Creating Social Reality: Informational Social Influence and the Content of Stereotypic Beliefs

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Three experiments tested the hypothesis that comparison information about other people's stereotypic beliefs is used to validate personal beliefs about a target group. A simple manipulation of questionnaire items and their response scales, presented as part of a political opinion survey, served as social comparison information regarding beliefs about African Americans. The comparison information influenced participants' subsequently measured beliefs about group as well as their evaluation of a Black target. When provided with negative comparison information, participants reported more negative racial beliefs and a more negative evaluation of the Black target than when provided with positive feedback. Moreover, this effect depended on participants' initial stereotypic beliefs. Only participants with initially negative beliefs about the target group were influenced by the comparison information; participants with relatively positive beliefs were not.

Stereotypic beliefs are among the most striking examples of the significance that the social environment has for the content of our cognitions. From last century's Uncle Tom's Cabin to today's teenage welfare mother on the nightly news, American culture has always been an abundant source of images about various social groups. The importance of such images for the content of individual stereotypic beliefs has been recognized since the early writings on stereotyping and prejudice (see Allport, 1954; Katz & Braly, 1933; Kelman, 1958; Lippmann, 1922).

Yet, although there seems to be little doubt of the significance of social influences on the content of a person's stereotypic beliefs, little psychological research actually addresses this issue. Greenberg and Pyszczynski (1985, p. 61), for example, assert that "there is an alarming dearth of experimental research" on the effects of social influence for prejudice and stereotyping. Moreover, the existing work that does address the relevance of social influence to prejudiced attitudes and beliefs has traditionally focused on aspects of attitude expression rather than on the formation or conversion of attitudes. That is, a number of studies have documented that normative social pressure is conducive to the expression of less prejudiced attitudes or less stereotypic target evaluations (e.g., Blanchard, Lilly, & Vaughn, 1991; Gaertner & Dovidio, 1977; McConahay, 1986; Sigall &

"The subtlest and most pervasive of all influences are those which create and maintain the repertory of stereotypes. We are told about the world before we see it."

Walter Lippmann
(1922, pp. 89-90)

This statement by Walter Lippmann is reminiscent of one of the basic principles underlying social psychological analysis: our subjective construction of reality is shaped by the beliefs, thoughts, and actions of the people around us (Asch, 1952; Eagle & Chaiken, 1993; Festinger, 1954; Markus & Zajonc, 1985; Mead, 1934; Moscovici, 1985; Schachter & Singer, 1962). The way other people see the world often serves as a crucial frame of reference for our own understanding of a complex and ambiguous reality.

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© 1996 by the Society for Personality and Social Psychology, Inc.
Page, 1971; for a review, see Crosby, Bromley, & Saxe, 1980). In this article, we intend to focus instead on the informational value that other people’s beliefs have for the content of a person’s stereotypes. That is, rather than being interested in how existing social norms may coerce people into the expression of a given belief, we want to examine how these norms may actually serve as a validating basis for their own construal of the social environment.

The first empirical evidence, though rather indirect, that culturally dominant beliefs are relevant for the content of people’s stereotypes comes from the classic work by Katz and Braly (1933). This study, as well as the replications carried out since (Dovidio & Gaertner, 1986; Gilbert, 1951; Karlins, Coffman, & Walters, 1969), documents a striking level of consensus among individuals regarding the attributes they considered to be characteristic of various target groups. Considerable evidence has also been accumulated demonstrating the prevalence of stereotypic portrayals of men and women, African Americans, or Asians in the mass media and educational materials (see Freedman, 1977; Greenberg & Mazinio, 1976; McArthur & Resko, 1975; Reid, 1979).

Unfortunately, this work is rather silent on how the content of the media is translated into an individual’s subjective beliefs, and it often seems to assume that “the members of the mass media audience simply ‘absorb’ what is portrayed” (Ashmore & Del Boca, 1981, p. 25). In addition, because of the truly social nature of the media, those studies that do attempt to understand how media contents influence individual attitudes and beliefs often suffer from methodological shortcomings (e.g., inadequate control groups, lack of counterstereotypic media examples to serve as stimulus material, correlational and quasi-experimental designs; see Christenson & Roberts, 1983; Roberts & Maccoby, 1985).

In an effort to better understand the influence of socially shared beliefs on the content of a person’s stereotypes, we conducted three studies that document the potential of such social influences for people’s stereotypes of African Americans, a stereotype that has been frequently hypothesized to be based on culturally transmitted beliefs (e.g., Devine, 1989; Dovidio & Gaertner, 1986; Karlins et al., 1969; Sears, 1988). In the studies reported, a rather trivial manipulation of feedback about other people’s beliefs was capable of influencing participants’ own stereotypic assumptions and their construal of a member of the target group.

