Emotional Reactions to a Seemingly Prejudiced Response: The Role of Automatically Activated Racial Attitudes and Motivation to Control Prejudiced Reactions

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This study examined emotional reactions to a televised public service ad regarding racial prejudice. The ad induces viewers to draw a seemingly prejudicial inference about an African American man. Emotional reactions to the ad varied as a function of automatically activated racial attitudes and the two factors of the Motivation to Control Prejudiced Reactions Scale, all of which were assessed 3 months prior to exposure to the ad. More positive racial attitudes were associated with feelings of guilt in response to the ad. Individuals with higher scores on the concern with Acting Prejudiced factor of the motivation scale reported both greater guilt and greater agitation, whereas those with higher scores on the Restraint to Avoid Dispute factor experienced agitation but not guilt. The implications of the findings for prejudice reduction efforts and the effectiveness of the public service ad as a social influence strategy are discussed.

The present research was prompted by a television commercial—a public service ad that the authors became aware of when it was broadcast as part of a 1-hour show presenting the advertising industry's 1995 Clio Award winners. The commercial is very brief, only about 25 seconds, yet it struck us as having great impact. The commercial begins with the display of the head and shoulders of an African American man who is gazing directly into the camera. The image occupies virtually all of the left half of the screen. On the right half of the screen, text appears slowly, one line after another, with each line being shown for approximately 2 seconds before the next line appears underneath the preceding line. The appearance of each line is accompanied by an auditory tone. With a slash (/) designating a line break, the text reads as follows: "Michael Conrad. / Male. Age 28. / Armed Robbery. / Assault and Battery. / Rape. / Murder."

Obviously, the viewer cannot help but get the impression that the text refers to and describes the depicted African American. The display of text continues as follows: "Apprehended / August 1994 by / Police Lieutenant / Joseph Cruthers, / shown here."

After a few more seconds, the image and text are replaced with the simple message "Urban Alliance on Race Relations" centered on the screen. Thus, the commercial induces viewers to assume wrongly that the African American who is pictured and the criminal who is described in the text are one and the same individual. Eventually, viewers learn that the photo is actually of the police officer who apprehended the criminal. In addition to being designed to surprise viewers, the commercial raises a critical issue about race for the viewers. Would they have made the same false assumption if the man had not been African American? The ad forces viewers to at least entertain the possibility the pictured man's race contributed to their having been duped so easily

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and that their having been duped represents a prejudicial response.

Moreover, informal pilot testing with the public service ad revealed that viewers invariably were surprised by the ad. No viewer reported not having made the false assumption regarding the pictured African American. In this respect, the ad parallels the typical induced-compliance situation in which virtually everyone is successfully induced to write a counterattitudinal essay and accepts personal responsibility for having "freely" chosen to do so (see Cooper & Fazio, 1984, for a review). Similarly, the commercial dupes virtually everyone into making a prejudiced assumption. Yet, the assumption is something for which the individual must accept some responsibility; it was, after all, self-generated, as the ad eventually reveals.

We were interested in viewers' emotional reactions to this commercial. Would the commercial evoke feelings of guilt among at least some kinds of people as a result of its having induced them to associate criminal activities with the pictured African American? Extensive research by Devine, Monteith, and their colleagues (Devine, Monteith, Zuwerink, & Eliot, 1991; Monteith, 1993; Monteith, Devine, & Zuwerink, 1993; Zuwerink, Devine, Monteith, & Cook, 1996) suggests that some individuals do experience guilt and self-recrimination after becoming aware that they would respond in a more negative manner than they believe they should.

This program of research has concerned responses toward homosexuals as well as toward African Americans. However, the research on African Americans has involved the assessment of racial attitudes via self-report instruments such as the Modern Racism Scale (MRS) (McConahay, 1986). Participants with high versus low scores on the scale have been compared with one another. The procedure entailed the participants' imagining and responding to a number of scenarios involving an African American, first in terms of how they *should* behave and then in terms of how they *would* behave. Most participants revealed discrepancies between their should and would responses such that they believed they would respond more negatively than they should. After responding to the scenarios, participants "reported how they were feeling about the extent to which their actual responses (woulds) matched their personal standards (shoulds) for responding to Blacks" (Zuwerink et al., 1996, p. 141) by rating the degree to which a number of affective terms described their feelings. Among those with relatively low scores on the MRS (i.e., those with scores reflecting relatively less prejudice), should-would discrepancies have been found to relate to feelings of guilt and compunction. The more these low-prejudice individuals report a violation of their standards for behavior toward African Americans, the more guilt they experience. No such relation was apparent among individuals with relatively high scores on the MRS. Thus, guilty reactions in response to the presence of should-would discrepancies have been found to vary as a function of prejudice as assessed by the MRS.

The public service ad provides an interesting opportunity for extending this prior research. The commercial presents a "real-world" means of inducing a seemingly prejudicial response and, hence, does not require focusing participants' attention on any discrepancy that might exist between how they believe they should versus would respond to imagined scenarios. Instead, any emotional reactions to the commercial represent a natural outcome of observing oneself exhibit a response that can be interpreted as prejudiced against African Americans.

A second manner in which the present research was intended to extend prior work concerns the question of *who* is likely to experience feelings of shame and guilt in response to the commercial. As noted earlier, the should-would discrepancy research concerning African Americans has assessed levels of prejudice using such self-report measures as the MRS (e.g., Devine et al., 1991; Zuwerink et al., 1996). Research concerning such explicit self-report measures has revealed that scores indicative of low prejudice are fraught with an important ambiguity (Dunton & Fazio, 1997; Fazio, Jackson, Dunton, & Williams, 1995). Such scores are obtained by both (a) individuals for whom little or no negativity is automatically activated in response to African Americans *and* (b) individuals for whom negative attitudes are activated automatically but who are motivated to control prejudiced reactions. In the present research, we assessed the automatic component of racial attitudes and the more controlled, motivational component independently so as to obtain a more fine-grained perspective regarding the types of individuals who are likely to experience guilt after observing themselves respond with prejudice. To date, no existing research has examined the impact of automatically activated racial attitudes on emotional reactions to a seemingly prejudiced response.

