The study was presented as part of a program designed to train managers to evaluate interpersonal skills. Participants gave spoken responses to a series of questions assessing interpersonal skills. They were led to believe that a manager in another room was listening to their responses over an intercom and would evaluate their performance. Participants then watched the manager evaluate them, supposedly over a closed-circuit TV. In fact, they watched a videotape in which a White or a Black manager provided a positive or a negative evaluation. Shortly after receiving the feedback, participants completed a measure assessing the activation of the stereotype of Black people. They then evaluated the manager. They also completed a measure of affect to determine whether strategic stereotyping can buffer affective reactions to feedback.

### Participants

Participants were 51 University of Waterloo male undergraduates who participated for partial course credit or for pay. I included only men because the feedback had to mention the participant's gender, and, therefore, I would have had to create separate feedback videotapes for male and female participants. I wished to avoid this because, in such a design, it would be impossible to determine whether any obtained differences between male and female participants were due to participant gender or to subtle unintended differences in the delivery of the feedback to men and women. None of the participants was Black, and one participant was excluded from the analyses because he reported growing up in a predominantly Black neighborhood. Four additional participants were excluded for disbelieving the cover story, leaving a total of 46 participants.

### Procedure

The setting. Participants took part individually in sessions conducted by a male experimenter. A cover sheet explained that the study was part of a collaborative effort with

local corporations to develop a training program designed to teach personnel managers how to use a questionnaire assessing employees' interpersonal skills (see Appendix A). To ensure that participants would view interpersonal skills as important, the cover sheet also stated that corporations hiring university graduates were finding that good interpersonal skills and leadership qualities were essential for good job performance and promotion.

Participants were told that they would be asked to respond to an interpersonal skills questionnaire by speaking into a tape recorder. A manager-in-training sitting in another room would listen to their responses over an intercom and would provide a brief evaluation of their skills. This evaluation would be videotaped for use in the training program in conjunction with the participant's audiotaped responses. Participants were told that, in return for their participation, if they were interested, they would be able to watch the manager giving this evaluation of them over a close circuit TV as the manager was being videotaped. Happily, all participants were interested.

To increase experimental realism, participants were shown the room where the manager would be during the session. It was equipped with a video camera to tape the manager and a speaker from which the manager would hear the respondent's answers to the interpersonal skills questionnaire. After agreeing to participate in the study, participants were asked to sign a form permitting the use of their taped responses in conjunction with the videotaped evaluation of these responses in the manager-training program.

The interpersonal skills questionnaire. Next, participants were asked to respond to the interpersonal skills questionnaire (see Appendix B). This questionnaire was made up of ten open-ended questions asking respondents to describe how they would react in a variety of interpersonal situations that could arise at work (e.g., "Imagine your boss gives you and two other people responsibility for a project. One of your co-workers is not doing his fair share of the work, what do you do?" "How would you motivate your employees to complete an important project on time?").



Each question was written on a separate index card. The experimenter gave the participant a stack of index cards and asked him to read each question out loud and then speak his answers into a tape recorder. The participant was reminded that his answers would also be transmitted over the intercom to the manager who would be evaluating him. The experimenter then left the room, leaving the participant to complete this task alone.

Feedback manipulation. The experimenter was not aware of the participant's condition up to this point. After completing the interpersonal skills questionnaire, participants were randomly assigned to watch a prerecorded videotape of a White<sup>1</sup> or a Black confederate delivering positive or negative feedback. To create these tapes, each confederate was taped twice, once delivering prescribed positive feedback and once delivering prescribed negative feedback. The videotaped evaluation lasted approximately three and a half minutes.

The texts of the positive and the negative feedback addressed the same points, but each was presented in a positive or negative light (see Appendix C). The evaluation began with a general statement about the participant's ability. In the positive evaluation, this included statements such as "I was very impressed with this person, I think he has really good interpersonal skills" and in the negative evaluation this included statements such as "I was not very impressed with this person. I think his interpersonal skills are not very good."

The manager then commented on several particular responses given by the participant. These comments were specific enough to appear tailor made yet generic enough to apply to anyone. For example, the positive feedback included the comment:

I was also quite impressed with his answer to the question about how to motivate employees. I know this is a tough question, but he seemed to have zeroed in on the

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<sup>1</sup>For the White evaluator, I used one of the two sets of positive and negative feedback videos used in Sinclair and Kunda, 1996.

most important factors. I think he would be pretty assertive in a good way and would be as good as the best at motivating and leading others. I think most employees would look up to someone like this and would seriously listen to what he had to say.

The negative feedback stated instead:

I was also not that impressed with his answer to the question about how to motivate employees. I know this is a tough question, but he seemed to have missed some of the most important factors. I think he would be only somewhat assertive, and may not be as good as the best at motivating and leading others. There is a possibility that some employees may not look up to someone like this and would not seriously listen to what he had to say.

The feedback concluded with the manager giving the respondent an overall rating. In the positive condition, the summary evaluation was, "I really thought this person gave good answers to most of the questions. Overall, I believe this person's interpersonal skills are way above average. On a scale of 0-100, I would give him a 90." In contrast, in the negative condition, the summary evaluation was, "I really thought this person gave mediocre answers to most of the questions. Overall, I believe this person's interpersonal skills are at best average. On a scale of 0-100, I would give him a 60."

After participants viewed the feedback videotape, the experimenter explained that he had to spend some time with the manager but that he would return as soon as he could to finish off the study with the participant. After apologizing for the delay, the experimenter asked participants whether, while they were waiting, they would be willing to complete a questionnaire for a cognitive psychologist. All agreed to do so. Participants were then given a cover sheet from the fictitious cognitive psychologist explaining his study and describing his word fragment questionnaire. In fact, this questionnaire was designed to

assess the activation of the Black stereotype. None of the participants guessed the true purpose of this questionnaire when questioned during the debriefing.

Upon completion of the stereotype activation measure, participants were asked to fill out a questionnaire about their impressions of the manager, supposedly so as to help the investigators evaluate the manager. They were also asked to provide ratings of affect.

### Dependent measures

Stereotype activation measure. Stereotype activation was assessed through a word-fragment completion task similar to ones used by other investigators to assess the activation of recently primed stereotypes (Gilbert & Hixon, 1991; Spencer et. al., in press; Steele & Aronson, 1995). In this task, participants are asked to complete word fragments whose missing letters are specified by blank spaces (e.g., \_ \_ A C K). Some of these may be completed to create a word associated with the stereotype in question (e.g., Black) but may also be completed to create a different word that is unrelated to the stereotype (e.g., stack). The underlying assumption of this measure is that when the stereotype is activated, participants will be more likely to complete these fragments with the stereotypic words.

My measure was made up of 84 word fragments, 13 of which had as one possible solution a word associated with the stereotype of Black people. This list of stereotype-related words included all the words used by Steele and Aronson (1995) to assess the activation of the Black stereotype, with the exception of WHITE which was problematic in that it was also associated with the White stereotype (which may have been activated for participants evaluated by a White manager). Steele and Aronson (1995) obtained these words by asking undergraduates to generate words reflecting the “image of African Americans,” selecting the 12 most common constructs, and selecting single words to represent these constructs (e.g., “class” for “lower class,” and “race” for “concerned with race”). I conducted similar pretests at the University of Waterloo, and, based on the results, added three words that were revealed to be associated with the Black stereotype on this

campus (crime; rap; drug). The complete list of stereotypic words was: \_\_\_ C E (RACE); L A \_\_\_ (LAZY); \_\_\_ A C K (BLACK); \_\_\_ O R (POOR); C L \_\_\_ S \_\_\_ (CLASS); B R \_\_\_ (BROTHER); M I \_\_\_ (MINORITY); W E L \_\_\_ (WELFARE); C O \_\_\_ (COLOR); T O \_\_\_ (TOKEN); C R \_\_\_ (CRIME); \_\_\_ A P (RAP); D R \_\_\_ (DRUG). These fragments were embedded among the remaining fragments which were unrelated to the stereotype. There were at least three non-stereotypic fragments between any two stereotypic ones.

Evaluation measures. Following the word fragment completion task, participants filled out a questionnaire about their impressions of the manager. Participants were asked "How skilled was the manager at evaluating your interpersonal skills" and "How competent is the manager". They responded on 11-point scales ranging from 1 (*not at all*) to 11 (*very*).

As a manipulation check, participants were asked for their own interpretation of the manager's evaluation. They rated the favorability of this evaluation on a 15-point scale ranging from -7 (*very unfavorable*) through 0 (*neither unfavorable nor favorable*) to +7 (*very favorable*). They also rated how the manager had viewed their interpersonal skills and their leadership skills, on 15-point scales ranging from -7 (*much worse than average*) through 0 (*average*) to +7 (*much better than average*). Finally, they rated how happy they were with this evaluation, on a scale ranging from -7 (*very unhappy*) through 0 (*neither happy nor unhappy*) to +7 (*very happy*).

Next, participants were presented with a list of 20 affect-related words. Nine of these words were positive (e.g., happy, confident, proud) and the remaining words were negative (e.g., anxious, sad, embarrassed). Participants rated the extent to which each described the way they were feeling at that time, using 11-point scales with endpoints labeled 1 (*not at all*) and 11 (*very*).

On the final page, as a preliminary check for suspicion, participants were asked to list any thoughts they might have had about what the study was about. At the end of the

study, participants were probed for suspicion and were then given a process debriefing. All participants were shown the opposite-valence feedback videotape made by the same confederate and were also shown how they were randomly assigned to get the feedback they had received. The entire procedure took approximately seventy-five minutes.

### Study 1b: Observers

#### Overview

Participants each listened to the responses made by one of the recipients in Study 1a and then viewed the feedback received by that participant. Thus, participants observed positive or negative feedback delivered to someone else by a White or a Black man. They then completed a measure of the activation of the Black stereotype and evaluated the evaluator.

#### Participants

The 46 recipients were each yoked to a male participant. None of the new participants was Black. In cases where the original participant had been excluded because he was an outlier on a given measure, his yoked participant was excluded from analyses of that measure as well.

#### Procedure

Participants took part individually in sessions conducted by a male experimenter. As for recipients, a cover sheet described the study as part of a collaborative effort with local corporations to develop a training program designed to teach personnel managers how to use a questionnaire assessing employees' interpersonal skills (see Appendix D). This time, however, participants read that during the previous term managers from several local corporations had practiced evaluating responses given by volunteers to an interpersonal skills questionnaire. Each respondent's responses to the questionnaire and each manager's evaluation of these responses were audiotaped and videotaped.

As part of the manager training program, we wished to give trainees some examples of how to interpret responses to the questionnaire by providing them with someone's answers along with a personnel manager's evaluation of these answers. The current study was designed to determine the best presentation format for responses and evaluations—videotape or audiotape. Therefore, we were trying out different combinations of videotapes and audiotapes on different participants. All participants were informed that they were assigned to listen to an audiotape of someone's responses and to watch a videotape of a manager's evaluation of these responses.

Each of the recipient participants was yoked to a randomly chosen participant in this second part of the Study. This new participant listened to the audiotape of the original participant's responses, and then viewed the same evaluation videotape that the original participant had viewed.

#### Dependent measures

Participants responded to the same measures recipients had answered, in the same order, with some modifications necessary to allow for the fact that the respondent was another person rather than the self. As for recipients, the stereotype activation measure was presented as unrelated to the study. After viewing the evaluation videotape, participants were informed that they had to wait 15 minutes before proceeding so as to maximize similarity to procedures in the training program, and were asked if they were willing to complete a questionnaire for another investigator while they were waiting. All agreed to do so.

The word fragment completion task used to assess stereotype activation excluded two stereotypic words (welfare, minority) that were not completed to form the stereotypic word by any of the recipients, but was otherwise identical to the measure used with those participants

Participants rated the manager on the same measures used with recipients. Next, they completed three of the four manipulation checks, modified to refer to the favorability of the feedback received by the respondent rather than the self (I excluded the measure of happiness with the evaluation, which seemed inappropriate for observers). Finally, they completed the affect measure for the way they were currently feeling. At the end of the study, participants were probed for suspicion and were then given a process debriefing.

### Results and Discussion

The detached observers' results help clarify the meaning of the motivated recipients' results. Therefore, for each measure, I first present the results for the recipients (Study 1a) followed by the results for the observers (Study 1b) on that measure.

#### Manipulation check

Recipients. Participants' ratings of the favorability of the evaluation they had received, of the manager's view of their interpersonal skills and their leadership skills, and of their satisfaction with this evaluation were averaged into a single measure of feedback favorability (Cronbach's alpha = .97). Participants who had received positive feedback rated the evaluation as highly favorable ( $M = 6.01$ ), whereas participants who had received negative feedback rated it as unfavorable ( $M = -2.40$ ), and this difference was highly significant,  $F(1, 39) = 584.77, p < .0001^2$ . The effects for manager's race and for the interaction did not approach significance, both  $ps > .40$ . Clearly, the feedback manipulation was successful.

Observers. As for recipients, the three measures of feedback favorability were averaged into a single measure (Cronbach's alpha = .98). Positive feedback observers rated

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<sup>2</sup>Three participants were excluded from all analyses of measures included in the questionnaire because their responses were more than three standard deviations away from their group means on the manager evaluation measure. However, these participants were not excluded from analyses of the stereotype activation measure because this measure was answered earlier, allegedly as part of a separate study. One different participant was excluded from analyses of the stereotype activation measure because his responses were more than three standard deviations away from the mean on this measure. By necessity, mediation analyses involving both sets of measures excluded all four outliers.

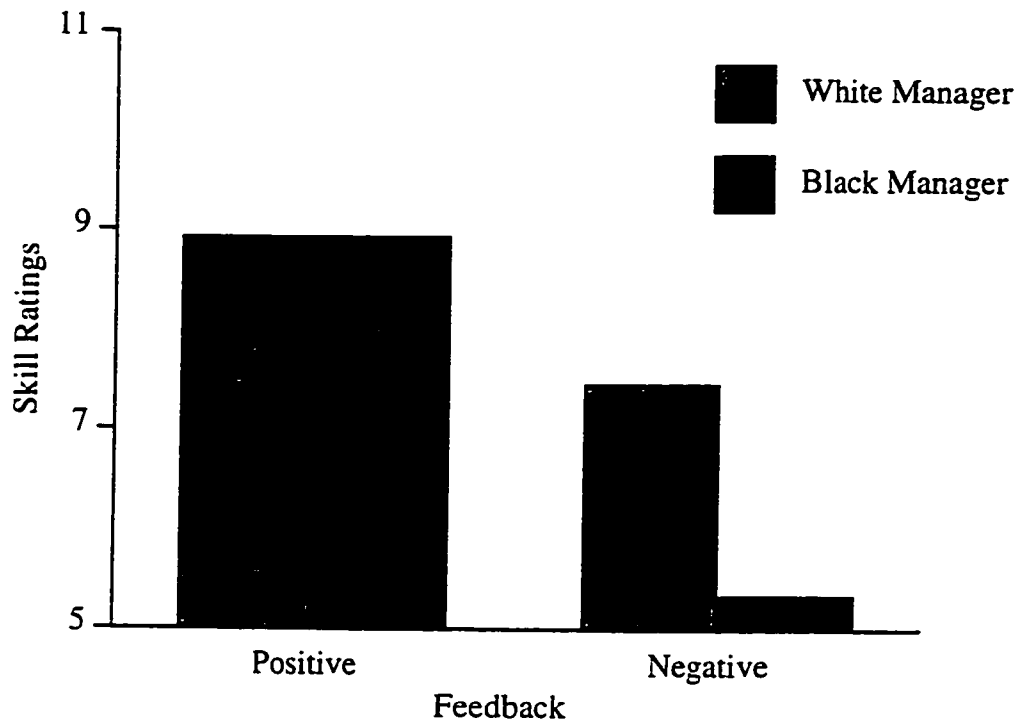
the feedback as highly favorable ( $M = 5.35$ ) whereas negative feedback observers rated it as unfavorable ( $M = -2.59$ ),  $F(1, 39) = 364.21$ ,  $p < .0001$ . The effects for manager race and for the interaction did not approach significance, both  $ps > .20$ . Clearly, the feedback manipulation was effective.