A major problem for testing possible influences of socially shared beliefs on people’s personal stereotypes derives from the difficulty of providing credible comparison information without making participants suspicious about the intention of the manipulation. Recent findings from survey research may offer an elegant solution to this problem. Work by Schwarz and his colleagues demonstrates that the response scales in common attitude questionnaires provide crucial information for social comparison (for a review, see Schwarz & Hippler, 1991). For example, in one study, these authors varied the labeling of response scales so that for a question asking respondents how much time they spend watching television daily, half the respondents were provided with an answer scale that ranged from \textit{up to \frac{1}{2} hour} to \textit{more than 2\frac{1}{2} hours}, and the remaining respondents were given a scale with \textit{up to 2\frac{1}{2} hours} at the low end and \textit{more than 4\frac{1}{2} hours} at the high end (Schwarz, Hippler, Deutsch, & Strack, 1985). Not only did the scale manipulation influence respondents’ reported hours of TV watching such that respondents reported higher frequencies when provided with the high-frequency scale but, importantly, the response scales also influenced respondents’ subsequent judgments related to their TV-watching habits. For example, respondents rated the importance of TV for their leisure time higher when they had been provided with the high-frequency scale than when given the low-frequency scale; and respondents’ evaluation of their satisfaction with their leisure time was lower when they had reported their TV consumption on the high-frequency scale than on the low-frequency scale. Of particular interest for the current article is the finding that respondents in the high-frequency-scale condition also estimated that \textit{the average person} spends significantly more time watching TV than did respondents in the low-frequency-scale condition. Apparently, respondents use the range of response alternatives to infer existing social standards—that is, the distribution of possible answers in the population. A response in the middle of the scale is evidently considered to be the average, or “normal,” response in the population, and responses above or below the scale midpoint are interpreted as a deviation from this normality. Thus response scales provide the respondent with implicit information about social standards regarding the issue in question. For our purposes, a similar manipulation seemed to be well suited for providing individuals with information regarding common beliefs related to the stereotype of African Americans.

Specifically, we asked participants about their beliefs regarding certain issues related to the common stereotype of African Americans (e.g., the delinquency rate among African Americans) while manipulating the scales on which participants made their responses. To enhance the potential impact of the social comparison information provided by this manipulation, we chose to ask participants about issues that required specific factual knowledge—knowledge that participants most likely did not have. This general notion that increased stimulus
ambiguity augments the impact of social comparison information has frequently been stated in the literature (see Allen, 1965; Asch, 1956; Crutchfield, 1955; Festinger, 1954). Moreover, in a study that specifically manipulated response scale choices, Bless, Bohner, Hild, and Schwarz (1992) observed stronger response scale influences for judgments of increased uncertainty. Accordingly, we hypothesized that in the absence of specific knowledge for the judgment at hand, participants would be likely to refer to the available social comparison information.

In addition, we expected participants’ judgments to be affected by their actual stereotypic beliefs. For example, a person who believes that African Americans are especially aggressive and violence prone should be likely to give higher estimates for the frequency of criminal offenses among African Americans than a person who does not believe this. In other words, participants’ stereotypic beliefs about African Americans should provide a major source of variance in responses to the items used in our feedback manipulation. This could, in fact, undermine the effectiveness of the scale manipulation, which is designed to inform participants that the normal responses fall either above or below a participant’s own.

The first experiment presented here, therefore, intended to test the feasibility of this scale manipulation with participants from a population that was relatively homogeneous in its initial beliefs about African Americans. Specifically, in Study 1, participants were first presented (by means of a scale manipulation) with comparison information regarding common stereotypic beliefs about African Americans. Subsequently, we examined the influence of this information on participants’ own beliefs about this target group, as well as on their behavior toward a member of the group. Following our arguments outlined above, we expected the comparison information contained in the response scales to lead participants to reevaluate their own stereotypic beliefs. We therefore predicted that participants would show more negative beliefs about African Americans when presented with negative comparison information than when presented with positive information about this target group. We further expected these differences to influence participants’ subsequent judgments of the African American target.

**STUDY 1**

**Method.**

**Overview.** Study 1 included two experimental conditions. Using a manipulation similar to the one reported by Schwarz et al. (1985), participants were given feedback regarding certain stereotypic beliefs that indicated either a more positive or a more negative reality. Consecutively, participants’ racial beliefs were measured, and in an allegedly unrelated task, participants were asked to evaluate an African American defendant in a mock jury trial. In the trial, participants were presented with evidence that included numerous references to negative contents of the African American stereotype, as well as individuating information about the defendant. Participants were asked for their verdict and, if the defendant was found guilty, for an appropriate sentence. Finally, participants indicated their impression of the defendant on a list of 25 trait adjectives.