Automatically activated racial attitudes were assessed via a priming technique that Fazio et al. (1995) have referred to as the "bona fide pipeline." The procedure concerns the relative speed with which participants can judge the evaluative connotation of an adjective after being primed with a Black versus a White face. Response latencies are recorded for each trial, and the effect size of the Race of Prime (Black or White face) × Valence of Adjective (positive or negative) interaction can then be calculated for each participant. This effect size serves as

the estimate of the individual's automatically activated racial attitude.

Previous research has found the attitude estimates derived from the priming technique to be predictive of race-related judgments and behaviors. For example, such estimates were correlated with the amount of responsibility assigned to Blacks versus Whites for the riots in Los Angeles following the Rodney King verdict (Fazio et al., 1995). The attitude estimates also correlated with an African American experimenter's judgments of the quality of her interaction with each participant. Those with more negative automatically activated racial attitudes exhibited less interest and friendliness (Fazio et al., 1995). Jackson (1997) observed a relation with judgments of the quality of an essay written by an African American student. Finally, in a study concerned with the potential origins of racial attitudes, Towles-Schwen and Fazio (2001) found a correlation between the current racial attitudes of college students and the reported positivity of their interactions with African Americans during their high school years. Thus, a variety of research illustrates the validity of the estimates of automatically activated racial attitudes that are obtained from the priming procedure.

The present research also is concerned with the more controlled processes potentially involved in race-related judgments and behaviors. People clearly differ in the extent to which they report being motivated to control any seemingly prejudiced reactions. In the present investigation, such motivation was assessed by means of the Motivation to Control Prejudiced Reactions (MCPR) scale (Dunton & Fazio, 1997). Previous studies have revealed that the scale involves two stable factors: a concern with acting prejudiced and a restraint to avoid dispute (Dunton & Fazio, 1997). The concern factor involves a desire not to appear prejudiced to oneself or others. Examples of items that load on this factor are "It's important to me that other people not think I'm prejudiced" and "I get angry with myself when I have a thought or feeling that might be considered prejudiced." Examples of items that load on the restraint factor are "If I were participating in a class discussion and a Black student expressed an opinion with which I disagreed, I would be hesitant to express my own viewpoint" and "I'm not afraid to tell others what I think, even when I know they disagree with me" (reverse-coded). The restraint factor involves a specific desire to avoid any conflict with or about African Americans.

The MCPR has now been employed in a number of investigations. For example, scores on the scale have been found to relate to the likelihood of categorizing multiply-categorizable stimulus persons by race, as opposed to gender or occupation (Fazio & Dunton, 1997). Both the overall scores and the separate factor scores of the MCPR also have been shown to play an important role in moderating the expression of prejudice on the MRS and on direct assessments of the "typical Black male undergraduate" (Dunton & Fazio, 1997). Most relevant to the present concerns, however, is the finding of an interaction between automatically activated attitudes and scores on the concern factor of the MCPR when predicting MRS scores. As concern with acting prejudiced decreased, the relation between the unobtrusive attitude estimates derived from the priming procedure and MRS scores grew stronger, such that more negative automatically activated attitudes were associated with more prejudiced MRS scores. Concern with acting prejudiced mattered little among those for whom little or no negativity was automatically activated in response to Black faces. However, such concern exerted a strong influence among those individuals for whom negativity was automatically activated. Those with little such motivation felt free to respond to the MRS items in a manner that was indicative of prejudice, whereas the more motivated described themselves as far less prejudiced (see Dunton & Fazio, 1997). Thus, scores indicative of low prejudice on the MRS were obtained *both* by individuals with positive automatically activated attitudes and by those who reported being highly concerned about acting prejudiced, even if the latter were characterized by negative automatically activated attitudes.

The primary aim of the present investigation was to examine the extent to which any feelings of guilt evoked by the public service ad might vary as a function of automatically activated racial attitudes and the two factors of the MCPR: concern with acting prejudiced and restraint to avoid dispute. We expected a relation between self-recriminatory reactions to the ad and racial attitudes. Having been induced to exhibit a seemingly prejudicial response should be of no consequence for individuals characterized by negative automatically activated attitudes toward African Americans. The response is consistent with their attitudes. However, those with more positive automatically activated racial attitudes would have displayed a response that is quite contrary to their attitudes, attitudes which are themselves so strongly internalized that they are capable of automatic activation. This discrepancy between the act of making a seemingly prejudicial assumption and the internalized attitude is likely to produce dissonance and corresponding feelings of guilt among such individuals (Cooper & Fazio, 1984; Dutton & Lake, 1973; Elliot & Devine, 1994; Fried & Aronson, 1995; Sherman & Gorkin, 1980).

We also expected scores on the concern factor of the MCPR to relate to the experience of guilt in response to the commercial. People with high concern scores indicate that they strive to behave in a nonprejudiced man-

ner. In other words, they believe that they should respond nonprejudicially. Hence, any violations of that standard are likely to evoke some degree of self-recrimination. In fact, two of the items that load highly on the concern factor are clearly related to the experience of such negative affect when responding in a seemingly prejudiced manner: "I get angry with myself when I have a thought or feeling that might be considered prejudiced" and "I feel guilty when I have a negative thought or feeling about a Black person." Thus, unless respondents to the MCPR are very much lacking in self-insight, individuals who score highly on the concern factor items should report some feelings of guilt in response to the commercial.