### Manager evaluations

Recipients. Participants' ratings of the manager's skill at evaluating them were analyzed with a 2 (Feedback) X 2 (Manager race) ANOVA. Managers who had provided positive feedback ( $M = 8.92$ ) were rated more highly than were managers who had provided negative feedback ( $M = 6.39$ ),  $F(1, 39) = 26.11$ ,  $p < .0001$ . However, as may be seen in Figure 1, this effect was qualified by a significant interaction,  $F(1, 39) = 4.51$ ,  $p < .05$ , which indicated that this feedback-dependent evaluation was greater for Black than for White managers. Conceptually replicating findings for gender (Sinclair & Kunda, 1996), the Black manager was rated lower than the White manager only after providing negative feedback,  $F(1, 39) = 7.82$ ,  $p < .01$ . After providing positive feedback, in contrast, the Black manager was rated just as highly as the White manager. Note also that the Black manager providing positive evaluations was rated considerably higher than was the Black manager providing negative evaluations,  $F(1, 39) = 25.74$ ,  $p < .0001$ . A similar effect was obtained for the White manager,  $F(1, 39) = 4.53$ ,  $p < .05$ . However, the effect size of this feedback-dependent evaluation was more than twice as large for Black managers ( $d = 2.23$ ) than for White managers ( $d = 1.06$ ).

Ratings of manager competence revealed only a significant main effect for feedback: Positive-feedback participants rated the manager as more competent ( $M = 8.64$ ) than did negative-feedback participants ( $M = 7.44$ ),  $F(1, 39) = 6.81$ ,  $p = .01$ . The effects for manager's race and for the interaction did not approach significance, both  $ps > .50$ . It appears that the tendency to disparage the Black manager providing a harsh evaluation on this global measure of competence was not as strong as the one obtained on the more





**Figure 1.** Recipients' ratings of the manager's skill at evaluating them as a function of feedback favorability and the manager's race (Study 1a).

narrow and specific measure assessing his skill at evaluating the participant. This discrepancy is consistent with research showing that stereotypes may sometimes influence specific judgments about an individual's behavior even when they do not influence judgments about this individual's underlying traits (Kunda, Sinclair, & Griffin, 1997). It may also be that concerns about appearing prejudiced prevent people from global disparagement of stereotyped individuals, but do not prevent them from disparaging such individuals on task-specific dimensions because such specific devaluation could be more readily justified in terms of stereotype-unrelated information. This interpretation is consistent with theories of aversive racism (Gaertner & Dovidio, 1986) and modern racism (McConahay, 1986).

This pattern of results was also found in the gender study (Sinclair & Kunda, 1996), suggesting that it was unlikely to be due to chance. More likely, people tend to apply the negative stereotype to specific judgments about the target but not to global ones (Kunda et al., 1997), perhaps because it is easier to justify specific than global disparagement in non racial terms (Gaertner & Dovidio, 1986; McConahay, 1986).

Observers. Participants' ratings of the manager's skill at evaluating the respondent are presented in Table 1<sup>3</sup>. It may be seen that neither feedback nor manager race had any impact on the evaluation of the manager. Neither of the main effects nor the interaction approached significance,  $F(1, 39) = 1.74, p = .19$  for evaluation, both  $F_s(1, 39) < 1.0, p_s > .50$  for manager race and for the interaction. Black and White evaluators were given comparable ratings when providing negative feedback as well as when providing positive feedback, both  $p_s > .60$ .

Summary. Recipients rated the Black manager lower than the White Manager after he provided negative feedback but not after he provided positive feedback. Such selective

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<sup>3</sup>None of the measures obtained for observers yielded significant interactions, therefore, they are all presented in a single table.

Table 1

Measures from detached observers as a function of feedback favorability and manager's race.

Measures	Positive Feedback		Negative Feedback	
	White Manager	Black Manager	White Manager	Black Manager
Manager evaluations	7.00	6.67	7.78	7.56
Stereotype activation	0.75	1.67	1.36	1.60
Negative affect	2.60	2.77	2.41	2.79

stereotype application was not found for observers even though they were exposed to the identical information as recipients. Observers rated the Black manager just as highly as they rated the White manager regardless of the type of feedback he had provided. It appears, then, that the stereotype application shown by recipients of negative feedback from a Black manager was due to their motivation to disparage the harsh Black evaluator rather than to their mere exposure to this individual. Thus, it is clear that motivation led to stereotype application. It is unclear, however, whether motivation also led to the activation of the stereotype. Alternatively, the stereotype may have been activated by mere exposure to the Black manager regardless of motivation. If that were true, the results just described would reflect motivated application of an already activated stereotype. The next section addresses these issues.

#### Stereotype activation

Recipients. I assessed the degree to which the Black stereotype was activated by examining the number of stereotypic completions made by participants in each condition. There was a significant effect for feedback on this measure. Participants who had received

negative feedback ( $M = 1.33$ ) activated the Black stereotype to a greater degree than participants who had received positive feedback ( $M = .71$ ),  $F(1, 41) = 9.86$ ,  $p < .01$ . However, this effect was qualified by a significant interaction,  $F(1, 41) = 12.83$ ,  $p < .001$ . As may be seen in Figure 2, participants receiving feedback from a White manager activated the Black stereotype to the same degree regardless of feedback,  $F(1, 41) = 0.10$ , NS. These participants were not exposed to any Black individual or to any other information that could cue the activation (or inhibition) of the Black stereotype, and so could be expected to be responding at a “normal” level to the stereotype activation measure. Therefore, the extent to which the Black stereotype was activated for participants exposed to a White manager provides a baseline against which to assess the activation or inhibition of this stereotype in response to feedback from a Black manager. As expected, receiving negative feedback from a Black manager led participants to activate the Black stereotype; stereotype activation was greater for participants receiving negative feedback from a Black manager than for participants receiving negative feedback from a White manager,  $F(1, 41) = 8.78$ ,  $p < .01$ . In contrast, receiving positive feedback from a Black manager led participants to inhibit the Black stereotype; stereotype activation was lower for participants receiving positive feedback from a Black manager than for participants receiving positive feedback from a White manager,  $F(1, 41) = 4.31$ ,  $p < .05$ .

Note that the list of words used to tap stereotype activation was created to reflect the most commonly mentioned aspects of this stereotype. Many of these are quite negative (e.g., crime, lazy) but others are relatively neutral (e.g., Black, Brother). I included the neutral words so as to obtain a list that would be long enough to provide a reliable and sensitive measure of stereotype activation (cf. Steele & Aronson, 1997). Because the average number of stereotypic completions was low (it was only 1.8 for participants who showed increased stereotype activation, namely those who had received negative feedback from a Black evaluator), the data do not permit examination of whether the changes in

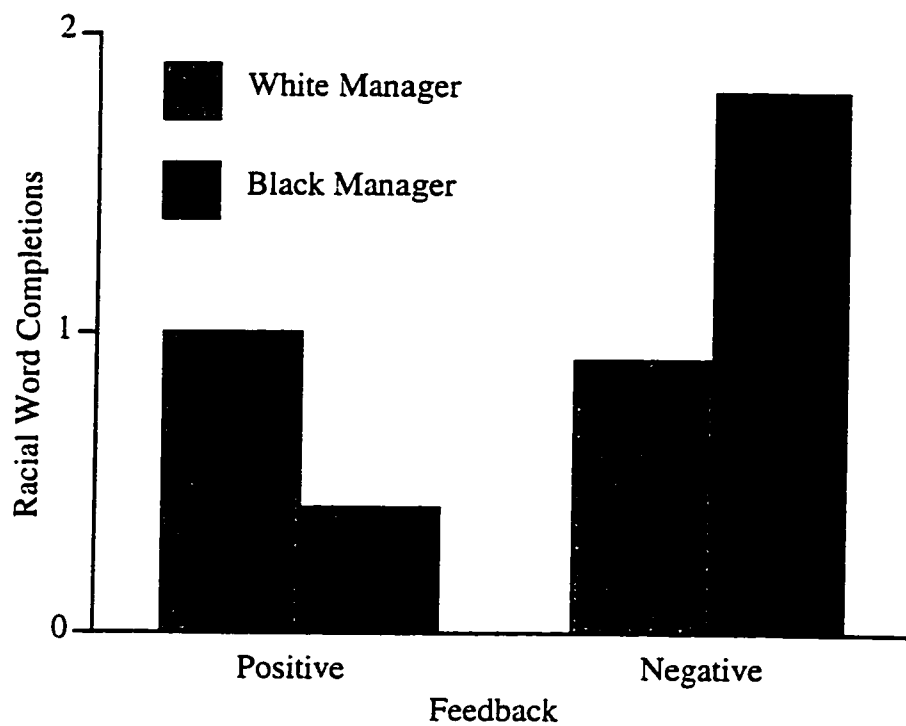


Figure 2. Number of racial word completions as a function of feedback favorability and the manager's race (Study 1a).

activation levels were restricted to the negative aspects of the stereotype. It is important to note, however, that I did not expect such restriction. Although I hypothesized that category membership would be activated or inhibited because its predominantly negative stereotypic associates could boost or undermine participants' desired conclusions, I also expected that, once category membership was activated, the full range of the category's associates, from negative through neutral to positive, would be activated as well.

There are reasons to believe stereotypes tend to be activated as a whole in this manner. Devine (1989) found that subliminal exposure to a list of words related to African Americans which included positive words (e.g., musical, athletic), neutral words (e.g., Blacks, Africa), and negative words (e.g., lazy, welfare), led to the activation of an aspect of the African-American stereotype, hostility, which had not been primed directly. Others have found that exposure to neutral category labels (e.g., Black) can activate the negative aspects of the stereotype of Black people, especially among prejudiced individuals (Kawakami, et al., 1998; Lepore & Brown, 1997; Wittenbrink et al., 1997). These demonstrated associations between different components of the stereotype and between the category label and the stereotype suggest that the motivated activation and inhibition of the negative components of the Black stereotype would likely be accompanied by comparable activation and inhibition of the category itself along with its neutral and positive components; it may be difficult to activate or inhibit one aspect of a stereotype without similar ramifications for semantically related aspects (Meyer & Schvaneveldt, 1971; Neely, 1977; for a review of the semantic priming literature, see Neely, 1991).

Mediation analyses. I have proposed that participants activated and inhibited the Black stereotype in order to justify their desired evaluations of the Black evaluator: An activated negative Black stereotype can serve to justify devaluing the harsh Black evaluator, and an inhibited negative stereotype cannot cast aspersions on the capabilities of a laudatory Black evaluator. Consistent with such a process, I found that participants evaluated by a

Black manager showed a strong negative correlation between the extent to which they activated the stereotype and their evaluation of the manager,  $r = -.57, p < .01$ . In other words, the more they had activated the Black stereotype, the less they thought of the Black manager. No such correlation was obtained for participants exposed to a White manager,  $r = -.15, p = .50$

If the manager's race and feedback led recipient participants to activate or inhibit the Black stereotype when such activation or inhibition could facilitate their desired negative or positive evaluations of him, then the impact of the interaction between the manager's race and feedback on recipient participants' evaluations of him should be mediated by the extent to which participants activated the Black stereotype. I followed the procedures recommended by Baron and Kenny (1986) to test for such mediation. First, I created dummy variables for manager race, for feedback, and for their interaction. The variables representing the main effects were entered in all the reported regressions, but discussion focuses on results for the interaction variable. The first regression analysis revealed that the interaction term had a significant impact on stereotype activation ( $b = .43, p < .01$ ). The second regression analysis revealed that the interaction term had a significant impact on the evaluation of the manager ( $b = .25, p < .05$ ). When I regressed manager evaluations on both stereotype activation and the interaction, stereotype activation had a marginally significant impact on manager evaluation ( $b = .23, p = .10$ ). Most importantly, the impact of the interaction on manager evaluations was reduced and was no longer significant, ( $b = .15, p > .25$ ). A test of the indirect effect of the interaction on manager evaluations via stereotype activation revealed this effect to be marginally significant,  $Z = 1.56, p = .12$ . In sum, controlling for stereotype activation reduced the impact of the interaction on manager evaluations. This suggests that this impact was mediated by stereotype activation. However, this conclusion remains tentative because the indirect effect via stereotype activation was only marginally significant.

In conclusion, note that the evidence for motivated stereotype inhibition is quite compelling—the level of stereotype activation for participants who had received positive feedback from a Black evaluator was even lower than it was for participants who had received comparable feedback from a White evaluator and who were not exposed to any Black individual. The flattering Black individual, who might have cued the Black stereotype, instead cued its suppression. The evidence for motivated activation, however, is unclear. It is not known whether the harsh Black evaluator led participants to an increase in the level of stereotype activation above what is normal in the presence of a Black individual. The results for the observers provide insight into this issue.

Observers. The numbers of stereotypic completions made by participants in each condition are presented in Table 1. Participants observing a Black manager activated the Black stereotype to a greater degree ( $M = 1.64$ ) than did participants observing a White manager ( $M = 1.04$ ),  $F(1, 41) = 4.25$ ,  $p < .05$ . This finding is consistent with earlier research indicating that exposure to members of stereotyped groups can lead to the activation of their group's stereotype (Fazio et al., 1995; Gilbert & Hixon, 1991). Importantly, however, the activation of the Black stereotype by the Black manager did not depend on the feedback provided by that manager; the interaction did not approach significance,  $F(1, 41) = 1.48$ ,  $p > .20$ . The effect of feedback was not significant either,  $F(1, 41) = 0.96$ ,  $p > .30$ .

Comparisons between recipients and observers. The number of stereotypic completions by observers exposed to a Black manager sheds some light on the results obtained for recipients. To facilitate comparisons between the two groups of participants, I combined the two data sets for participants exposed to a Black manager, and conducted a 2 (Participant type: recipients vs. observers) x 2 (Feedback) ANOVA. Such an analysis seems reasonable given the similarity of procedures used with the two groups, but its results should be interpreted with caution because it does pool data collected at different



times. This analysis revealed a significant main effect for participant indicating that observers showed greater stereotype activation than did recipients,  $F(1, 40) = 3.01, p < .05$ , and a significant main effect for feedback indicating that negative feedback provoked greater stereotype activation than positive feedback,  $F(1, 40) = 6.86, p < .05$ . Importantly, however, both effects were qualified by a significant interaction,  $F(1, 40) = 8.32, p < .01$ . As may be seen in Figure 3, observers differed from recipients following positive feedback but not following negative feedback. Participants who had observed a Black manager deliver negative feedback made almost as many stereotypic completions ( $M = 1.64$ ) as did participants who had themselves received negative feedback from a Black manager ( $M = 1.80$ ),  $F(1, 40) = .29, p > .50$ . This suggests that the motivation to disparage the harsh Black evaluator did not lead recipients to activate the Black stereotype beyond what could be expected when one observes a Black individual in the absence of such motivation. Although comparisons among the two studies argue against motivated stereotype activation, they argue strongly for motivated stereotype inhibition. Participants who had received positive feedback from a Black manager made substantially fewer stereotypic completions ( $M = .42$ ) than did participants who had merely observed a Black manager deliver positive feedback ( $M = 1.67$ ),  $F(1, 40) = 13.56, p < .001$ .