In contrast, there appears to be little reason to expect guilty reactions to vary as a function of the restraint factor of the MCPR. People with high scores on this factor are reporting a desire to stay out of trouble when interacting with or discussing African Americans and a willingness to restrain themselves in the interest of doing so. Their motivation is not based on any standards for nonprejudiced behavior that they and/or society endorse. Instead, such individuals simply strive to avoid conflict. Thus, self-recrimination is an unlikely response to the ad.

This prediction is consistent with the results of recent research that has served to enlighten our understanding of individuals characterized by high restraint to avoid dispute with or about African Americans. In an investigation concerned with the origins of racial prejudice, Towles-Schwen and Fazio (2001) examined the relations between college students' scores on the restraint factor and their reports of earlier experiences with African Americans. Higher restraint scores correlated with relatively infrequent interactions with African Americans during elementary and middle school years, with reports of relatively less positive interactions when they did occur, with assessments that one's attitude had been influenced primarily by the media as opposed to personal experiences, and with reports that one's parents were themselves relatively prejudiced. Thus, the portrait of high restraint individuals that emerges from this work suggests that they grew up in a relatively prejudiced environment, have had little experience interacting with African Americans, and did not enjoy the few personal interactions that they did have. Such a background appears to foster the development of a motivation to avoid conflict with or about African Americans. Moreover, this background provides cause for such individuals believing that their actions might provoke dispute if they do not restrain themselves.

Although nothing about this portrait of high restraint individuals implies that they will experience guilt in response to the ad, it certainly does not suggest that they will find the ad emotionally inconsequential. The ad may evoke more general discomfort or agitation among those with high restraint scores. It may remind them of the very sort of verbal expressions, behaviors, and misunderstandings that have provoked dispute with or about African Americans in the past and may underscore the need to be vigilant about such matters. This reasoning prompted us to include as dependent measures not only emotional terms related to guilt but also ones focusing on agitation. We predicted that restraint scores would relate to reports of agitation following exposure to the ad but not to reports of guilt.

Because reactions of agitation seem to be a likely response for individuals characterized by high restraint, we also entertained the possibility that individuals with high concern scores might report both agitation and guilt. Concerns about behaving in a nonprejudiced manner represent egalitarian moral obligations or duties that (some) people are motivated to fulfill.[1] In the language of self-discrepancy theory (Higgins, 1987), these moral obligations are "ought" standards. The theory maintains that when individuals transgress such standards, they are "vulnerable to guilt, self-contempt, and uneasiness" (Higgins, 1987, p. 323). Thus, behavior that falls short of avowed moral obligations should leave individuals feeling both distressed about their failure and guilty about their seemingly hypocritical endorsement of the moral standard.

In contrast, automatically activated positivity toward African Americans is not necessarily accompanied by such a sense of moral obligation. Thus, there seemed little reason to expect automatically activated racial attitudes to relate to agitation. Instead, such attitudes were expected to predict the unique experience of guilt, unaccompanied by any feelings of agitation.

METHOD

Participants

Individuals were recruited for participation in a study concerning "Television and Emotions" in return for monetary compensation. These individuals were from a sample of 94 Indiana University undergraduates who had participated in an investigation 3 months earlier (Jackson, 1997) in which they had completed the bona fide pipeline priming measure, the MCPR, and other measures unrelated to the present investigation. These original participants were contacted by phone by a different person than the original experimenter and offered a $10 payment in return for their participation in a study concerning general responses to the media. They were told that the lab was attempting to conduct another experiment prior to the conclusion of the semester and that individuals who had participated in any of the lab's earlier studies this semester were being contacted to see

if they might be willing to participate in a study concerning emotional reactions to television commercials. We were able to contact and recruit 58 of the participants, all of whom classified themselves as White.

Procedure

Session 1: Priming procedure and the MCPR. After arriving, students were greeted by a White female experimenter. As in earlier research, participants were informed that they would perform a variety of tasks designed to assess the extent to which responding to word meaning was an automatic skill. The procedure closely followed that described in Fazio et al. (1995). In brief, the procedure consisted of five phases: an initial adjective connotation task that provided baseline latencies, a face-learning practice task, and a face recognition practice task, followed by the actual priming task in which faces were presented as primes and the adjectives from the baseline task were the targets and a final face recognition task involving those faces that had been presented in the priming task.

The first phase was conducted to obtain baseline data. Students were asked to indicate whether a word presented on the computer screen had a "good" or a "bad" meaning by pressing one of two labeled buttons. After a warning beep, they were presented with a row of asterisks for 315 ms as a warning that a word was about to appear. After a delay of 135 ms, one of 12 clearly positive or 12 clearly negative adjectives appeared on the screen. The adjectives were presented in random order within each of two blocks. Participants were asked to indicate the meaning of the adjective (good vs. bad) as quickly and as accurately as possible. The time between the onset of the adjective and the participant's response was recorded by the computer.

The second and third phases were designed as filler tasks and were administered only to support the cover story (see Fazio et al., 1995). In the second phase, participants were asked to attend to a computer screen upon which 10 color, yearbook-style photographs of college-age students would appear. They were told to study the faces because their recall would be tested in the next task. The photographs were each presented twice and consisted of White, Black, Hispanic, and Asian male and female students. In the third phase, participants were presented with photographs and asked to press a key labeled "yes" if they had seen the photograph before and "no" if they had not. A total of 20 yearbook-style photographs were presented once. Ten of these were photos that had been presented earlier and 10 were novel.

The fourth phase involved the priming task of interest. As part of the cover story, students were told that if responding to word meaning was truly an automatic skill, they should be able to judge word meaning just as efficiently if they were given a second task to do simultaneously. They were told that faces would appear in place of the asterisks and that their secondary task was to study these faces for a later recall test while judging the valence of the adjective. Once again, students were asked to respond as quickly and as accurately as possible.

A total of 48 photographs digitized as 256-color, 640 × 480 resolution images were presented as primes in each of four blocks. These photographs were taken against a common background and consisted of head shots of Black, White, and "Other" (Asian and Hispanic) male and female undergraduates at Indiana University (see Fazio et al., 1995, Study 1, for details). Over the course of the four blocks, each face prime was followed by two positive adjectives and two negative adjectives. The same four adjectives were assigned to a pair of faces, where a pair consisted of a White face and a same-gender Black or Other face. The 12 White-Black pairs constituted the trials of interest, and the 12 Other-White pairs served as fillers to decrease the relative frequency of the Black faces.

In the fifth phase, participants were presented with 1 of 96 photographic images on each trial; 48 of these photographs had appeared in the fourth task, whereas the remaining 48 were novel fillers. Participants were asked to recall whether they had seen these photographs in the previous phase and respond by pressing a key labeled "yes" or "no." The purpose of this task was simply to support the cover story by testing performance on the secondary task.

After the presumed experiment concerning the judgment of word meaning, the participants completed a variety of questionnaires unrelated to the present concerns. Included within the packet of surveys, however, was the MCPR.

Session 2: Emotional reactions to television commercials. As noted earlier, the session concerning television commercials occurred 3 months after the first session and was conducted by a different experimenter. Participants viewed a commercial and then recorded the extent to which that commercial evoked 12 emotions on a printed form. Three of the emotional terms (*astonished*, *deceived*, and *surprised*) were included as a means of testing our presumption that the public service ad involved a very surprising conclusion. The remaining 9 emotional terms constituted the dependent variables of interest; they related to guilt, agitation, or amusement (*amused*, *ashamed*, *delighted*, *distressed*, *embarrassed*, *guilty*, *relaxed*, *uncomfortable*, and *uneasy*). Participants recorded their emotional responses on a 5-point scale labeled *not at all* to *very much so*. They were given 45 seconds to do so after each commercial.

The target ad was the fourth in the series of five commercials. The filler commercials were chosen on the

basis of their entertainment and interest value. In the first filler ad, for a car stereo manufacturer, a man apologizes for playing his car stereo so loudly on a suspension bridge that the bridge shakes as if an earthquake were occurring. In the second filler commercial, for film development, two young men steal a camera from two older female sunbathers, take a photo of one with his pants down, and tiptoe away after returning the camera. The third ad involved a reenactment of the now-classic Macintosh commercial that aired during the 1984 Superbowl. In the final commercial, for home-remodeling services, a disreputable carpet layer flattens a lump in a poorly laid carpet; the lump turns out to be the homeowner's guinea pig. The filler ads are later referred to as "car stereo," "film," "Macintosh," and "carpet," respectively.

RESULTS

Racial Prejudice Variables

Estimates of automatically activated racial attitudes. The latency data from the priming procedure were employed to arrive at an estimate of each participant's automatically activated racial attitude. In effect, any given participant's latencies were reduced to a single index of that person's racial attitudes. Facilitation scores for each adjective associated with the 12 Black or 12 White target photographs were first calculated. The baseline latency that was obtained during the first phase of the procedure (when the adjective was preceded by a row of asterisks) was subtracted from the latency of responding to each adjective when it was preceded by a photograph. The facilitation scores for each of the two positive and two negative adjectives for each photograph were averaged, and difference scores were created by subtracting the mean facilitation score for the negative adjectives from the mean facilitation score for the positive adjectives for each face. Each Black-White matched pair had been associated with the very same four adjectives. Hence, a pairwise t test was conducted on the difference scores for each and every participant. Each resulting t value was transformed to a correlation coefficient, which was then subjected to a Fisher's r-to-z transformation. This index, which represents the effect size of the Race of Photo × Valence of Adjective interaction for each participant, forms the estimate of automatically activated attitude toward Blacks; more negative scores indicate more negative attitude toward Black relative to White persons (see Fazio et al., 1995). Within the present sample of 58 participants, the attitude estimates ranged from –.76 to .72, with a mean and standard deviation of –.04 and .34, respectively.

Motivation to control prejudiced reactions. Responses to the items of the MCPR were factor analyzed. The analysis was performed including all 94 of the first-session participants so as to permit the largest possible sample size to form the basis for the factor scores. The factor analysis replicated the factor structure obtained in previous work (see Dunton & Fazio, 1997). Scale items involving concern with acting prejudiced and those involving restraint to avoid dispute loaded on two separate factors. Factor scores were calculated for each individual.

The relations among the Attitude Estimate, the concern factor, and the Restraint factor were examined within the present sample of 58 participants. The estimates of automatically activated racial attitudes were uncorrelated with either the Concern factor scores, $r = .055$, or the Restraint factor scores, $r = .129$, both ps $> .30$. In addition, and as is to be expected given the varimax rotation that was performed on the two factors in the analysis of the original sample, Concern and Restraint factor scores were virtually uncorrelated in the sample of interest, $r = .049$. Thus, just as in earlier research (e.g., Dunton & Fazio, 1997; Towles-Schwen & Fazio, 2001), the three aspects of racial prejudice—automatically activated attitudes, concern with acting prejudiced, and restraint to avoid dispute—were essentially independent of one another.

Emotional Reactions to the Commercial

Participants had responded to 12 emotional terms after each of the five commercials. Mean ratings for each commercial on each of these terms are presented in Table 1.