I found little evidence for motivated stereotype activation. Participants who had received negative feedback from a Black evaluator did activate the Black stereotype, but not to a greater degree than did the detached observers who had seen a stranger receive negative feedback from the same Black evaluator. This suggests that the motivation to disparage their harsh Black evaluator did not lead recipients to activate the Black stereotype above the level triggered by mere exposure to that Black individual in the absence of such motivation. Failure to obtain motivated stereotype activation in these studies does not rule out the possibility that motivated stereotype activation could occur on other occasions. I may have been unable to demonstrate motivated activation of the Black stereotype because the Black

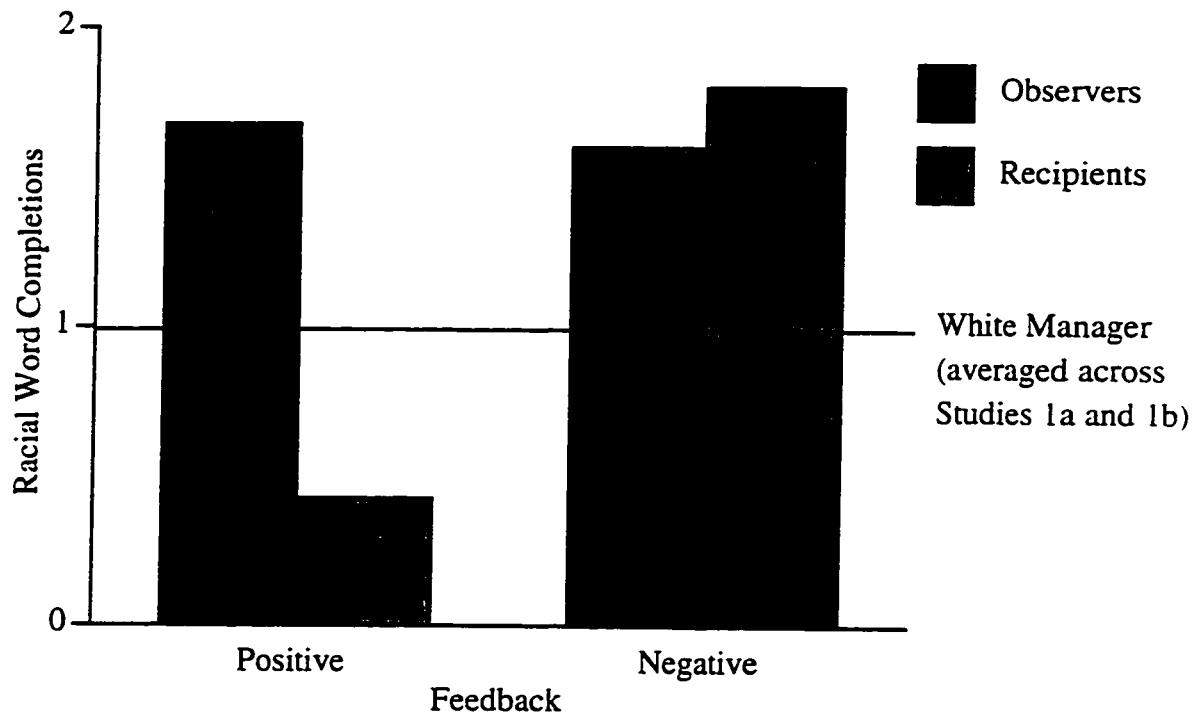


Figure 3. Number of racial word completions for the Black manager as a function of feedback favorability and participant type (Studies 1a and 1b).

individual portrayed in these studies provoked spontaneous activation of that stereotype even in the absence of such motivation, leaving little room for further stereotype activation through motivation. It remains plausible that when a stereotype is not activated spontaneously, it may be activated by motivation as suggested by Spencer et al. (in press). I return to this issue in Study 3.

Although recipients of negative feedback from a Black evaluator did not engage in motivated stereotype activation, they did appear to engage in motivated application of the activated stereotype to their evaluator. Observers and recipients of a negative evaluation by a Black evaluator activated the Black stereotype to the same degree, yet only the recipients used this stereotype to evaluate the evaluator; only they judged him as less competent than the harsh White evaluator. Moreover, only recipients of feedback from a Black evaluator appeared to base his evaluation on the extent to which the Black stereotype was activated in their minds. Recall, participants evaluated by a Black manager showed a strong negative correlation between the extent to which they activated the stereotype and their evaluation of the manager,  $r = -.57$ ,  $p < .01$ . In other words, the more they had activated the Black stereotype, the less they thought of the Black manager. No such correlation was obtained for participants observing a Black manager,  $r = -.31$ ,  $p = .17$ . Even though observers activated the Black stereotype it did not play a major role in determining the evaluation of the Black manager.

It is interesting that participants observing a Black manager did activate the Black stereotype, but did not apply it to their evaluation of the Black manager, whom they evaluated just as highly as the White manager. One possible explanation for these results is that observers inhibited the application of the activated stereotype to the Black manager, perhaps because they felt it was inappropriate for stereotypes to influence their judgments (Monteith, 1993). If this were the case, then the motivation to discredit the harsh Black evaluator experienced by participants who had received negative feedback from him led to a

breakdown of the inhibition on applying the activated Black stereotype to the evaluation of a Black individual. Put differently, these participants may have engaged in motivated application of an activated stereotype that would not have been applied in the absence of motivation.

In sum, unlike for participants who had themselves received feedback from a Black manager, observer participants' activation and use of the Black stereotype did not depend on the feedback provided by the Black manager. Observers exposed to a Black manager did activate the Black stereotype, but did not use it to evaluate this manager. The findings obtained for these observers help clarify the results obtained for recipients. They suggest that the inhibition of the Black stereotype by recipients of positive feedback from a Black manager and the application of this stereotype to the evaluation of the Black manager by recipients of negative feedback from him were most likely due to motivation.

#### Affect

Recipients. Participants' responses to the negative affect terms were averaged into a single scale (Cronbach's alpha = .89) as were their responses to the positive affect terms (Cronbach's alpha = .87). Not surprisingly, negative-feedback participants expressed more negative affect ( $M = 3.58$ ) than did positive-feedback participants ( $M = 2.20$ ),  $F(1, 39) = 10.29$ ,  $p < .01$ . However, this effect was qualified by a significant interaction,  $F(1, 39) = 7.00$ ,  $p = .01$ . As may be seen in Figure 4, participants who had received negative feedback from a Black evaluator expressed considerably less negative affect than did participants who had received negative feedback from a White evaluator,  $F(1, 39) = 6.53$ ,  $p = .01$ . Participants receiving positive feedback showed a non-significant tendency in the opposite direction,  $p > .25$ . Moreover, participants who had received negative feedback from a Black evaluator expressed no more negative affect than did participants who had received positive feedback from a Black evaluator,  $p > .50$ . In contrast, participants who had received negative feedback from a White evaluator expressed considerably more

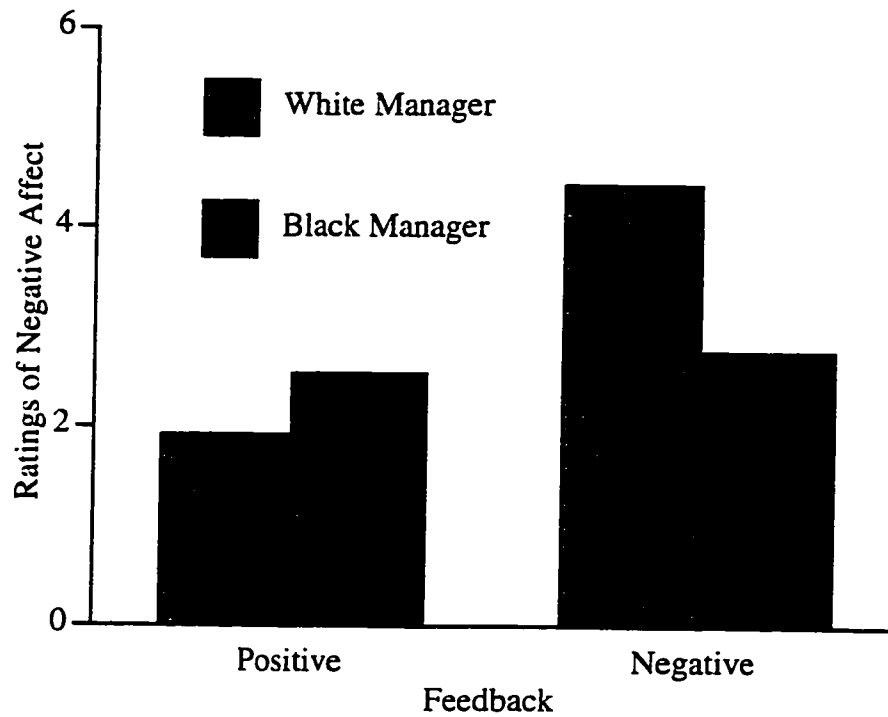


Figure 4. Ratings of negative affect as a function of feedback favorability and the manager's race (Study 1).

negative affect than did participants who had received positive feedback from a White evaluator,  $F(1, 39) = 17.42, p < .001$ .

These findings suggest that the disparagement of the negative Black evaluator served to blunt the sting of the negative evaluation he had delivered; participants were not nearly as upset by this negative evaluation as they were when the identical negative evaluation was delivered by a White evaluator. However, this conclusion should be tempered somewhat by the finding that negative mood was not significantly correlated with manager evaluation for negative-feedback participants or for positive-feedback participants, both  $ps > .50$

The positive affect index revealed only a main effect for feedback, such that positive feedback participants expressed more positive affect ( $M = 8.09$ ) than did negative feedback participants ( $M = 6.11$ ),  $F(1, 39) = 22.70, p < .0001$ . The interaction did not approach significance,  $p > .70$ . I can only speculate on why manager race interacted with feedback for negative affect but not for positive affect. One possibility is that positive affect was boosted by the positive feedback but was not influenced much by the negative feedback. And positive feedback boosted positive affect regardless of the race of the manager who had delivered the feedback. In contrast, negative affect was influenced by negative feedback, but here, the race of the manager made a difference because the manager and the feedback he had provided were discredited when he happened to be Black.

Observers. As for recipients, I created an index of negative affect terms and an index of positive affect terms (respective Cronbach's alphas = .81 and .88). Scores for the negative affect index are presented in Table 1. Unlike for recipients, there were no significant effects on this measure, all  $F_s(1, 39) < 1.0$ , all  $ps > .50$ . For the positive mood index there was a marginal effect for feedback,  $F(1, 39) = 3.35, p < .08$ , such that participants observing positive feedback reported more positive affect ( $M = 7.83$ ) than did participants observing negative feedback ( $M = 6.99$ ). This may be because it is more

pleasant to watch someone being praised than criticized. Importantly, however, neither the main effect for the manager's race nor the interaction approached significance, both  $F_s < 1.0$ , both  $p_s > .60$ . Thus, whereas the fact that negative feedback was delivered by a Black person had buffered the impact of that feedback on its recipients, no such effect was obtained for observers. The manager's race had no impact on observers' affective reactions.

Study 2: A Black doctor is a doctor when he provides praise but a Black person when he provides criticism

I have now shown in a field study and two experiments (Sinclair & Kunda, 1996), with two different stereotyped groups and two different occupations, that people can selectively disparage evaluators who are members of negatively stereotyped groups: Participants viewed female and Black evaluators as less skilled than White male evaluators after receiving negative evaluations from them but not after receiving positive evaluations. Moreover, Study 1 demonstrated that this effect was due to motivated stereotype application and inhibition. Participants who had been criticized by a Black manager engaged in motivated application of the activated Black stereotype to discredit the evaluator. And those who had been praised by a Black manager engaged in motivated inhibition of the stereotype so as to avoid discrediting this evaluator. In this latter case, participants did not activate or apply the Black stereotype. In what terms, then, were they thinking about the laudatory evaluator?

Like any other person, the Black evaluator in Study 1 belonged to a variety of social categories, each with its stereotype, some positive and some negative. He was not only a Black person, but also a manager, a male, a person in his late twenties, and so on. One possibility, then, is that another stereotype, perhaps a more positive one, was activated in place of the negative Black stereotype. If motivation can lead to the activation of a negative stereotype when one wishes to disparage a group member (Spencer et al., in press), it seems plausible that a positive stereotype could be activated when one wishes to think highly of a group member, as when the person has provided praise. To get the most out of positive feedback, one needs to be able to view the source of the praise as competent. Therefore, if one has just received praise from a member of a negatively stereotyped group whose competency can be questioned, one may wish to activate a positive stereotype so as to quash any doubts about this person's capabilities.



Perhaps then, participants who were praised by a Black manager not only inhibited the negative stereotype of Black people but also activated a more positive stereotype, such as that of managers, in order to think highly of their laudatory evaluator. In contrast, participants who wished to think poorly of the Black manager and who had the Black stereotype activated, may have, at the same time, inhibited the stereotype of managers because if it were activated it would have conflicted with their desired negative impression. More generally, when people form an impression of an individual, they often have access to many competing beliefs. People motivated to reach a desired conclusion about a stereotyped person may be able to pick and choose among the stereotypes associated with the applicable categories this person belongs to. Perceivers may activate those stereotypes that support their desired conclusion of an individual while at the same time inhibiting those that contradict it.

As reviewed in the introduction, only a handful of studies have measured more than one stereotype at a time, but these studies do suggest that characteristics of the target and of the perceiver can influence which stereotype is activated. Moreover, Macrae et al. (1996) have provided evidence that when there are two applicable stereotypes; one of them may be inhibited. And Study 1 showed that directional goals can lead to the selective application and inhibition of a negative stereotype. As yet, however, no studies have shown that the motivation to view a person in a particular way may lead people to pick and choose among applicable stereotypes, activating those that support their desired conclusion and inhibiting those that conflict with it. Studies 2 and 3 do so.

Study 2 was designed to extend the results of Study 1 by showing that people can pick and choose between stereotypes when there are two applicable stereotypes for a given individual. As in Study 1, experimental participants received a positive or negative evaluation of their interpersonal skills, but this time the feedback was provided by a Black doctor, a member of a positively stereotyped group and a negatively stereotyped group, or

by a White doctor. In addition, this study included a no-feedback control group who also completed the interpersonal skills test but did not observe any evaluator. This control group, therefore, provided a baseline for stereotype activation against which the experimental groups could be compared.

As in Study 1, in order to get enough words for the activation task I used category labels and associates as well as stereotypic traits. This time I was even more limited in the stereotypic traits I could use because many of the traits stereotypic of doctors are counterstereotypic of Black people and vice versa. For example, doctors are stereotyped as rich, smart, and hard-working whereas Black people are stereotyped as poor, unintelligent, and lazy. I expected that once category membership was activated, the full range of the category's associates, from negative through neutral to positive, would be activated as well.

I predicted that participants praised by a Black doctor would activate the doctor stereotype in order to maximize the self-enhancing potential of this favorable feedback. I also expected them to inhibit the Black stereotype as did Study 1 participants praised by a Black manager because if it were activated it could lower the evaluator's perceived competency. On the other hand, I expected that participants criticized by the same Black doctor would activate the Black stereotype as did Study 1 participants criticized by a Black manager. I also expected them to inhibit the positive doctor stereotype which, if activated, might undercut their goal of discrediting the harsh evaluator.

In order to bolster the validity of Study 1's findings on stereotype activation and inhibition, a different and more sensitive measure of stereotype activation was used. Instead of the word fragment completion task used in Study 1, participants performed a lexical decision task in which they were asked to indicate whether letter strings were words or non-words. Some of the words were associated with doctors and some were associated with Black people. The drawback with using this measure, however, was that it could

contaminate any measures that came after it. Unlike the word fragment completion task, in which participants had to generate the stereotype words themselves and were not exposed to them if they did not, in the lexical decision task all participants were exposed to all the stereotype words. Even subliminal exposure to such stereotype words can color subsequent judgments (Devine, 1989). Consequently, there is little point in having participants provide ratings of their evaluator following such a lexical decision task, because participants would have just been primed with both the doctor and Black stereotypes, and this priming could contaminate their subsequent judgments. In sum, I expected that participants criticized by a Black doctor would activate the Black stereotype and inhibit the doctor stereotype whereas, participants praised by a Black doctor would activate the doctor stereotype and inhibit the Black stereotype.

#### Method

##### Participants

Participants were 71 male and female non-Black University of Waterloo undergraduates who participated for partial course credit or for pay. Thirteen participants were excluded for disbelieving the cover story; 1 participant was excluded due to an error by the experimenter; and 1 participant was excluded because she mistook the medical doctor for a Ph.D., leaving a total of 56 participants.

##### Procedure

The procedure was identical to that used in Study 1, with several exceptions. As in Study 1, participants were given a cover sheet explaining that the study was part of a collaborative effort with local corporations to develop a training program to teach employers how to use a questionnaire assessing employees' interpersonal skills. This time, however, participants were told that the training program was for people in diverse occupations and not specifically for personnel managers. At no point were participants told they would be evaluated by a medical doctor, one of the stereotypes targeted in this study.

As in Study 1, participants responded to a measure of their interpersonal skills and then observed a videotape depicting a positive or a negative evaluation coming from a White or a Black man. This time, however, the evaluator was portrayed as a medical doctor. He wore a white lab coat and at the beginning of the videotape, before starting in on the feedback, he identified himself as Dr. Anderson from Fairway Medical Clinic. The feedback was identical to that used in Study 1 with the exception that it was re-written to be gender neutral so both males and females could participate.