The commercial's surprise value. Three of the 12 emotional terms in the questionnaire (surprised, astonished, and deceived) had been included solely to check on our presumption that the target ad produced a sense of surprise among viewers. The relevant means can be found in the first three rows of Table 1. Repeated measures ANOVA revealed significant differences in the extent to which participants felt surprised, astonished, and deceived by the five commercials (all ps $< .001$). The three emotions were related sufficiently to one another that their average, displayed in the fourth row of Table 1, was computed as an aggregate index of the extent to which each commercial surprised the participants (mean of the Cronbach's alphas across the five commercials = .64). The commercials differed significantly, $F(4, 228) = 11.93$, $p < .001$. Moreover, a contrast indicated that the target ad ($M = 3.15$) was significantly more surprising than the average of the four filler commercials ($M = 2.79$), $F(1, 57) = 10.13$, $p = .002$. Least significant difference tests revealed the target ad to be more surprising than both the film and Macintosh ads. The car stereo and carpet commercials, on the other hand, did not differ reliably from the target ad. Similar to the target ad, both of these commercials rely on astonishing the viewer. The car stereo is portrayed as having produced earthquake-like tremors, and the lump in the carpet

TABLE 1: Mean Emotional Responses to the Commercials

	Filler Commercials[a]					
Emotional Rating Term	*Car Stereo*	*Film*	*Macintosh*	*Carpet*	*Mean of the Fillers*	*Target Ad*
Terms related to the surprise value of the commercials						
Surprised	3.77	3.88	**2.81**	**4.05**	3.64	3.74
Astonished	2.59	3.09	**2.29**	3.00	2.74	2.83
Deceived	2.46	**1.39**	**1.86**	**2.23**	**1.98**	2.88
M	2.94	**2.78**	**2.31**	3.10	**2.79**	3.15
Terms related to the affect factors						
Uneasy	**1.78**	**1.79**	2.43	**1.33**	**1.83**	2.29
Uncomfortable	**1.59**	**1.79**	2.28	**1.28**	**1.73**	2.31
Distressed	1.79	**1.28**	2.19	**1.43**	**1.67**	2.14
Ashamed	**1.19**	**1.59**	**1.09**	**1.21**	**1.27**	2.14
Embarrassed	**1.16**	1.97	**1.03**	**1.10**	**1.31**	1.83
Guilty	**1.14**	**1.22**	**1.05**	**1.10**	**1.13**	2.19
Amused	**4.26**	**4.21**	1.54	**4.63**	**3.66**	1.74
Relaxed	2.43	**3.02**	2.21	**3.30**	**2.74**	2.38
Delighted	**3.07**	**2.74**	**1.53**	**3.38**	**2.68**	2.21

NOTE: All ratings were scored on a 1 (*not at all*) to 5 (*very much so*) scale. For any given emotion, means in bold differ significantly from the corresponding mean for the target ad.

a. See the Method section for a brief description of each filler commercial.

commercial is eventually revealed to be the homeowner's pet guinea pig. However, the target ad was rated as equally surprising to these and substantially more surprising than the film and Macintosh ads, thus confirming our assumption regarding its surprise value.[2]

Affect factors. Mean ratings for each commercial on the nine other emotional terms are displayed in the lower portion of Table 1. Again, ANOVAs revealed differences among the ads on each and every emotion (all $ps < .001$). In each case, contrast analyses also revealed the target ad to differ reliably from the average of the four fillers (all $ps < .025$). Relative to the fillers, the public service ad made participants feel more uneasy, uncomfortable, distressed, ashamed, embarrassed, and guilty and less amused, relaxed, and delighted.

Subsequent analyses focused on the difference between the ratings assigned to the target commercial and the average of the ratings for the four filler commercials. These difference scores permitted us to examine reactions to the target ad in relation to the fillers, thus controlling for individual differences in the use of the Emotional Response scales. The nine emotional difference scores were subjected to a principal components analysis followed by a varimax rotation. Three factors with eigenvalues greater than 1 emerged, which together accounted for 72% of the variance. The factors were very interpretable. The emotional terms *uneasy*, *uncomfortable*, and *distressed* all had factor loadings greater than .83 on the first factor, with no other emotion being characterized by a loading higher than .42. We shall refer to this factor as Agitation. The second factor, Guilt, was characterized by loadings greater than .87 for the emotions *ashamed*, *embarrassed*, and *guilty*, with no other emotions loading higher than .26. Finally, the third factor, Amusement, involved the emotions *amused*, *relaxed*, and *delighted*, which had loadings of .74, .57, and .55, respectively; no other emotion loaded higher than .24 on this factor. Factor scores were computed to represent Agitation, Guilt, and Amusement, thus maintaining their independent and orthogonal relation to one another.

Relations between the affect factors and racial prejudice. Tests of the hypotheses were conducted by examining the correlation between each of the three affect factors (Agitation, Guilt, and Amusement) and automatically activated racial attitudes, concern with acting prejudiced factor scores, and restraint to avoid dispute factor scores (see Table 2).

Automatically activated racial attitudes were related uniquely to the experience of guilt in response to the public service ad. Those with more positive attitudes toward African Americans reported feeling more ashamed, embarrassed, and guilty after having been induced to make a seemingly prejudiced assumption by the commercial. Neither the experience of agitation nor amusement was associated with automatically activated racial attitudes.

A very different picture emerged for the concern with acting prejudiced factor of the MCPR. Greater concern was associated with the experience of both guilt and a more general agitation or uneasiness in response to the commercial. In addition, those with high Concern factor scores found the commercial relatively more amusing—a reaction that may reflect an appreciation for the commercial's cleverness.

TABLE 2: Correlation Coefficients

Affect Factor	*Attitude Estimate*	*Concern Factor*	*Restraint Factor*
Agitation	–.150	.223*	.404***
Guilt	.281**	.278**	.003
Amusement	–.118	.271**	–.224*

NOTE: Greater agitation, guilt, and amusement in response to the target ad are reflected by higher scores on those variables. Likewise, higher scores reflect greater concern with acting prejudiced and greater restraint to avoid dispute. Higher scores on the attitude estimate reflect a more positive racial attitude.
*$p < .10$. **$p < .05$. ***$p < .005$.