After participants viewed the feedback videotape, as in Study 1, the experimenter explained that he had to spend some time with the evaluator to go over a few things but that he would return as soon as he could to finish off the study with the participant. After apologizing for the delay, the experimenter asked participants if, while they were waiting, they could complete a computer task for a cognitive psychologist. Participants were then given a cover sheet from the fictitious cognitive psychologist explaining his study and asking participants to help by performing a lexical decision task, instead of the word fragment completion task, this time. In fact, this task was designed to assess the activation of the Black and doctor stereotypes. All participants agreed to complete this task, and none guessed its true purpose when questioned during the debriefing.

Apparatus. The lexical decision task was programmed with Micro-Experimental Laboratory Professional software (Schneider, 1995) and was run on an IBM-compatible computer. The stimuli were presented in the center of the screen as white words on a black background.

Stimuli. The list of letter strings contained 125 words and 75 non-words. Of the 125 words, 10 words were associated with doctors but not with Black people (doctor, physician, nurse, hospital, medical, prescription, lab, appointment, health, and patient), and 12 words were associated with Black people but not with doctors (black, race, color, Africa, gang, dealer, crime, rap, jazz, violent, aggressive, dangerous). These stereotype-

and category-related words were selected from pilot tests and the literature (Devine, 1989; Lepore & Brown, 1997; Wittenbrink et al., 1997). As well, for each stereotype word, a neutral word matched on length and frequency to the stereotype words was included (Kucera & Francis, 1967). The remaining words served as filler words.

The presentation of the letter strings was fixed such that a Black word was presented followed by at least three filler letter strings (words and non-words), followed by a doctor word and then at least three filler letter strings and so on, with the Black and doctor words alternating. This was done in order to reduce the chance that participants would guess the true purpose of the task and to make sure that the task did not prime one of the stereotypes over the other. Within each type of letter string (i.e., Black, doctor, neutral, filler, and non-words) order of presentation was randomized for each participant. During debriefing, when asked if they saw any patterns of words in the lexical decision task, some participants reported they remembered seeing either doctor or Black words, but none were able to guess the hypothesis or what these words were used for.

Task. The participant was seated in front of the computer and asked to follow the instructions on the screen. Participants were told that they would see an orienting stimulus (+) followed by a letter string, and their job was to indicate whether the letter string was a word or a non-word by pressing the appropriate key on the computer. Participants were instructed to respond quickly but accurately. To familiarize participants with the lexical decision task, they were given 10 practice trials initiated by pressing the space bar. After the practice trials, participants started the experimental task which consisted of 20 buffer trials and 200 experimental trials. For these trials, an orienting stimulus was presented for 500 ms, followed by the target which remained on the screen until participants made a response or 2000 ms elapsed.

Control condition. Unlike Study 1, this study also included a no-feedback control group. Control participants completed the interpersonal skills questionnaire as did the

experimental participants but then performed the lexical decision task without receiving feedback. They were led to believe they would be evaluated after the computer task. However, following the lexical decision task participants were informed that the experiment was over and they would not be receiving an evaluation. These participants were also probed for suspicion and given a process debriefing.

## Results and Discussion

Preliminary analyses. The principal dependent measure was the mean time (in milliseconds) taken by participants to classify the stereotype-related words as words. Trials on which participants responded incorrectly ( $M = 2.42\%$ ) or after the time limit ( $M = 0.08\%$ ) were discarded for these words. The error data, for the most part, do not contradict the RT data and are presented with the RT data in the appropriate figures. In addition, trials on which participants responded more than three standard deviations away from the mean for that word were discarded. These were distributed equally across conditions and individuals. The number of words excluded per participant ranged from 0 to 2 with a mean of .02 for Black words and a mean of .01 for doctor words.

Overview of analyses. Preliminary inspections of the means for the stereotype words revealed that participants who had received feedback were slower at recognizing these words than participants who had not received feedback. Neutral words, therefore, were used as a covariate to adjust for differences in responding between the experimental and control groups.

This study had a 2 (Feedback) X 2 (Doctor race) design with an additional non-orthogonal control group of participants who did not receive feedback<sup>4</sup>. I averaged the RTs for the doctor words and for the Black words to create two indexes. Each index was analyzed separately and is presented separately. For each, the data from the factorial design were analyzed with a 2 X 2 analysis of covariance (ANCOVA). Next, a one way

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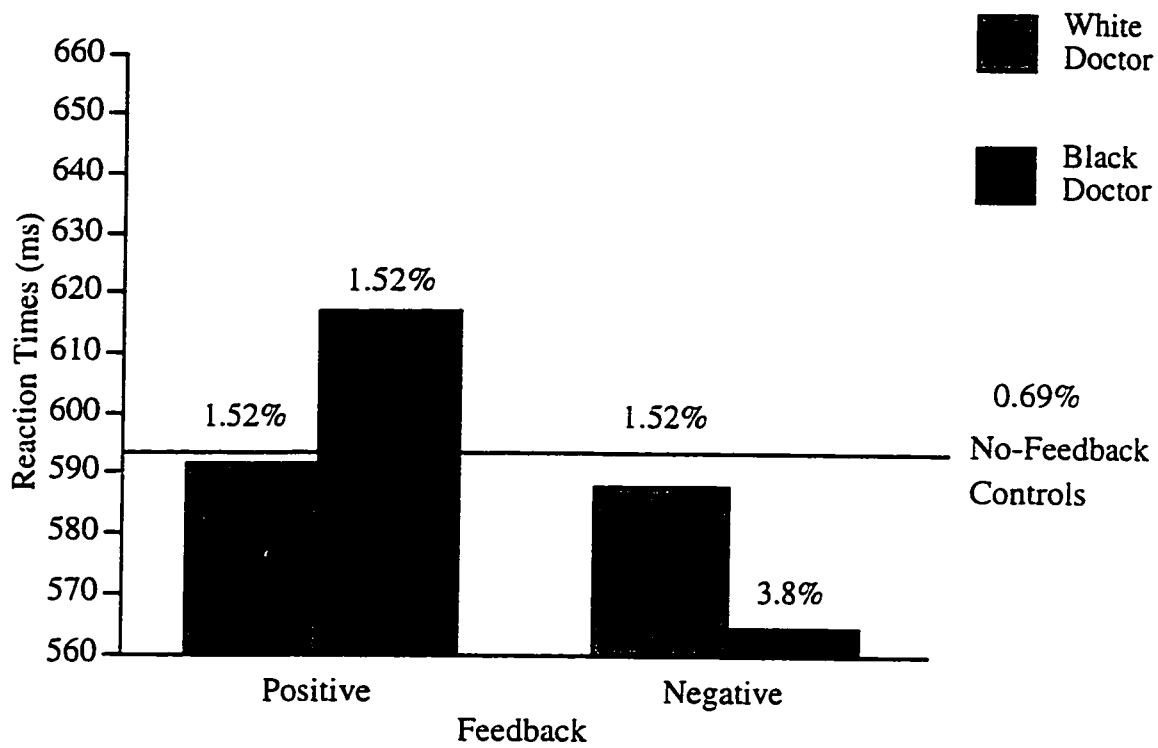
<sup>4</sup>There were no significant effects for gender in Studies 2 or 3.

ANCOVA with five conditions was performed on these data. This provided the error term used in contrasts among these conditions.

Black words. The mean RTs for the index of Black words are presented in Figure 5. The 2 X 2 ANCOVA revealed a significant effect for feedback on this measure such that participants who had received negative feedback ( $M = 583.16$ ) activated the Black stereotype to a greater degree than did participants who had received positive feedback ( $M = 610.98$ ),  $F(1,39) = 5.81$ ,  $p < .05$ . However, this effect was qualified by a significant interaction such that participants criticized by a Black doctor activated the Black stereotype, whereas participants praised by the same Black doctor inhibited the Black stereotype,  $F(1, 39) = 4.54$ ,  $p < .05$ . Contrasts using the error term from the one-way ANCOVA revealed that participants who received feedback from a White evaluator did not differ from control participants who received no feedback, all  $ps > .75$ . Therefore, these three groups not exposed to a Black evaluator were combined to create a baseline condition. As expected, participants receiving negative feedback from a Black doctor activated the Black stereotype; they were quicker at recognizing Black words than were the baseline participants,  $F(1, 50) = 4.08$ ,  $p < .05$ . In contrast, participants who received positive feedback from a Black doctor inhibited the Black stereotype; they were slower at recognizing Black words than were the baseline participants,  $F(1, 50) = 4.55$ ,  $p < .05$ .

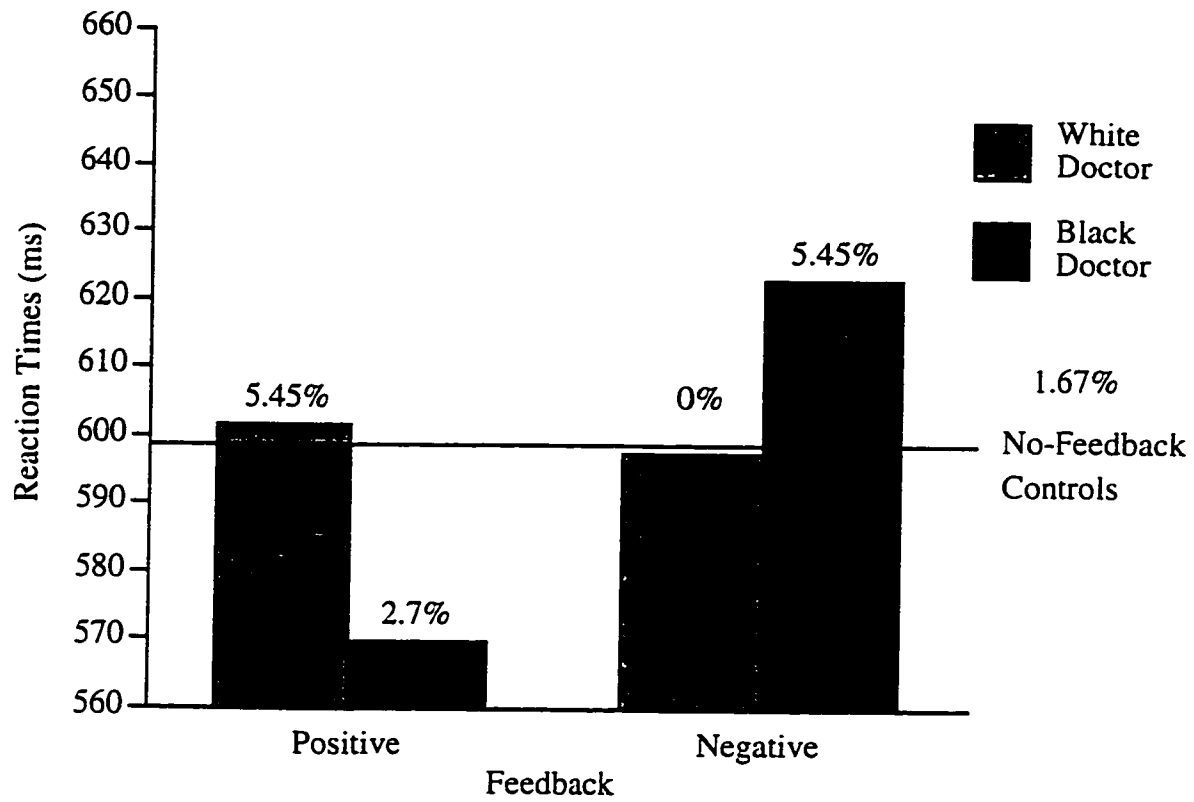
In sum, these findings successfully replicated those obtained in Study 1a. Participants activated the Black stereotype when criticized by a Black evaluator and inhibited this stereotype when praised by a Black evaluator. This study used a different measure of stereotype activation, therefore, these results add convergent validity to the earlier findings.

Doctor words. The mean RTs for the index of doctor words are presented in Figure 6. The 2 X 2 ANCOVA revealed a significant effect for feedback on this measure such that participants who had received positive feedback ( $M = 595.93$ ) activated the doctor



**Figure 5.** Adjusted mean reaction times for the Black words as a function of feedback favorability and the doctor's race (Study 2).





**Figure 6.** Adjusted mean reaction times for the doctor words as a function of feedback favorability and the doctor's race (Study 2).

stereotype to a greater degree than did participants who had received negative feedback ( $M = 620.34$ ),  $F(1,39) = 6.74$ ,  $p < .05$ . However, this effect was qualified by a significant interaction such that participants criticized by a Black doctor inhibited the doctor stereotype, whereas participants praised by the same Black doctor activated the doctor stereotype  $F(1, 39) = 9.20$ ,  $p < .005$ . Contrasts using the error term from the one-way ANCOVA revealed that, here too, participants who received feedback from a White evaluator did not differ from control participants who received no feedback, all  $ps > .75$ . Therefore, these three groups were combined to create a baseline condition. As expected, participants receiving negative feedback from a Black doctor inhibited the doctor stereotype; they were slower at recognizing doctor words than were baseline participants,  $F(1, 50) = 4.84$ ,  $p < .05$ . In contrast, participants who received positive feedback from a Black doctor activated the doctor stereotype; they were faster at recognizing doctor words than were the baseline participants,  $F(1, 50) = 8.74$ ,  $p < .005$ .

In sum, participants activated the doctor stereotype when praised by a Black doctor and inhibited this stereotype when criticized by a Black doctor. It appears that motivated activation and inhibition of stereotypes is not limited to negative stereotypes. Positive stereotypes may be activated when one wishes to think highly of an individual and inhibited when one wishes to think poorly of an individual.

Interestingly, participants given feedback by a White doctor did not activate or inhibit the doctor stereotype. Their RTs were no different from baseline participants who received no feedback and were not exposed to any doctor, which may seem surprising. It was predicted that participants who received positive feedback would activate an applicable positive stereotype so as to maximize the self-enhancing benefits of the feedback. One might, therefore, have expected participants praised by a White doctor to activate the doctor stereotype; after all, they too were motivated to think highly of their laudatory evaluator. Perhaps, participants praised by a White doctor did not activate the doctor stereotype

because they could readily form their desired impression of him even without doing so. A White doctor may normally be assumed to be competent, therefore, there was no need to further bestow credibility on him. Put somewhat differently, participants praised by a White doctor did not need to activate the doctor stereotype because there was never any challenge to this doctor's competence. In contrast, the Black doctor's credibility may have been under suspicion by virtue of his race. Consequently, this may have led participants praised by a Black doctor to activate the stereotype of doctor to counteract the threat to their evaluator's competency posed by the negative Black stereotypes. It appears that when one wishes to think highly of another person, one only needs to activate a positive stereotype if the desired impression is challenged by other negative information such as an applicable negative stereotype.

A different account is needed to explain why the doctor stereotype was not inhibited by participants criticized by a White doctor. Like participants criticized by a Black doctor, these participants might also have been expected to inhibit the doctor stereotype; receiving negative feedback from a White doctor may be even more threatening than receiving negative feedback from a Black doctor, especially if a White doctor is seen as more competent than a Black doctor. Therefore, one might have expected that these participants would have been even more likely to inhibit the stereotype of doctors. This, however, was not the case. Perhaps, participants criticized by a White doctor were unable to inhibit the doctor stereotype because there was no alternative stereotype to replace it with. One's ability to inhibit an applicable stereotype may depend on the availability of plausible alternatives.

The finding that participants selectively activated and inhibited the doctor stereotype for a Black doctor but not for a White doctor suggests that the activation and inhibition of a stereotype applicable to an individual may at times be influenced by the other stereotypes applicable to that individuals. Researchers examining the activation of a single applicable

stereotype should recognize that very different patterns of stereotype activation may occur when more is known about the stereotyped individual.

This study suggests that when more than one possible stereotype is available, people strategically activate and inhibit stereotypes so as to reach a desired impression of an individual. They can pick and choose among available stereotypes, activating stereotypes that will support a desired conclusion and inhibiting stereotypes that conflict and interfere with this conclusion. As a result, the same individual may be viewed quite differently depending on the goals of the perceiver. This study suggests that a Black doctor will be viewed as a doctor after providing praise but as a Black person after providing criticism.

Note, however, that this study did not include an observer group. Therefore, it is unclear whether the activation of the Black stereotype by participants criticized by a Black doctor and the activation of the doctor stereotype by participants praised by a Black doctor was due to motivation to form desired impressions of the evaluator or to the mere exposure to a group member. The evidence for motivated inhibition, however, is solid. Participants were exposed to a Black doctor who might be expected to cue the activation of the Black stereotype and of the doctor stereotype, but instead, this evaluator cued the inhibition of the Black stereotype when he provided praise and the doctor stereotype when he provided criticism.

In two studies, with two different measures, I have found that people praised by a Black evaluator inhibited the Black stereotype so as to avoid casting any doubts on his credibility. Such motivated stereotype inhibition should only occur, however, if the competence of the Black person is under suspicion in the first place. Ironically, then, only individuals for whom the Black stereotype would spontaneously come to mind, namely high-prejudice individuals, should feel the need to inhibit the Black stereotype when they wish to think highly of a Black person. Study 3 addresses this point.

### Study 3: Prejudice and motivated inhibition of the Black stereotype

The main purpose of Study 3 was to explore the role of racial prejudice in the motivated inhibition of the Black stereotype. Thus far, it has been suggested that a stereotype will be inhibited if, when activated, it would lead one to form the opposite conclusion of the one desired. If this account of inhibition is true, then it should only be found for people who normally spontaneously activate a stereotype that could threaten their desired impression. Only high-prejudice individuals should inhibit the Black stereotype when motivated to think highly of a Black individual because only they would otherwise activate that stereotype.

Although both high- and low-prejudice individuals are aware of the negative stereotype of Black people, only high-prejudice individuals spontaneously activate it when primed with affectively-neutral words related to the Black stereotype or with photographs of Black individuals (Fazio et al., 1995; Kawakami et al., 1998; Lepore & Brown, 1997; Wittenbrink et al., 1997). It has also been shown that high-prejudice people are more likely than low-prejudice people to attend to information about race when viewing a Black person who is multiply categorizable. Low-prejudice people, on the other hand, are more likely to attend to other information about the person, such as the person's occupation (Fazio & Dunton, 1997; Stangor et al., 1992). Thus, when a Black doctor provides praise, only high-prejudice individuals should spontaneously activate the Black stereotype which will threaten their desired impression of their evaluator. As a result, only they should need to inhibit the stereotype. Low-prejudice participants should not need to inhibit the negative Black stereotype because, for them, it should not spontaneously spring to mind and interfere with their desired conclusion.

A second goal of this study was to determine whether activation of the doctor stereotype by participants receiving praise from a Black doctor in Study 2 was due to the motivation to think highly of this Black doctor rather than to their mere exposure to this

individual. Therefore, an observer condition was included, as in Study 1. Recall that in Study 1, exposure to a Black person led to the activation of the Black stereotype not only by recipients of negative feedback from a Black manager but also by detached observers who watched a Black manager provide feedback to someone else. The motivation to disparage the harsh Black evaluator did not appear to further increase stereotype activation. Motivated activation may not have been found in this study because the Black evaluator provoked spontaneous activation of that stereotype even in the absence of motivation, leaving little room for further stereotype activation through motivation. Study 2 suggests, however that, in some circumstances at least, the doctor stereotype is not spontaneously activated in the absence of motivation. Although participants praised by a Black doctor activated the doctor stereotype, participants praised by a White doctor did not. A doctor, then, may not always give rise to spontaneous activation of the doctor stereotype, thus leaving room for motivated stereotype activation. It is not obvious though, that it was motivation that led participants praised by a Black doctor to activate the doctor stereotype because Study 2 did not include an observer group. Perhaps the surprise of seeing a Black doctor was enough to trigger the activation of the doctor stereotype even in the absence of motivation. The inclusion of detached observers in Study 3 should clarify this issue.

I expected that high-prejudice participants praised by a Black doctor would activate the doctor stereotype as did participants in Study 2. It is unclear, however, whether low-prejudice recipients would do the same. It is possible that they would be just as motivated as high-prejudice individuals to boost the credibility of a Black doctor by activating the doctor stereotype. Alternatively, it may be that one only needs to activate positive stereotypes in such circumstances if the evaluator's competence is under suspicion. Recall that, unlike participants praised by a Black doctor, those praised by a White doctor in Study 2 did not activate the doctor stereotype. If low-prejudice individuals are truly colorblind, they may react to the Black doctor as they would to a White doctor; if this were the case,

low-prejudice participants praised by a Black doctor would not activate the doctor stereotype.

## Method

### Overview

To test the prediction that only high-prejudice participants would inhibit the negative Black stereotype when motivated to think highly of a Black person, high- and low-prejudice individuals either received praise from a Black doctor (motivated recipient condition), watched someone else receive praise from a Black doctor (yoked observer condition), or were not exposed to an evaluator (no-feedback baseline condition).

### Participants and selection criteria

Participants were 83 male and female University of Waterloo undergraduates enrolled in Introductory Psychology who participated for partial course credit. None of the participants was Black, and one participant was excluded from the analyses because she came to the study with her Hispanic boyfriend. Seven additional participants were excluded for disbelieving the cover story and 2 participants were excluded because of high error rates, leaving a total of 72 participants.

At the beginning of the term, participants filled out a lengthy prescreening measure that included a version of the Modern Racism Scale (MRS, McConahay, Hardee, & Bats, 1981) adapted for the Canadian context (e.g., "There are too many foreign students being allowed to attend university in Canada," "Minorities are getting too demanding in their push for special rights". See Appendix E for the entire scale). The scale consists of 10 items and responses ranged from -4 (*very strongly disagree*) to 4 (*strongly agree*) so scores can range from -40 to 40 with higher scores indicating greater prejudice.

Participants were divided at the median into high- and low-prejudice groups based on their scores on the MRS (Mdn = -11.00). Each recipient was then matched with an observer who had an approximately similar prejudice score (maximum of  $\pm 5$  points) and

was of the same gender. Furthermore, for each of these pairs of participants, a no-feedback participant with the same prejudice level designation (i.e., high or low prejudice) and gender was run. The design was thus 2 (Prejudice level: high vs. low) X 3 (Participant type: recipient, observer, control).

### Procedure

Recipients and no-feedback controls. The procedure and materials for the recipient and no-feedback groups were identical to Study 2. Both recipients and controls completed a test of interpersonal skills and then recipients received a positive evaluation from a Black doctor. Both groups then performed a lexical decision task to measure the activation of the doctor and Black stereotypes.

Observers. The procedure for observers was identical to that of Study 1, with the exception that the modifications made for Study 2 were also made here. Each observer participant listened to the audiotape of the recipient participant's responses, and then viewed the same evaluation videotape of the Black doctor giving positive feedback that the yoked recipient participant had viewed. After viewing the evaluation videotape, participants were informed that they had to wait 10 minutes before proceeding so as to maximize similarity to the procedures in the training program and were asked to complete a lexical decision task for another investigator while they were waiting. Following, the lexical decision task, all participants were probed for suspicion and given a process debriefing as in Study 1.

### Dependent measures

Stereotype activation measure. The lexical decision task was identical to the one used in Study 2.

## Results and Discussion

Modern Racism Scale. To ensure that within each prejudice level, recipients, observers, and controls did not differ in prejudice level, a 2 (Prejudice level) X 3



(Participant type) ANOVA was conducted on the MRS scores. The means for the six conditions are presented in Table 2. By definition, high-prejudice individuals had higher MRS scores ( $M = -0.87$ ) than low-prejudice individuals ( $M = -22.62$ ),  $F(1, 66) = 138.59$ ,  $p < .001$ . There were no effects for feedback or for the interaction (both  $ps > .45$ ).

Table 2

Modern Racism scores as a function of participant type and prejudice level.

Prejudice Level	Participant Type		
	Recipient	Control	Observer
High Prejudice	-1.62	0.90	-1.90
Low Prejudice	-21.67	-22.92	-23.15

Preliminary analyses. The principal dependent measure was the mean time (in milliseconds) taken by participants to classify the stereotype-related words as words. Trials on which participants responded incorrectly ( $M = 1.50\%$ ) or after the time limit ( $M = 0.25\%$ ) were discarded for these words. The error data, for the most part, do not contradict the RT data and are presented with the RT data in the appropriate figures. In addition, trials on which participants responded more than three standard deviations away from the mean for that word were discarded. These were distributed equally across conditions and individuals. The number of words excluded per participant ranged from 0 to 2 with a mean of .03 for Black words and a mean of .01 for doctor words. As in Study 2, I averaged the RTs for the doctor words and for the Black words to create two indexes. Each index was analyzed separately and is presented separately.

Black words. Participants' RTs for the index of Black words were analyzed with a 2 (Prejudice level) X 3 (Participant type) ANCOVA, with neutral words as the covariate<sup>5</sup>.

<sup>5</sup>Overall there were 17 threesomes of matched participants. Some participants were not part of a threesome because their partner was excluded or because there were no participants with which to match the person by

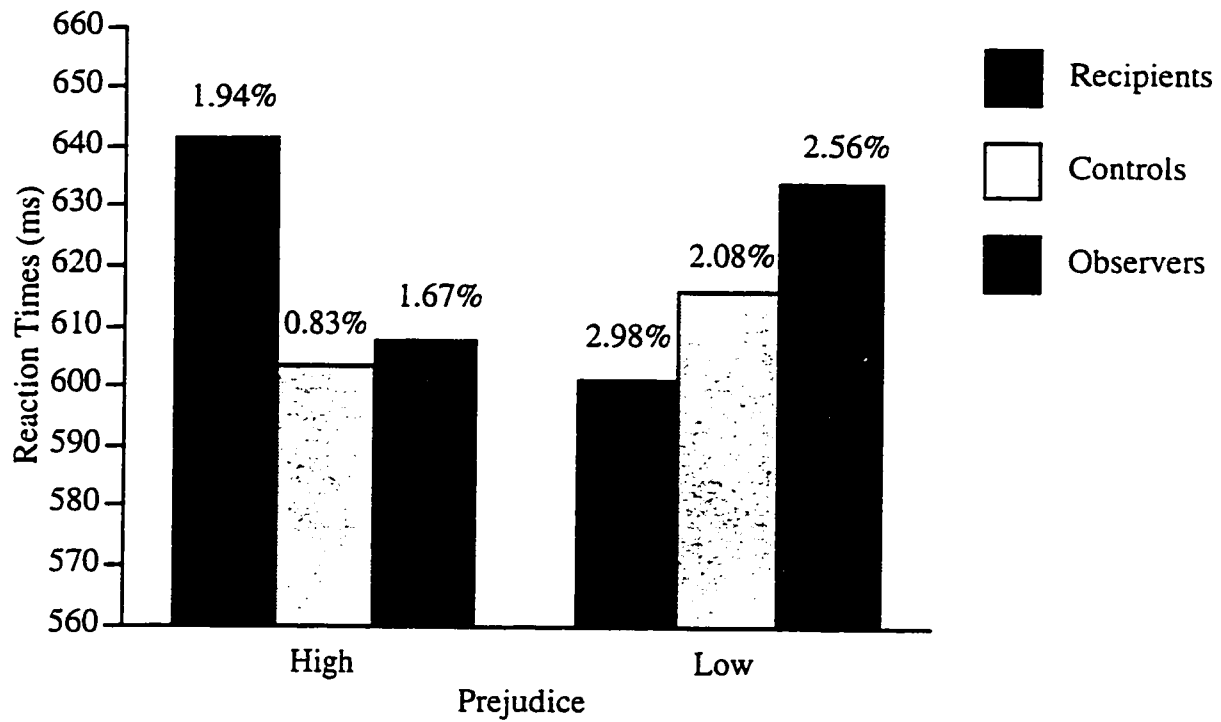
This analysis yielded a significant interaction,  $F(2, 65) = 5.75, p = .005$ . As may be seen in Figure 7, high-prejudice recipients of positive feedback from a Black doctor inhibited the Black stereotype; they were slower to recognize Black words than were control high-prejudice participants who had not been exposed to any Black individual,  $F(1, 65) = 5.88, p < .05$ . This inhibition appears to be due to motivation because high-prejudice observers, who had been exposed to the same Black doctor but were not motivated to view him positively, showed no such inhibition; their RTs for the Black words did not differ from those of high-prejudice control participants,  $F(1, 65) = 0.05, p = .82$ .

In contrast to high-prejudice recipients, low-prejudice recipients of positive feedback from a Black doctor did not inhibit the Black stereotype; their RTs did not differ significantly from those of low-prejudice controls,  $F(1, 65) = 1.09, p = .30$ . Low-prejudice observers' RTs for the Black words also did not differ from those of low-prejudice control participants,  $F(1, 65) = 1.44, p = .23$ .

Note that, unlike in Study 1, observers, regardless of their level of prejudice, did not activate the Black stereotype. It is encouraging that merely observing a Black individual did not lead to the spontaneous activation of the Black stereotype. There are several reasons why Studies 1 and 3 yielded different results for the activation of the Black stereotype in detached observers of a Black individual. A different Black confederate was used in Studies 1 and 3, therefore, the two individuals may have differed on some dimension which prompted the activation of the Black stereotype by the confederate in Study 1 but not by the confederate in Study 3. More interestingly, the two Black evaluators were members of different occupational groups. Perhaps, the Black stereotype more readily comes to mind for a Black manager than for a Black doctor. This could be because the doctor stereotype is more counterstereotypic of the Black stereotype than is the manager stereotype.

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the end of term. Consequently, I analyzed the data with feedback (recipient, observer, and no feedback) as a between-subjects factor.



**Figure 7.** Adjusted mean reaction times for the Black words as a function of prejudice level and participant type (Study 3).

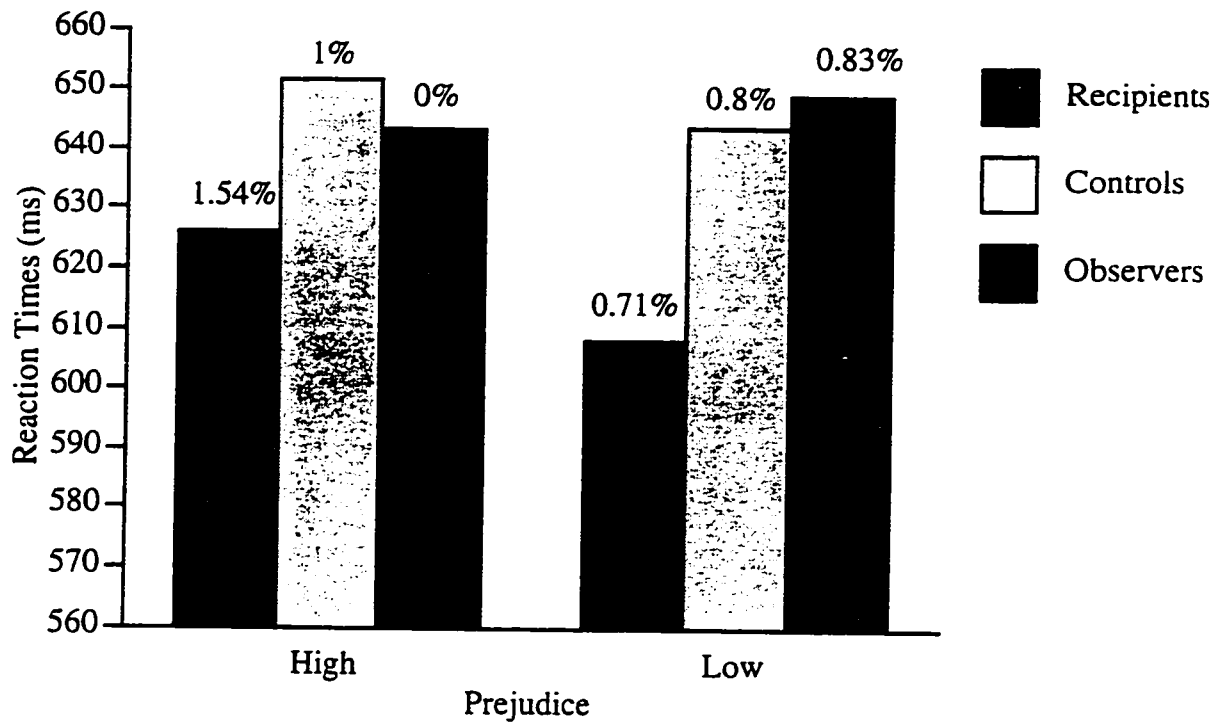
In sum, only high-prejudice recipients of praise from a Black doctor engaged in motivated inhibition of the Black stereotype. This is presumably because only high-prejudice participants would otherwise activate the stereotype and, therefore, only they needed to inhibit it in order to view their evaluator positively.