As expected, individuals characterized by relatively high scores on the restraint to avoid dispute factor reported feeling uneasy, uncomfortable, and distressed after viewing the ad, but not guilty. They also reported finding the commercial relatively less amusing.

Multiple regression analyses also were conducted for each affective factor. The affective factor score was predicted from automatically activated racial attitudes, Concern factor scores, Restraint factor scores, and the interactions among these independent variables. Given the independence of the three predictor variables noted earlier, the main effects in these regression analyses mirrored the correlations shown in Table 2. More important, no significant interactions emerged when predicting any of the three affect factors.[3] Thus, the effects of any given predictor on any given emotion were not themselves dependent on any other variable.

DISCUSSION

The findings were very consistent with our expectations. Relative to the filler commercials, the public service ad succeeded in startling and surprising the participants. Moreover, the ad produced emotional reactions that varied systematically as a function of automatically activated racial attitudes and the two factors of the MCPR, even though these aspects of racial prejudice were assessed 3 months earlier in a separate and unrelated session.

Those participants with more positive racial attitudes reported greater guilt in response to the ad. For these individuals, the invalid and seemingly prejudicial assumption fostered by the ad represents a hypocritical response. That is, wrongly assuming that the pictured African American and the criminal described by the text are the same person stands in contradiction to their positive racial attitudes. Apparently, observing themselves commit such a hypocritical inference led these individuals to feel ashamed, embarrassed, and guilty.

However, the experience of guilt was not restricted to those participants whose positivity toward African Americans was so well internalized that their attitudes were capable of automatic activation. Individuals highly concerned about acting prejudiced (i.e., those with high scores on the Concern factor of the MCPR) also reported feeling guilty after exposure to the ad. This finding can hardly be considered surprising. As noted earlier, some of the scale items that load on the Concern factor specifically inquire about the extent to which one experiences guilt after having a prejudiced thought or feeling. Thus, this specific finding is probably most appropriately viewed as validating the self-assessment process that underlies the MCPR. Those individuals who reported generally feeling self-critical when they have prejudiced thoughts experienced more guilt in response to a real-world event that provoked a seemingly prejudiced inference.

Of importance, the relation between Guilt factor scores and Concern factor scores was not itself moderated by the estimates of racial attitude derived from the bona fide pipeline priming procedure. Thus, greater concern was associated with experiencing greater guilt, regardless of whether positivity or negativity was automatically activated in response to African Americans. Even people characterized by negative racial attitudes experienced feelings of guilt, if they were highly concerned about acting prejudiced. A failure to meet the standards implied by egalitarian goals that one is motivated to achieve is sufficient to provoke guilt, even if those goals have not yet become so internalized that positivity is capable of being activated automatically when one encounters an African American.

The findings regarding guilt as a function of racial attitude and concern are consistent with earlier research that has observed a relation between scores on the MRS and the experience of negative self-directed affect when individuals are confronted with discrepancies between how they believe they should versus would behave in imagined interactions with African Americans (e.g., Zuwerink et al., 1996). Individuals with MRS scores reflecting relatively less prejudice reported more guilt about their should-would discrepancies. Such low MRS scores have been shown to emanate from either positive automatically activated racial attitudes or a high concern with acting prejudiced (Dunton & Fazio, 1997; Fazio et al., 1995). The present results indicate that both of these kinds of individuals feel guilty after making a seemingly prejudicial response in the context of a real-world event: the public service ad.

Unlike those with more positive racial attitudes and those with greater concern with acting prejudiced, individuals with higher scores on the restraint to avoid dispute factor did not report feeling greater guilt in response to the public service ad. Restraint was not at all associated with Guilt factor scores, presumably because

restraint is unrelated to the possession of either strongly internalized positive attitudes or a motivated striving to achieve egalitarian goals and standards. However, restraint did correlate strongly with Agitation factor scores. Individuals with higher restraint scores reported feeling more uneasy, uncomfortable, and distressed following exposure to the public service ad. Individuals characterized by high restraint are likely to perceive the ad as precisely the sort of event that can provoke conflict. That is, an invalid inference seemingly indicative of prejudice is probably reminiscent of past events that provoked conflict and left them feeling distressed. In addition, the ad provides a perfect example of the very kind of prejudice-tainted pitfall that they feel the need to be vigilant about avoiding. Having drawn the invalid inference is distressing in that it illustrates just how vigilant they must be if they are to avert conflict with or about African Americans.

Unlike automatically activated racial attitudes, which related to Guilt but not Agitation, and unlike the Restraint factor scores, which related to agitation but not guilt, the concern with acting prejudiced factor did not relate uniquely to a given affect factor. Consistent with self-discrepancy theory's depiction of "ought" standards (Higgins, 1987), Concern factor scores related to both guilt and agitation. Their failure to adhere to the moral obligations entailed by avowed commitment to egalitarianism led participants who were highly concerned about acting prejudiced to feel both guilty and distressed.

Although we favor the interpretation of the concern factor findings in terms of violation of an "ought" standard, an alternative possibility warrants consideration. The alternative is suggested by recent research conducted by Plant and Devine (1998). Noting that the Concern factor of the MCPR involves items relating to not wanting to appear prejudiced to both oneself and others, these researchers developed two distinct scales measuring internal and external motivation to respond without prejudice. As part of their scale validation research, Plant and Devine examined the relations between each scale and the emotions that participants reported about how well their "would" responses to imagined scenarios involving African Americans matched their "should" responses. Should-would discrepancies were more strongly associated with an index of negative self-directed affect for those with higher internal motivation but not for those with higher external motivation. External motivation, on the other hand, moderated the relation between feelings of threat and should-would discrepancies based on participants' views on how campus standards dictated they should behave versus how they would in fact behave. At first glance, these findings appear very relevant to the present results regarding the Concern factor. Given that the Concern factor of the MCPR does not distinguish between appearing prejudiced to others and personal standards (see Dunton & Fazio, 1997, p. 324), one might argue that individuals who obtained high Concern scores because they were internally motivated were the ones who felt guilt in response to the ad, whereas those who received high Concern scores because they were externally motivated were the ones who became agitated.