Doctor words. Participants' RTs for the index of doctor words also were analyzed with a 2 (Prejudice level) X 3 (Participant type) ANCOVA, with neutral words as the covariate<sup>6</sup>. As may be seen in Figure 8, there was a significant main effect of feedback,  $F(2, 64) = 4.10, p < .05$ , such that recipients ( $M = 617.00$ ) showed faster RTs than the observers ( $M = 646.08$ ),  $F(1, 64) = 5.65, p < .05$  and no-feedback controls ( $M = 647.57$ ),  $F(1, 64) = 6.23, p < .05$ . This activation appears to be due to motivation rather than mere exposure to a Black individual because observers showed no such activation; they did not differ significantly from controls,  $F(1, 64) = 0.01, p = .91$ . Neither the main effects of prejudice nor the interaction was significant, both  $ps > .50$ . Thus, recipients of positive feedback from a Black doctor engaged in motivated activation of the doctor stereotype regardless of their prejudice level.

It is interesting that both high- and low-prejudice participants who received praise from a Black doctor were motivated to activate the doctor stereotype despite the fact that only high-prejudice participants inhibited the Black stereotype. It appears that even the low-prejudice recipients were not impervious to their evaluator's skin color. Unlike participants praised by a White doctor in Study 2 and low-prejudice observers in this study, low-prejudice recipients did activate the doctor stereotype. Together, these findings imply that low-prejudice individuals may react differently to a White and a Black doctor. This conclusion, however, should be interpreted with caution because it is based on a comparison between two different studies. Still, it is interesting to speculate on the causes

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<sup>6</sup>One participant was excluded from this measure because his response was more than three standard deviations away from the mean.



**Figure 8.** Adjusted mean reaction times for the doctor words as a function of prejudice level and participant type (Study 3).

of this difference. Perhaps low-prejudice participants still entertained a hint of suspicion about the Black doctor's credibility . This suspicion may not have been powerful enough to provoke inhibition of the Black stereotype but it appears to have been powerful enough to provoke activation of the doctor stereotype. Even low-prejudice participants may feel the need to boost the credibility of a Black doctor by activating the doctor stereotype.

## General Discussion

Taken together, Studies 1 through 3 suggest that self-protective motives can lead to the activation, application, and inhibition of stereotypes to support a desired conclusion about a stereotyped evaluator. People receiving a negative evaluation from a Black evaluator were motivated to challenge the competence of this evaluator so as to protect themselves from the self-deflating consequences of the negative evaluation. They accomplished this goal by applying a negative stereotype to the evaluator and by inhibiting an applicable positive stereotype that, if activated, might have undermined their ability to discredit this evaluator. In contrast, people receiving positive feedback from a negatively stereotyped individual were motivated to view the evaluator as competent so as to maximize the self-enhancing potential of the positive evaluation. They accomplished this goal by activating a positive stereotype that could boost this person's credibility and inhibiting a negative stereotype that, if activated, might have challenged their evaluator's competence. Study 3, however, demonstrated that a negative stereotype which challenges a desired positive impression will only be inhibited if it would otherwise be activated spontaneously. Only high-prejudice recipients of praise from a Black doctor inhibited the Black stereotype when they wished to think highly of this individual.

Such self-protective motives appear to have been responsible for Study 1's finding that a Black evaluator was disparaged after providing negative feedback but not after providing positive feedback, because this finding was not obtained for detached observers who had harbored no such motives. As well, Study 1 provides some evidence that recipients of negative feedback from a Black person were successful at protecting themselves from the self-deflating implications of the negative feedback. They showed less negative affect than did participants who had received the same negative feedback from a White evaluator. No such differences in affective reactions were obtained for recipients of positive feedback or for observers. This suggests that disparaging the harsh Black

evaluator may have served to buffer participants from the affective consequences of the negative evaluation they had received from him. Note, however, that such self-protective processes may be costly. They may prevent one from extracting useful conclusions from negative feedback and from attempting to improve one's shortcomings.

#### Motivated application and activation of stereotypes

I found evidence for motivated activation as well as motivated application of stereotypes. In Study 3, participants who had received positive feedback from a Black doctor activated the doctor stereotype; they were faster to identify doctor words on a lexical decision task than no-feedback control participants who had not been exposed to a doctor. Detached observers, on the other hand, did not activate the doctor stereotype. Thus, the motivation to think highly of the doctor rather than mere exposure to a Black person led recipients of positive feedback to activate the doctor stereotype in order to support their desired impression. Interestingly, participants who had received feedback from a White doctor did not activate the doctor stereotype. It appears, then, that motivation only led participants to activate the doctor stereotype when their evaluator's credibility could be challenged. These results are consistent with the findings of Spencer et al. (in press) that when a stereotype is not activated spontaneously it may be activated by motivation.

It was also found that when a stereotype is activated spontaneously, motivation may lead to its application to an individual. In Study 1, participants who had received negative feedback from a Black evaluator did activate the Black stereotype, but not to a greater degree than did the detached observers in Study 1 who had seen a stranger receive negative feedback from the same Black evaluator. This suggests that the motivation to disparage their harsh Black evaluator did not lead feedback recipients to activate the Black stereotype above the level triggered by mere exposure to that Black individual in the absence of such motivation. However, recipients did appear to engage in motivated application of the activated stereotype to their evaluator. Although observers and recipients of a negative



evaluation by a Black evaluator activated the Black stereotype to the same degree, only the recipients used this stereotype to evaluate the evaluator; only they judged him as less competent than the harsh White evaluator. Moreover, only recipients of feedback from a Black evaluator appeared to base his evaluation on the extent to which the Black stereotype was activated in their minds; there was a significant negative correlation between stereotype activation and evaluator evaluation for recipients of feedback from a Black evaluator, but not for observers of such feedback.

It is clear that participants motivated to discredit their harsh Black evaluator were able to do so by relying on the reactions that his race had evoked in them; they were unable to similarly discredit their harsh White evaluator. It is less clear precisely which reactions they relied on. They may have used the negative stereotypic beliefs about Black people activated by this Black individual to justify disparaging him (e.g., “Black people tend to be incompetent, so this one must be too”). Alternatively, they may have used more generalized negative attitudes or feelings activated by the Black person to gauge their evaluation of him (e.g., “My negative feelings reflect my negative evaluation of this person”). Although I did not assess such feelings, exposure to Black individuals has been shown to activate negative affect (Fazio et al., 1995). It therefore stands to reason that when the Black category and stereotype were activated, negative attitudes were activated as well. People have been found to use such feelings to inform their judgments (for a review, see Schwarz, 1990). Note that these two mechanisms are not mutually exclusive; both stereotypic beliefs about Black people and negative attitudes towards them may have contributed to the disparagement of the harsh Black evaluator.

To summarize, it was found that motivation can lead to the activation of a positive stereotype when people wish to think highly of a member of a stereotyped group and it can also lead to the application of a negative stereotype when people wish to think poorly of a group member.

### Motivated inhibition of stereotypes

I found strong evidence for motivated inhibition of stereotypes with two different measures, a word fragment completion questionnaire and a lexical decision task. Participants who had received positive feedback from a Black evaluator inhibited the Black stereotype; they showed lower levels of stereotype activation than did participants who had received the same positive feedback from a White evaluator and for whom the Black stereotype was never cued (Studies 1 and 2) and than did participants who did not receive any feedback (Studies 2 and 3). No such stereotype inhibition was found for detached observers (Studies 1 and 3). This motivated inhibition, however, was restricted to high-prejudice individuals in Study 3, as will be discussed shortly. It appears, then, that the motivation to avoid disparaging their laudatory Black evaluator led participants to suppress the activation of the Black stereotype even below its normal level of activation.

Evidence was also found for the motivated inhibition of a positive stereotype. Participants who had received negative feedback from a Black doctor inhibited the doctor stereotype; they showed slower RTs to doctor words than did participants who had received the same negative feedback from a White evaluator or participants who did not receive feedback but who were led to believe they would be evaluated (Study 2). It cannot be said unequivocally, however, that these results were due to motivation because this study did not have an observer group. Presumably, however, participants inhibited this stereotype because, if activated, it would have threatened their ability to discredit their harsh evaluator.

It is interesting that motivation can provoke the inhibition of knowledge structures. Some theorists have speculated about the possibility of such motivated inhibition (Pyszczynski & Greenberg, 1987), but I believe that this dissertation is the first empirical demonstration of such a process. It is particularly interesting and encouraging that motivation can inhibit the activation of the Black stereotype in the presence of a Black

individual, an activation which, since the pioneering work of Devine (1989), has often been assumed to be inevitable (Bargh, in press). In this case, the motivation to inhibit the stereotype stemmed from self-enhancement goals. But if these goals can provoke stereotype inhibition, perhaps other goals can too. Most importantly, the goal of avoiding prejudice may also lead to stereotype inhibition and, thereby, curtail the subtle and unintended consequence of activated stereotypes for person perception (Devine, Monteith, Zuwerink, & Elliot, 1991; Monteith, 1993).

It is important to note, however, that although stereotype suppression may be successful at first, it may backfire in the long run. Once individuals let down their guards and stop trying to avoid stereotyping, suppressed stereotypes, like other suppressed thoughts, can become hyperaccessible and show a rebound effect, leading to even greater stereotyping (Macrae et al., 1994; Wegner, 1994; for a review, see Monteith et al., 1998). The finding that individuals can pick and choose among available stereotypes suggests one promising lead for stereotype control. If people can learn to focus on and activate a target individual's positive stereotypes perhaps there will be no need for them to also inhibit the negative stereotypes the target individual also belongs to (cf. Bargh, in press). Indeed, low-prejudice participants praised by a Black doctor activated the doctor stereotype but did not inhibit the Black one.

Results in this dissertation also hint at the possibility that observers may have inhibited the application of activated stereotypes in a manner consistent with Devine's (1989) analysis. Participants who had observed a Black individual deliver feedback to someone else did activate the Black stereotype, but did not apply it to their evaluation of this Black individual. Their evaluations of the Black evaluator were unrelated to the extent to which they had activated the Black stereotype, and were just as positive as were observers' evaluations of the White evaluator. Perhaps, then, these observers were inhibiting the extent to which the activated stereotype was allowed to color their judgments

of the target. If this were the case, then the finding that recipients of negative feedback from a Black evaluator did apply the Black stereotype to his evaluation, thereby discrediting his competence, may reflect a breakdown of normal inhibitions on stereotype application.

Earlier work implies that fatigue may reduce people's ability to inhibit stereotype application (Bodenhausen, 1990). These findings suggest that the motivation to disparage a stereotyped individual may do the same.

#### Motivated selection among positive and negative stereotypes

I also found evidence for motivated selection among conflicting stereotypes. In Studies 2 and 3, participants received feedback from an individual for whom both the doctor and Black stereotype were applicable. It was found that participants who were motivated to think highly of a Black doctor, because he had provided them with positive feedback, activated the stereotype of doctors to support this goal. These participants could just as easily have activated the Black stereotype for this evaluator but, instead, they inhibited it. It appears that participants maximized the self-enhancing benefits of receiving positive feedback by activating a positive stereotype and inhibiting a negative stereotype that, if activated, would have interfered with this goal. Participants with the opposite goal of protecting themselves from the self-deflating consequences of receiving negative feedback showed the opposite pattern of stereotype activation. This time, they activated the Black stereotype and inhibited the doctor stereotype. Importantly, different goals can lead one to activate very different stereotypes for the same individual. Study 2 suggests that a Black doctor will be seen as a doctor when providing praise but as a Black person when providing criticism.

#### Motivated inhibition and prejudice

I have suggested that people will only inhibit a stereotype when it challenges a desired conclusion about a stereotyped person. Only people for whom a stereotype that can conflict with a wished for impression comes to mind spontaneously should attempt to

inhibit that stereotype. In line with this reasoning, it was found that only high-prejudice participants, who would normally activate the Black stereotype upon exposure to a Black individual, resorted to inhibiting the Black stereotype when praised by a Black doctor. Low-prejudice participants, on the other hand, did not inhibit the Black stereotype. Most probably, they had little need to because the Black stereotype does not normally spring to mind for them and, therefore, does not threaten their desired conclusions. It appears that motivation will only lead one to inhibit a stereotype that would otherwise be activated and conflict with a desired impression. This adds to recent research showing that high- and low-prejudice people have different patterns of stereotype activation (Fazio et al., 1995; Kawakami et al., 1998, Lepore & Brown, 1997; Wittenbrink et al., 1997). Earlier research showed that knowledge of a stereotype need not lead to stereotype activation. By the same token, it need not lead to stereotype inhibition.

I did not examine whether prejudice level would also lead to differences in motivated activation of the Black stereotype. It might be expected that, on the one hand, only high-prejudice individuals would activate it and use it to derogate a critical Black evaluator because only they believe so strongly in the negative Black stereotype. Low-prejudice people might not denigrate a Black evaluator to the same degree or, even if they do, their evaluations might be driven by other types of negative information about their evaluator rather than by race. On the other hand, because low-prejudice individuals are aware of the negative Black stereotype they may be able to activate it when necessary. Indeed, it has been shown that when reminded of negative aspects of the Black stereotype, low-prejudice individuals are just as likely as high-prejudice people to activate it (Devine, 1989; Lepore & Brown, 1997). Unfortunately, because stereotypes are so well known within a culture, they may provide an especially salient and insidious excuse for derogating a person (Fein & Spencer, 1997).

It is also interesting that there were no differences in prejudice level for the motivated activation of the doctor stereotype. It may be recalled that participants who were praised by a White doctor did not activate the doctor stereotype. This was presumably because the White doctor's competence was not in question, therefore, participants did not have to activate it in order to benefit from his praise. It might be expected for low-prejudice participants then, that a Black doctor's competence would also not be questioned because they do not activate the Black stereotype. Therefore, they should also not be motivated to activate the doctor stereotype. This, however, was not the case. Recipients of positive feedback from a Black doctor did engage in motivated activation of the Black stereotype regardless of their prejudice level. It appears, then, even low-prejudice individuals may need to boost the credibility of a Black doctor by activating the doctor stereotype.

### Conclusion

These findings add to a growing body of research showing motivation can affect the activation of knowledge structures (for reviews, see Kruglanski, 1996; Kunda, 1990, in press). It also shows that motivation can lead to the inhibition of knowledge structures. In this dissertation, I focused on stereotype inhibition. It seems plausible, however, that motivation could lead one to inhibit other types of information, for example self-knowledge or attitudes, that could threaten a desired conclusion about the self or another person. In studying motivated reasoning, it is important to look not only at what information people bring to their decisions but also what information they push out of their minds when attempting to justify a desired conclusion.

## References

- Adams, B. D. & Kunda, Z. (1996). Do stereotypes recede over time? Paper presented at the American Psychology Association conference, Toronto, Ontario.
- Amir, N., Foa, E. B., & Coles, M. E. (1998). Automatic activation and strategic avoidance of threat-relevant information in social phobia. Journal of Abnormal Psychology, 107, 285-290.
- Anderson, M. C., & Spellman, B. A. (1995). On the status of inhibitory mechanisms in cognition: Memory retrieval as a model case. Psychological Review, 102, 68-100.
- Bargh, J. A. (in press). The cognitive monster: The case against the controllability of automatic stereotype effects. In S. Chaiken & Y. Trope (Eds.), Dual process theories in social psychology. New York: Guilford.
- Bargh, J. A., Chen, M., & Burrows, L. (1996). Automaticity of social behavior: Direct effects of trait construct and stereotype activation on action. Journal of Personality and Social Psychology, 71, 230-244.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51, 1173-1182.
- Beech, A., Powell, T., McWilliam, J., & Claridge, G. (1989). Evidence of reduced "cognitive inhibition" in schizophrenia. British Journal of Clinical Psychology, 28, 110-116.
- Benoit, G., Fortran, L., Lemelin, S., Laplante, L., Thomas, J., & Everett, J. (1992). L'attention selective dans la depression majeure: Ralentissement clinique et inhibition cognitive [Selective attention in major depression: Clinical slowing and cognitive inhibition]. Canadian Journal of Psychology, 46, 41-52.

- Bjorklund, D. F., & Harnishfeger, K. K. (1990). The resources construct in cognitive development: Diverse sources of evidence and a theory of inefficient inhibition. Developmental Review, 10, 48-71.
- Bjorklund, D. F., & Kipp, K. (1996). Parental investment theory and gender differences in the evolution of inhibition mechanisms. Psychological Bulletin, 120, 163-188.
- Blair, I. V., & Banaji, M. R. (1996). Automatic and controlled processes in stereotype priming. Journal of Personality and Social Psychology, 70(6), 1142-1163.
- Bodenhausen, G. V. (1990). Stereotypes as judgmental heuristics: Evidence of circadian variations in discrimination. Psychological Science, 1, 319-322.
- Bodenhausen, G. V., & Macrae, C. N. (1998). Stereotype activation and inhibition. In R. S. Wyer, Jr. (Ed.), Stereotype activation and inhibition: Advances in social cognition, (Vol. 11, pp. 1-52). Mahwah, NJ: Lawrence Erlbaum Associates.
- Bruner, J. (1957). On perceptual readiness. Psychological Review, 64, 123-152.
- Chen, M., & Bargh, J. A. (1997). Nonconscious behavioral confirmation processes: The self-fulfilling consequences of automatic stereotype activation. Journal of Experimental Social Psychology, 33, 541-560.
- Chiarello, C., & Maxfield, L. (1996). Varieties of interhemispheric inhibition: or How to keep a good hemisphere down. Brain and Cognition, 30, 81-108
- Clark, J. M. (1992). Inhibitory mechanisms in normal and dysfunctional number processing. In J. I. D. (Ed.), The nature and origins of mathematical skills: Advances in Psychology, (Vol. 91, pp. 411-456). Amsterdam, The Netherlands: Elsevier Science Publishers B. V.
- Clark, J. M. (1996). Contributions of inhibitory mechanisms to unified theory in neuroscience and psychology. Brain and Cognition, 30, 127-152.
- Connelley, S. & Hasher, L. (1993). Aging and the inhibition of spatial location. Journal of Experimental Psychology: Human Perception and Performance, 19, 1238-1250.



- Dagenbach, D., & Carr, T. H. (Eds.). (1994). Inhibitory processes in attention, memory, and language. San Diego, CA: Academic Press.
- Dempster, F. (1992). The rise and fall of the inhibitory mechanism: Toward a unified theory of cognitive development and aging. Developmental Review, 12, 45-75.
- Dempster, F., & Brainerd, C. (Eds.). (1995). Interference and inhibition in cognition. San Diego, CA: Academic Press.
- Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. Journal of Personality and Social Psychology, 56, 5-18.
- Devine, P. G., & Elliot, A. J. (1995). Are racial stereotypes *really* fading? The Princeton trilogy revisited. Personality and Social Psychology Bulletin, 21, 1139-1150.
- Devine, P. G., Monteith, M. J., Zuwerink, J. R., & Elliot, A. J. (1991). Prejudice with and without compunction. Journal of Personality and Social Psychology, 60, 817-830.
- Enright, S. J., & Beech, A. R. (1993). Reduced cognitive inhibition in obsessive-compulsive disorder. British Journal of Clinical Psychology, 32, 67-74.
- Fazio, R. H. & Dunton, B. C. (1997). Categorization by race: The impact of automatic and controlled components of racial prejudice. Journal of Experimental Social Psychology, 33, 451-470.
- Fazio, R. H., Jackson, J. R., Dunton, B. C., & Williams, C. J. (1995). Variability in automatic activation as an unobtrusive measure of racial attitudes: A bona fide pipeline? Journal of Personality and Social Psychology, 69, 1013-1027.
- Fein, S., & Spencer, S. J. (1997). Prejudice as self-image maintenance: Affirming the self through derogating others. Journal of Personality and Social Psychology, 73, 31-44.

- Gaertner, S. L., & Dovidio, J. F. (1986). The aversive form of racism. In J. F. Dovidio & S. L. Gaertner (Eds.), Prejudice, discrimination, and racism (pp. 61-89). Orlando, FL: Academic Press.
- Gernsbacher, M. A. (1990). Language comprehension as structure building. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Gernsbacher, M. A. (1997). Attenuating interference during comprehension: The role of suppression. In D. L. Medin (Ed.), The psychology of learning and motivation, (Vol. 37, pp. 85-104). San Diego, CA: Academic Press.
- Gernsbacher, M. A. & Faust, M. E. (1991). The mechanism of suppression: A component of general comprehension skill. Journal of Experimental Psychology: Learning, Memory, and Cognition, 17, 245-262.
- Gilbert, D. T., & Hixon, J. G. (1991). The trouble of thinking: Activation and application of stereotypic beliefs. Journal of Personality and Social Psychology, 60, 509-517.
- Gollwitzer, P. M., & Moskowitz, G. B. (1996). Goal effects on action and cognition. In E. T. Higgins & A. W. Kruglanski (Eds.), Social psychology: Handbook of basic principles (pp. 361-399). New York: The Guilford Press.
- Greenberg, J., Pyszczynski, T., Solomon, S., Rosenblatt, A., Veeder, M., Kirkland, L., & Lyon, D. (1990). Evidence for terror management theory II: The effects of mortality salience on reactions to those who threaten or bolster the cultural worldview. Journal of Personality and Social Psychology, 58, 308-318.
- Hamilton, D. L., & Sherman, J. W. (1994). Stereotypes. In R. S. Wyer, Jr., & T. K. Srull (Eds.), Handbook of social cognition (2nd ed., Vol. 2, pp. 1-68). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Hasher, L., Stoltzfus, E. R., Zacks, R. T., & Rypma, B. (1991). Age and inhibition. Journal of Experimental Psychology: Learning, Memory, and Cognition, 17, 163-169.

- Hasher, L., & Zacks, R. T. (1988). Working memory, comprehension, and aging: A review and a new view. In G. H. Bower (Ed.), The psychology of learning and motivation, (Vol. 22, pp. 193-225). San Diego, CA: Academic Press.
- Hilton, J. L., & Darley, J. M. (1991). The effects of interaction goals on person perception. In M. P. Zanna (Ed.), Advances in experimental social psychology (Vol. 24, pp. 235-267). New York: Academic Press.
- Holyoak, K. J., & Thagard, P. (1989). Analogical mapping by constraint satisfaction. Cognitive Science, 13, 295-355.
- Houghton, G., & Tipper, S. P. (1996). Inhibitory mechanisms of neural and cognitive control: Applications to selective attention and sequential action. Brain and Cognition, 30, 20-43.
- Johnson, C. J. (1994). Inhibitory mechanisms in selection among multiple object names. Cognitive Development, 9, 293-309.
- Jones, E. E., & Thibault, J. W. (1958). Interaction goals as bases of inference in interpersonal perception. In R. Taguiri & L. Petrullo (Eds.), Person perception and interpersonal behavior (pp. 158-178). Stanford, CA: Stanford University Press.
- Katz, I., Glass, D. C., & Cohen, S. (1973). Ambivalence, guilt, and the scapegoating of minority group victims. Journal of Experimental Social Psychology, 9, 423-436.
- Kawakami, K., Dion, K. L., & Dovidio, J. F. (1998). Racial prejudice and stereotype activation. Personality and Social Psychology Bulletin, 24, 407-416.
- Kruglanski, A. W. (1996). Motivated social cognition: Principles of the interface. In E. T. Higgins & A. W. Kruglanski (Eds.), Social psychology: Handbook of basic principles (pp. 493-520). New York: The Guilford Press.
- Kucera, H. & Francis, W. N. (1967). Computational analysis of present-day American English. Providence, RI: Brown University Press.

- Kunda, Z. (1990). The case for motivated reasoning. Psychological Bulletin, 108, 480-498.
- Kunda, Z. (in press). Social cognition: Making sense of people. Cambridge, MA: The MIT press.
- Kunda, Z., Sinclair, L., & Griffin, D. (1997). Equal ratings but separate meanings: Stereotypes and the construal of traits. Journal of Personality and Social Psychology, 72, 720-734.
- Kunda, Z., & Thagard, P. (1996). Forming impressions from stereotypes, traits, and behaviors: A parallel constraint satisfaction theory. Psychological Review, 103, 284-308.
- Landau, J. (1995). The relationship of race and gender to managers' ratings of promotion potential. Journal of Organizational Behavior, 16, 391-400.
- Lepore, L., & Brown, R. (1997). Category and stereotype activation: Is prejudice inevitable? Journal of Personality and Social Psychology, 72, 275-287.
- Linville, P. (1996). Attention inhibition: Does it underlie ruminative thought? In R. S. Wyer, Jr. (Ed.), Ruminative thoughts: Advances in social cognition, (Volume 9, pp. 121-134). Mahwah, NJ: Lawrence Erlbaum Associates.
- Linville, P. W., & Jones, E. E. (1980). Polarized appraisals of out-group members. Journal of Personality and Social Psychology, 38, 689-703.
- Logan, G. D. (1994). On the ability to inhibit thought and action: A user's guide to the stop signal paradigm. In D. Dagenbach & T. H. Carr (Eds.), Inhibitory processes in attention, memory, and language (pp. 241-264). San Diego, CA: Academic Press.
- Logan, G. D. & Cowan, W. B. (1984). On the ability to inhibit thought and action: A theory of an act of control. Psychological Review, 91, 295-327.

- Lorsbach, T. C. & Reimer, J. F. (1997). Developmental changes in the inhibition of previously relevant information. Journal of Experimental Child Psychology; 64, 317-342
- Macmillan, M. (1996). The concept of inhibition in some nineteenth century theories of thinking. Brain and Cognition, 30, 4-19.
- Macrae, C. N., Bodenhausen, G. V., & Milne, A. B. (1995). The dissection of selection in person perception: Inhibitory processes in social stereotyping. Journal of Personality and Social Psychology, 69, 397-407.
- Macrae, C. N., Bodenhausen, G. V., & Milne, A. B., & Jetten, J. (1994). Out of Mind but back in sight: Stereotypes on the rebound. Journal of Personality and Social Psychology, 67, 808-817.
- May, C. P., & Hasher, L. (1998). Synchrony effects in inhibitory control over thought and action. Journal of Experimental Psychology: Human Perception and Performance, 24, 363-379.
- McConahay, J. B. (1986). Modern racism, ambivalence, and the modern racism scale. In J. F. Dovidio & S. L. Gaertner (Eds.), Prejudice, discrimination, and racism (pp. 91-125). Orlando, FL: Academic Press.
- McConahay, J. B., Hardee, B. B., & Batts, V. (1981). Has racism declined? It depends on who's asking and what is asked. Journal of Conflict Resolution, 25, 563-579.
- Meindl, J. R., & Lerner, M. J. (1984). Exacerbation of extreme responses to an out-group. Journal of Personality and Social Psychology, 47, 71-84.
- Meyer, D. E., & Schvaneveldt, R. W. (1971). Facilitation in recognizing pairs of words: Evidence of a dependence between retrieval operations. Journal of Experimental Psychology, 90, 227-234.

- 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.
- Monteith, M. J., Sherman, J. W., & Devine, P. G. (1998). Suppression as a stereotype control strategy. Personality and Social Psychology Review, *2*, 63-82.
- Neely, J. H. (1977). Semantic priming and retrieval from lexical memory: Roles of inhibitionless spreading activation and limited-capacity attention. Journal of Experimental Psychology: General, *106*, 226-254.
- Neely, J. H. (1991). Semantic priming effects in visual word recognition: A selective review of current findings and theories. In D. Besner & G. W. Humphries, (Eds.), Basic processes in reading: Visual word recognition (pp. 264-336). Hillsdale, NJ: Erlbaum.
- Neuberg, S. L., & Fiske, S. T. (1987). Motivational influences on impression formation: Dependency, accuracy-driven attention, and individuating information. Journal of Personality and Social Psychology, *53*, 431-444.
- Neumann, E., & DeSchepper, B. G. (1991). Costs and benefits of target activation and distractor inhibition in selective attention. Journal of Experimental Psychology: Learning, Memory, and Cognition, *17*, 1136-1145
- Neumann, E., & DeSchepper, B. G. (1992). An inhibition-based fan effect: Evidence for an active suppression mechanism in selective attention. Canadian Journal of Psychology, *46*, 11-50.
- Pendry, L., & Macrae, N. (1996). What the disinterested perceiver overlooks: Goal directed social categorization. Personality and Social Psychology Bulletin, *22*, 249-256.
- Purdue, C. W., & Gurtman, M. B. (1990). Evidence for the automaticity of ageism. Journal of Experimental Social Psychology, *26*, 199-216.

- Pyszczynski, T., & Greenberg, J. (1987). Toward and integration of cognitive and motivational perspectives on social inference: A biased hypothesis-testing model. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 24, pp. 297-340). New York: Academic Press.
- Sanitioso, R., Kunda, Z., & Fong, G. T. (1990). Motivated recruitment of autobiographical memories. Journal of Personality and Social Psychology, *59*, 229-241.
- Schachar, R. J., Tannock, R., & Logan, G. (1993). Inhibitory control, impulsiveness, and attention deficit hyperactivity disorder. Clinical Psychology Review, *13*, 721-739.
- Schneider, W. (1995). MEL Professional User's Guide. Pittsburgh: Psychology Software Tools.
- Schwarz, N. (1990). Feelings as information: Informational and motivational functions of affective states. In E. T. Higgins & R. Sorrentino (Eds.), Handbook of motivation and cognition: Foundations of social behavior (pp. 527-561). New York: Guilford Press.
- Sherman, S. J., & Gorkin, L. (1980). Attitude bolstering when behavior is inconsistent with central attitudes. Journal of Experimental Social Psychology, *16*, 388-403.
- Simone, P. M., & Baylis, G. C. (1997). Selective attention in a reaching task: Effect of normal aging and Alzheimer's disease. Journal of Experimental Psychology: Human Perception and Performance, *23*, 595-608.
- Sinclair, L. & Kunda, Z. (1996). Motivated stereotype use: Discrediting women who rate us poorly. Paper presented at the American Psychology Association conference, Toronto, Ontario.

- Smith, E. R., Fazio, R. H., & Cejka, M. A. (1996). Accessible attitudes influence categorization of multiply categorizable objects. Journal of Personality and Social Psychology, 71, 888-898.
- Smith, E. R., & Zarate, M. A. (1992). Exemplar-based models of social judgment. Psychological Review, 99, 3-21.
- Smith, R (1992). Inhibition: History and meaning in the sciences of the mind and brain. Berkeley: University of California Press.
- Spellman, B. A. & Holyoak, K. J. (1996). Pragmatics in analogical mapping. Cognitive Psychology, 31, 307-346
- Spencer, S. J., Fein, S., Wolfe, C., Hodgson, H. L., & Dunn, M. A. (in press). Stereotype activation under cognitive load: The moderating role of self-image threat. Personality and Social Psychology Bulletin.
- Spieler, D. H., Balota, D. A., & Faust, M. E. (1996). Stroop performance in healthy younger and older adults and in individuals with dementia of the Alzheimer's type. Journal of Experimental Psychology: Human Perception and Performance, 22, 461-479.
- Stangor, C., Lynch, L., Duan, C., & Glass, B. (1992). Categorization of individuals on the basis of multiple social features. Journal of Personality and Social Psychology, 62, 207-218.
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. Journal of Personality and Social Psychology, 69, 797-811.
- Stroessner, S. J. (1996). Social categorization by race or sex: Effects of perceived non-normalcy on response times. Social Cognition, 14, 247-276.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of inter-group behavior. In S. Worchel & W. G. Austin (Eds.), Psychology of inter-group relations (pp. 7-24). Chicago: Nelson Hall.