We have two reservations, however, about the adequacy of such an explanation. First, inspection of the relation between the specific MCPR scale items that comprise the Concern factor and the Affect factor indices failed to reveal any systematic trends. Those MCPR scale items that focus on personal standards did not display stronger relations with Guilt than Agitation. In addition, the items that focused on appearing prejudiced to others did not relate more strongly to Agitation than Guilt. Second, and more important, closer inspection of the index of negative self-directed affect employed by Plant and Devine (1998) reveals it to be an amalgamation of the present Guilt and Agitation factors. Their index included not only the three emotional terms that comprised the Guilt factor in our study (*ashamed*, *embarrassed*, and *guilty*) but also two of the three items that formed the Agitation factor (*uneasy* and *distressed*). Thus, Plant and Devine's finding regarding internally motivated individuals and the present findings regarding concern with acting prejudiced are quite consistent with one another.[4] In both cases, the more motivated individuals reported experiencing greater guilt and greater agitation.

In general, the present findings suggest that different emotional reactions can result from a seemingly prejudiced response as a function of the particular discrepancy that the response creates for different types of individuals.[5] The nature of the construct that is discrepant with the seemingly prejudiced inference fostered by the ad appears to be a critical factor. Concerns about behaving in a nonprejudiced, egalitarian manner foster both guilt and agitation when individuals fail to meet the moral standard.

In contrast, the possession of positive racial attitudes that are capable of automatic activation is not necessarily accompanied by such an avowed commitment to a moral obligation. In this case, it is the positivity of the automatically activated attitude that lies at the source of the discrepancy produced by the seemingly prejudicial inference induced by the ad. The hypocrisy here is that the viewer wrongly inferred that the African American man pictured in the ad had committed various crimes, despite the viewer's general favorability toward African Americans. This discrepancy seems to evoke very specific emotions of guilt for having behaved in a manner that is hypocritical with one's attitude. For individuals with

more positive racial attitudes, the seemingly prejudiced response calls attention to their potential for acting in a manner that may produce unwanted, negative consequences for liked others (Cooper & Fazio, 1984).

Finally, for individuals with a strong desire to avoid dispute with or about African Americans, the discrepancy produced by committing a prejudiced response is of yet another form. The discrepancy does not involve a moral obligation or a sense that one has potentially harmed a liked other but a desire to avoid conflict. Agitation, but not guilt, results.

These conceptual distinctions between a behavioral discrepancy with a moral obligation versus a discrepancy with a strongly internalized attitude capable of automatic activation versus a discrepancy with a desire to avoid dispute also may underlie the relations that were observed with respect to the Amusement factor. Higher concern factor scores were associated with finding the public service ad more amusing and delightful, but no such relation was observed for racial attitudes, and a tendency toward a reverse relation was found for Restraint factor scores. Given that concern with acting prejudiced represents a commitment to a moral obligation or goal of acting in an egalitarian fashion, it seems reasonable for highly concerned viewers to take delight in the cleverness of an ad whose very intent is to promote such an egalitarian goal. No such appreciation is to be expected for viewers who possess relatively positive racial attitudes but do not necessarily frame race relations in terms of moral obligations and goals. The findings also suggested that those individuals with higher Restraint scores devalued the ad. Although the correlation attained only a marginal level of statistical significance, higher Restraint factor scores were associated with finding the ad relatively less amusing and delightful. By making salient their susceptibility to inferences that might be considered prejudiced, the ad reminds such individuals of how easily they might provoke dispute. Apparently, they do not take any delight in having their susceptibility to conflict-provoking reactions called to their attention.

The present findings also speak to the effectiveness of the public service ad as a social influence strategy. The commercial clearly has a profound impact on *some* kinds of people. Unfortunately, it appears to have the least effect on the very people whom one might most hope to influence—those with negative racial attitudes, low concern with acting prejudiced and low restraint to avoid dispute. Nonetheless, we remain very impressed with the ad's underlying influence strategy. In a mere 25 seconds, it successfully evokes emotions from people with positive racial attitudes, high concern with acting prejudiced, or high restraint to avoid dispute.

However, it is important to consider whether evoking guilt and/or agitation is likely to have positive social consequences. We have to admit to some qualms regarding the potential consequences of evoking agitation, without any accompanying guilt, among those individuals characterized by high restraint to avoid dispute. On one hand, the agitating experience may enhance such individuals' motivation to control any prejudiced reactions they experience. That is, the commercial may induce high-restraint individuals to exercise all the more vigilance about such matters. In this sense, the commercial may have the socially positive consequence of promoting control of overtly prejudiced expressions and behavior (see Dunton & Fazio, 1997, for an example of such control). However, there also may be a darker side to the public service ad's evoking feelings of agitation. By further associating uneasiness and distress with African Americans, the ad may enhance both tendencies to avoid interactions with African Americans and social awkwardness when such interactions do occur. This reasoning relates to what Towles-Schwen and Fazio (2001) referred to as a "fundamental duplicity" regarding high restraint to avoid dispute. It is a motivational force that is to be valued because it does promote control of overt prejudice, but at the same time it is associated with a relative lack of experience with African Americans and an anticipation of the potential for conflict.