- Tipper, S. P., Bourque, T., Anderson, S., & Brehaut, J. C. (1989). Mechanisms of attention: A developmental study. Journal of Experimental Child Psychology, 48, 353-378.
- Wegner, D. M. (1994). Ironic processes of mental control. Psychological Review, 101, 34-52.
- Williams, D. A. (1995). Forms of inhibition in animal and human learning. Journal of Experimental Psychology: Animal Behavior Processes, 21, 129-142.
- Williams, D. A., Overmier, J. B., & LoLordo, V. M. (1992). A reevaluation of Rescorla's early dictums about Pavlovian conditioned inhibition. Psychological Bulletin, 111, 275-290.
- Wittenbrink, B., Judd, C. M., & Park, B. (1997). Evidence for racial prejudice at the implicit level and its relationship with questionnaire measures. Journal of Personality and Social Psychology, 72, 262-274.
- Zacks, R. T., & Hasher, L. (1994). Directed ignoring: Inhibitory regulation of working memory. In D. Dagenbach & T. H. Carr (Eds.), Inhibitory processes in attention, memory, and language (pp. 241-264). San Diego, CA: Academic Press.
- Zarate, M. A., Bonilla, S., & Luevano, M. (1995). Ethnic influences on exemplar retrieval and stereotyping. Social Cognition, 13, 145-162.
- Zarate, M. A., & Smith, E. R. (1990). Person categorization and stereotyping. Social Cognition, 8, 161-185.
- Zelazo, P. D., Reznick, J. S., & Spinazzola, J. (1998). Representational flexibility and response control in a multistep multilocation search task. Developmental Psychology, 34, 203-214.

## Appendix A

### Cover story (Study 1a)

We've been working on a project with some local corporations, developing ways of identifying people with high interpersonal skills.

Corporations are finding in hiring university graduates that good technical and scientific skills are not enough to ensure good job performance. Interpersonal skills are also essential. Employees must have the ability to be good "team players" and to get along with their peers, their bosses, and people who work for them. And, although technical and scientific skills are important, promotion into higher level management jobs, such as running a research team, depends on having interpersonal skills and leadership qualities.

We have been working with several corporations to develop a test of interpersonal skills. We have already developed a questionnaire that is very effective at measuring interpersonal skills. We have found that people who score high on this test as having good interpersonal skills get better job evaluations and get promoted faster.

We have begun introducing this test to personnel managers. We are finding that some personnel managers are better than others at interpreting the results of the questionnaire, so now we are developing a training program to teach personnel managers to use our questionnaire effectively. What we are doing today is bringing in people from several corporations and seeing if they can be trained to use our questionnaire. We have just begun the training program. At this point the trainees have received general guidelines about how to interpret the questionnaire, but have had little direct experience with using it. This is where we need your help. We would like you to respond to the questionnaire and then we will have one of the trainees practice scoring your questionnaire.

It turns out that the questionnaire is most predictive if the interviewer does not actually see the respondent. This prevents the interviewer from being biased by irrelevant personal characteristics of the individual. What we are going to do then, is have you speak your answers into a microphone that is hooked up to a speaker in a room just down the hall where the trainee is. This way the trainee will be able to hear and evaluate your answers without seeing you. As well, we would like to audio tape your answers for use in our training program, if this is okay with you. We will, of course, ensure that your responses remain anonymous

After listening to the interview, the trainee will provide a brief evaluation of your skills. We will be videotaping this evaluation for use in our training program in conjunction with your audio tape.

Finally, we have found in other studies that participants are often curious about their test results, so in return for your participation, if you are interested, you may watch over a close circuit TV the trainee giving the evaluation of you as we videotape the trainee.

## Appendix B

### The Interpersonal Skills Questions (Studies 1-3).

- 1) What are your career goals?
- 2) In what type of interpersonal situations do you feel most comfortable?
- 3) What kinds of things make you angry?
- 4) In what situations are you talkative? What is it about these types of situations that makes you like to talk?
- 5) How do you go about making important decisions like choosing among majors or among job offers?
- 6) What do you think are the good and bad points of a boss becoming close friends with employees ?
- 7) How would you motivate your employees to complete an important project on time?
- 8) What do you think are the good and bad points of openly expressing criticism to your boss, your employees, your teammates?
- 9) Imagine your boss gives you and two other people responsibility for a project. One of your co-workers is not doing his fair share of the work, what do you do?
- 10) What activities would you plan for a weekend retreat designed to boost company spirit?

## Appendix C

### Feedback (Study 1)

#### Positive feedback

Let me start off by saying that I was very impressed by this person. I think his interpersonal skills are excellent. Most of his answers were insightful and he seemed to have a good understanding of most of the questions. His answers seemed intelligent and well thought out. This person is clearly going to go places. I think he would be a terrific employee for most companies.

Now let me see (consult notes) I had some more specific points about some of his answers that stood out.

In the question about how to boost company spirit, he seemed to know how to go about raising a group's morale. He did a good job of answering the question about the sticky situation of having to deal with a co-worker who is not doing his fair share of work on a team project. This suggests to me that he would probably make a good leader and team member and should have no problems fitting into an organization.

Okay, um, I was also quite impressed with his answer to the question about how to motivate employees. I know this is a tough question, but he seemed to have zeroed in on the most important factors. I think he would be pretty assertive in a good way and would be as good as the best at motivating and leading others. I think most employees would look up to someone like this and would seriously listen to what he had to say.

Sort of related to this, he seems to have a good understanding of how to go about making decisions. In most situations he would probably be able to take charge and make the right decision though occasionally he might have trouble making important last minute decisions or decisions under stress. So overall, he would probably be one of the most effective leaders.

On the negative side, I did not like his answer about the good and bad points of expressing criticism. He seems to have only a limited appreciation of the pros and cons of giving feedback.

Okay, let me see now. Oh yeah, I had one last observation. From his answers where he described himself, I get the impression he is the type of person who stands out in interpersonal skills, self-assuredness or I guess being comfortable with oneself and other people. People like this often make the kind of manager that others will listen to and respect and want to work hard for.

Just to kind of sum up then. I really thought this person gave good answers to most of the questions. Overall, I believe this person's interpersonal skills are way above average. On a scale of 0-100, I would give him a 90.

### Negative feedback

Let me start off by saying that I was not very impressed by this person. I think his interpersonal skills are at best fair. Only a few of his answers were insightful and he did not seem to have a good understanding of many of the questions. Only some of his answers seemed intelligent and well thought out. This person is clearly quite mediocre. I don't think he would make a better than average employee for most companies.

Now let me see (consult notes) I had some more specific points about some of his answers that stood out.

In the question about how to boost company spirit, he didn't seem to know how to go about raising a group's morale. He did a passable job of answering the question about the sticky situation of having to deal with a co-worker who is not doing his fair share of work on a team project. For me this raises questions about whether he would make a good leader and team member and about how well he would fit into an organization.

Okay, um, I was also not that impressed with his answer to the question about how to motivate employees. I know this is a tough question, but he seemed to have missed some of the most important factors. I think he would be only somewhat assertive, and may not be as good as the best at motivating and leading others. There is a possibility that some employees may not look up to someone like this and would not seriously listen to what he had to say.

Sort of related to this, he did not seem to have a great understanding of how to go about making decisions. In some situations he would probably be able to take charge and make the right decision, though often he might have trouble making important last minute decisions or decisions under stress. So overall, he would probably not be one of the most effective leaders.

On the plus side, I liked his answer about the good and bad points of expressing criticism. He seems to have an appreciation of the pros and cons of giving feedback.

Okay, let me see now. Oh yeah, I had one last observation. From his answers where he described himself, I get the impression he is the type of person who doesn't stand out in interpersonal skills, self-assuredness, or I guess being comfortable with oneself and other people. People like this sometimes do not make the kind of manager that people will listen to or respect and want to work hard for.

Just to kind of sum up then. I really thought this person gave mediocre answers to most of the questions. Overall, I believe this person's interpersonal skills are at best average. On a scale of 0-100, I would give him a 60.

## Appendix D

### Cover story (Study 1b)

We've been working on a project with some local corporations, developing ways of identifying people with high interpersonal skills.

Corporations are finding in hiring university graduates that good technical and scientific skills are not enough to ensure good job performance. Interpersonal skills are also essential. Employees must have the ability to be good "team players" and to get along with their peers, their bosses, and people who work for them. And, although technical and scientific skills are important, promotion into higher level management jobs, such as running a research team, depends on having interpersonal skills and leadership qualities.

We have been working with several corporations to develop a test of interpersonal skills. We have already developed a questionnaire that is very effective at measuring interpersonal skills. We have found that people who score high on this test as having good interpersonal skills get better job evaluations and get promoted faster.

We began introducing this test to personnel managers last term. We found that some personnel managers were better than others at interpreting the results of the questionnaire, so now we are developing a training program to teach a new group of personnel managers to use our questionnaire effectively.

More specifically, last term was brought in people from several corporations and trained them to use our questionnaire. At this point, the trainees had received general guidelines about how to interpret the questionnaire, but had little direct experience with using it. In order to give the trainees experience in scoring the questionnaire, we brought volunteers into the lab and had them respond to the questionnaire. The trainees then got practice evaluating the volunteers' responses to the questionnaire. We audio taped and videotaped both the volunteer respondents' answers to the questionnaire and the trainees' evaluation of the respondents' answers. Consequently, we have a set of answers from the respondents and the corresponding evaluations from the personnel managers.

What we would like to do now is to develop a training program to teach a new group of personnel managers to use our questionnaire. As part of their training, we would like to give them some examples of how to interpret responses to the questionnaire by providing them with a respondent's answers and then the personnel manager's subsequent evaluation of that respondent's answers.

At this point, we are not sure what the best format to present the respondents' answers and the trainees' evaluations in is. We have the options of using just the audio tape or just the videotape of the respondent and the personnel manager, or using the audio tape of one person and the videotape of the other person.

What we are doing now, is bringing people into the lab, and showing them either the audio tapes, the videotapes or a combination of the two. We want to get people's opinion of what the best format to present these materials in the training program is, in order to make it the best learning experience for the new trainees. The experimenter will let you know what condition you have been assigned to.

## Appendix E

### Modern Racism Scale

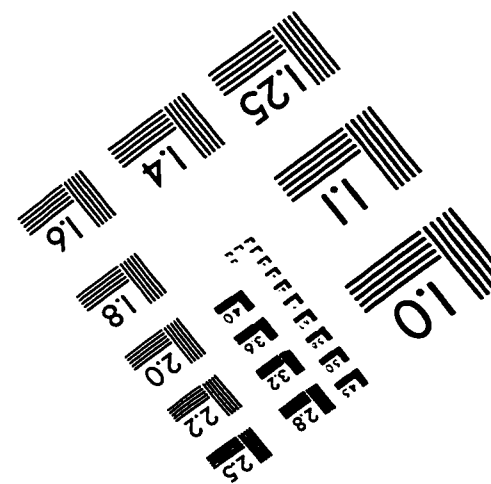
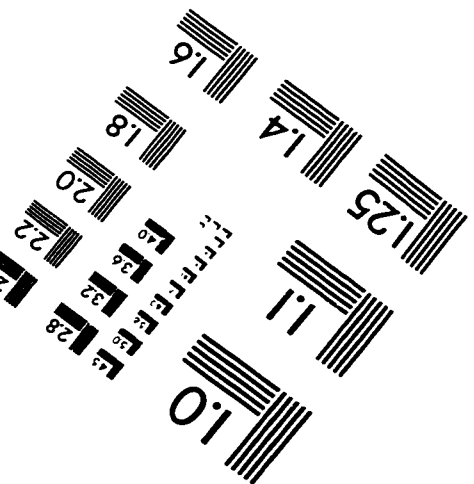
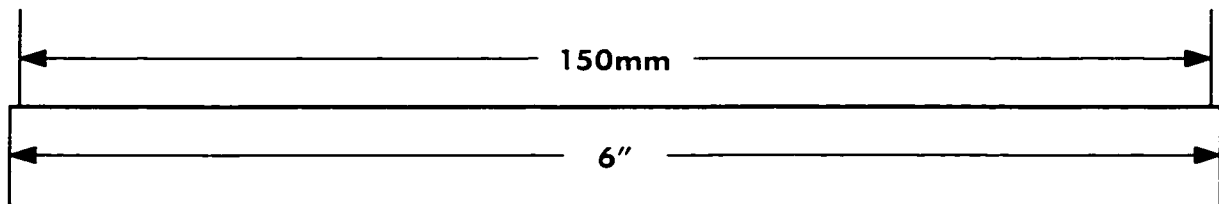
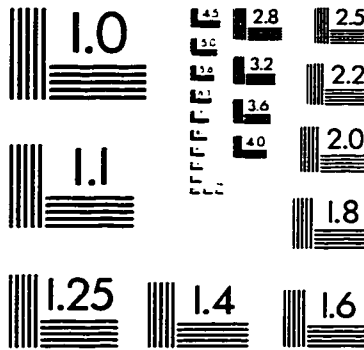
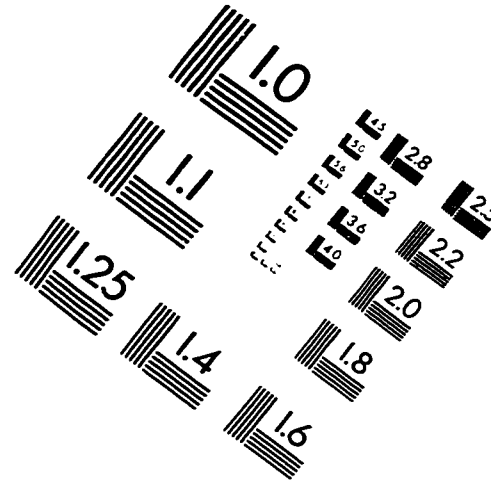
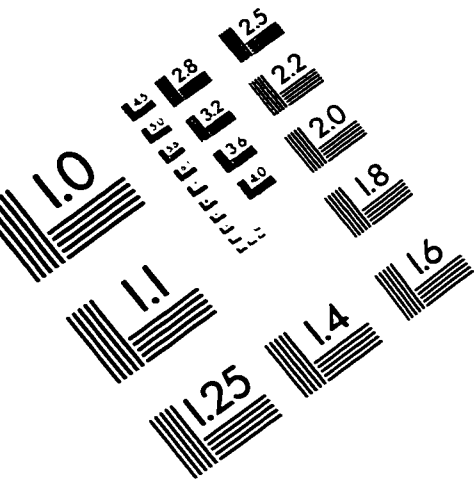
#### Social Attitudes Questionnaire

This questionnaire is part of an investigation of general public opinion concerning a variety of social issues. You will probably find that you agree with some of the statements, and you disagree with others.

Please indicate your reaction to each of the statements by placing an X on the appropriate number. For each question, -4 means very strongly disagree, and +4 means very strongly agree.

1.	There are too many foreign students being allowed to attend university in Canada.								
-4	-3	-2	-1	0	+1	+2	+3	+4	
2.	Canada should open its doors to more immigration from the poorer countries.								
-4	-3	-2	-1	0	+1	+2	+3	+4	
3.	It's good to live in a country where there are so many different ethnic and racial groups.								
-4	-3	-2	-1	0	+1	+2	+3	+4	
4.	Some races or ethnic groups are, by their nature, more violent than others.								
-4	-3	-2	-1	0	+1	+2	+3	+4	
5.	There is <u>nothing</u> wrong with intermarriage among the "races".								
-4	-3	-2	-1	0	+1	+2	+3	+4	
6.	It is easy to understand the anger of minorities in Canada.								
-4	-3	-2	-1	0	+1	+2	+3	+4	
7.	The government should not make any special effort to help minority groups because they should help themselves.								
-4	-3	-2	-1	0	+1	+2	+3	+4	
8.	Over the past few years, the government and the news media have given more attention to minorities than they deserve.								
-4	-3	-2	-1	0	+1	+2	+3	+4	
9.	Minorities are getting too demanding in their push for special rights.								
-4	-3	-2	-1	0	+1	+2	+3	+4	
10.	Discrimination against racial and ethnic minorities is no longer a problem in Canada.								
-4	-3	-2	-1	0	+1	+2	+3	+4	

# IMAGE EVALUATION TEST TARGET (QA-3)



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