We do not have this same ambivalence about the public service ad's evocation of guilt, as in the case of those with positive attitudes and/or high concern. Such self-recriminatory reactions have been found to provoke self-regulatory mechanisms that reduce the likelihood of individuals engaging in a subsequent prejudiced response (Monteith, 1993; see also Dutton & Lake, 1973). In addition, a variety of research based on dissonance theory has shown that, under some conditions, individuals who have committed an attitudinally discrepant act reduce their dissonance by bolstering their commitment to the original attitude position (see Cooper & Fazio, 1984). When actions are discrepant with attitudes and values that individuals have previously espoused, the resulting sense of hypocrisy often leads to a renewed commitment to behaving in an attitudinally consistent fashion (e.g., Fried & Aronson, 1995; Sherman & Gorkin, 1980; Stone, Wiegand, Cooper, & Aronson, 1997; Thibodeau & Aronson, 1992).

The research by Sherman and Gorkin (1980) is especially relevant to the ad examined in the present study. It too involved a strategy of evoking a seemingly prejudicial response from participants. Individuals were asked to solve a logic problem relevant to gender-role stereotypes. The problem was structured in such a way that most participants failed to recognize the key to its solution, that the doctor about to operate on a boy injured in an auto accident was the boy's mother, not his father. Thus, just as the public service ad fostered an incorrect

and seemingly racially prejudiced inference, the logic problem involved a seemingly sexist assumption about the doctor's gender. Failure to solve the problem influenced participants' judgments regarding a simulated gender discrimination case that they considered in a subsequent and ostensibly separate experiment. These participants were more favorable toward the female plaintiff than were control participants, especially if they had earlier described themselves as being extremely supportive of feminism. Thus, the attitudinally discrepant act of making an incorrect assumption regarding the doctor's gender led the committed feminists to reaffirm their original attitudes.

This same sort of reaffirmation is likely to result from the public service ad's provoking of guilt among viewers characterized by more positive racial attitudes or viewers strongly concerned about acting in a prejudiced manner toward African Americans. In fact, the self-regulation research by Monteith (1993) that was mentioned earlier suggests that negative self-directed affect plays a key role in mediating the effect of an initial discrepancy on subsequent related judgments and behavior. Either the positive racial attitudes or the commitment to an egalitarian moral view are likely to be reaffirmed when individuals feel guilty about having made a seemingly prejudiced response. Thus, although the public service ad may have little effect on prejudiced individuals and may involve mixed consequences for those characterized by high restraint to avoid dispute, it may foster an enhanced commitment to positive racial attitudes and egalitarian moral obligations among those viewers who already display signs of nonprejudice at either the automatic processing level or the more motivated, controlled level. This strikes us as a remarkable achievement for a brief public service ad capable of reaching a very large audience.

NOTES

1. In a sample of 216 participants, we recently observed a correlation of .50, $p < .001$, between scores on the concern factor of the Motivation to Control Prejudiced Reactions (MCPR) Scale and the endorsement of egalitarian values, as assessed by the Humanitarianism-Egalitarianism Scale (Katz & Hass, 1988). Restraint factor scores were uncorrelated with egalitarianism, $r = -.01$.

2. Reports of surprise did not correlate with either automatically activated racial attitudes ($r = -.08$, *ns*) or the Concern factor scores ($r = .11$, ns). However, individuals with higher restraint factor scores tended to report finding the commercial less surprising ($r = -.24$, $p < .10$). We suspect that this judgment itself reflects the exercise of restraint on the part of such individuals. They probably viewed admitting that the public service ad astonished them as the sort of verbal expression that necessitates restraint in the interest of avoiding dispute.

3. Only the regression predicting Agitation factor scores revealed any interaction effects that even approached a conventional level of statistical significance: (a) an Attitude × Concern interaction, $t(51) = 1.61$, $p < .12$, and (b) a Concern × Restraint interaction, $t(51) = 1.71$, $p < .10$. Examination of the former indicated that individuals characterized by both positive racial attitudes and low Concern factor scores tended to report less agitation than other types of people. The second interaction involved a tendency for agitation to be especially strong among individuals who scored high on both concern with acting prejudiced and restraint to avoid dispute.

4. The data from the present investigation were collected well before the publication of the Plant and Devine (1998) article. Since then, we have had the opportunity to employ Plant and Devine's scales in research concerning automatically activated racial attitudes and the MCPR. In one sample of 59 participants, we found Plant and Devine's Internal Motivation Scale (IMS) to correlate .58, $p < .001$, with the Concern factor of the MCPR; –.10, *ns*, with the restraint factor; and –.13, *ns*, with Attitude estimates derived from the bona fide pipeline priming procedure. The correlations for the External Motivation Scale (EMS) were .32, $p < .02$, with the Concern factor; .38, $p < .005$, with the Restraint factor; and .06, *ns*, with the attitude estimates. In a second sample of 202 individuals, the IMS correlations with Concern, Restraint, and Attitude were .46, $p < .001$; –.09, *ns*; and .08, *ns*, respectively, and the EMS correlations were .02, *ns*; .24, $p < .001$; and .07, *ns*, respectively. Thus, the IMS correlates moderately well with the concern factor of the MCPR, more so than does the EMS ($z = 1.77$, $p < .10$, for the first sample; $z = 4.78$, $p < .001$, for the second sample). The EMS and the Restraint factor of the MCPR also correlate, but not as strongly. Neither the IMS nor the EMS correlate with estimates of automatically activated racial attitudes, just as is the case for the two factors of the MCPR.

5. Such a possibility is very consistent with recent theorizing about dissonance processes by Stone and Cooper (2000), who have proposed that the dissonance may assume somewhat different forms as a function of the standard by which the behavior is judged (see also Stone, 1999; Stone, Wiegand, Cooper, & Aronson, 1997). Although they focus largely on a distinction between normative, socially shared standards and more idiographic self-standards, the present findings suggest that relevant standards may differ in more specific ways as well.

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