**Participants.** A common measure of beliefs regarding African Americans, the Modern Racism Scale (MRS) (McConahay, Hardee, & Batts, 1981), was administered as part of a larger survey to approximately 1,000 undergraduate university students enrolled in an introductory psychology course. Fifty participants who classified themselves in the questionnaire as non-Caucasian were excluded from the preselection sample. The upper 20% of the distribution for the Modern Racism Scale was selected as a subsample with relatively homogeneous racial beliefs. From this pool of students with relatively negative beliefs, 35 female and male individuals were randomly assigned to the current experiment and participated in partial fulfillment of their course requirements. The data for one participant who expressed suspicion about the relation between the two allegedly independent parts of the study were excluded from the analysis.

**Construction of response scales.** To develop response scales for the experimental manipulation of social comparison information, we administered the items listed in Table 1, combined with the MRS, to 84 undergraduate students who participated in this pretest on a voluntary basis. All items from Table 1 were presented with an open answer format so as not to convey any comparison information for what presumably was a “correct” answer. Using only the data from the upper 20% of the distribution for the MRS, we constructed response scales for the experimental manipulation. For response scales designed to convey more positive information, we constructed scales such that the upper 80% of the responses given by these pretest participants were combined in the highest response alternative. Similarly, the response scales designed to indicate rather negative information were constructed by combining the lower 80% of the selected pretest responses in the lowest response alternative. The overview of items and response scales in Table 1 contrasts the two experimental conditions. Considering the argument by Schwarz and his colleagues about the informational value of response scales, it becomes apparent that the social comparison information conveyed in the two experimental conditions was quite
TABLE 1: Response Scale Manipulation, Study 1

<table>
<thead>
<tr>
<th>Item</th>
<th>Positive Response Scale Information</th>
<th>Negative Response Scale Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In the state you live in, what percentage of the state budget do you think is spent on welfare payments?</td>
<td>Less than 1%</td>
<td>Less than 15%</td>
</tr>
<tr>
<td></td>
<td>1-3%</td>
<td>15-19%</td>
</tr>
<tr>
<td></td>
<td>4-6%</td>
<td>20-24%</td>
</tr>
<tr>
<td></td>
<td>7-9%</td>
<td>25-29%</td>
</tr>
<tr>
<td></td>
<td>10% or more</td>
<td>30% or more</td>
</tr>
<tr>
<td>2. How much do you think a 4 person family on welfare receives in welfare payments each month?</td>
<td>Less than $250</td>
<td>Less than $1,000</td>
</tr>
<tr>
<td></td>
<td>$250-$499</td>
<td>$1,000-$1,249</td>
</tr>
<tr>
<td></td>
<td>$500-$749</td>
<td>$1,250-$1,499</td>
</tr>
<tr>
<td></td>
<td>$750-$999</td>
<td>$1,500-$1,749</td>
</tr>
<tr>
<td></td>
<td>$1,000 or more</td>
<td>$1,750 or more</td>
</tr>
<tr>
<td>3. Out of 100 blacks between the ages of 20-40, how many do you think have a high school degree?</td>
<td>Less than 60</td>
<td>Less than 30</td>
</tr>
<tr>
<td></td>
<td>60-84</td>
<td>30-99</td>
</tr>
<tr>
<td></td>
<td>85-89</td>
<td>40-49</td>
</tr>
<tr>
<td></td>
<td>90-94</td>
<td>50-59</td>
</tr>
<tr>
<td></td>
<td>95 or more</td>
<td>60 or more</td>
</tr>
<tr>
<td>4. What do you think is the difference between the average white and the average black SAT score?</td>
<td>Less than 25 points</td>
<td>Less than 100 points</td>
</tr>
<tr>
<td></td>
<td>25-49 points</td>
<td>100-124 points</td>
</tr>
<tr>
<td></td>
<td>50-74 points</td>
<td>125-149 points</td>
</tr>
<tr>
<td></td>
<td>75-99 points</td>
<td>150-174 points</td>
</tr>
<tr>
<td></td>
<td>100 points or more</td>
<td>175 points or more</td>
</tr>
<tr>
<td>5. Out of 100 black students at your university, how many gained access primarily because of affirmative action policies?</td>
<td>Less than 5</td>
<td>Less than 60</td>
</tr>
<tr>
<td></td>
<td>5-14</td>
<td>60-69</td>
</tr>
<tr>
<td></td>
<td>15-24</td>
<td>70-79</td>
</tr>
<tr>
<td></td>
<td>25-34</td>
<td>80-89</td>
</tr>
<tr>
<td></td>
<td>35 or more</td>
<td>90 or more</td>
</tr>
<tr>
<td>6. How frequently are rallies protesting racial discrimination held on your campus?</td>
<td>Never</td>
<td>Less than once a month</td>
</tr>
<tr>
<td></td>
<td>Up to once a year</td>
<td>Once or twice a month</td>
</tr>
<tr>
<td></td>
<td>Up to once a semester</td>
<td>2 or 3 times a month</td>
</tr>
<tr>
<td></td>
<td>About twice a semester</td>
<td>Once a week</td>
</tr>
<tr>
<td></td>
<td>Once a month or more</td>
<td>More than once a week</td>
</tr>
<tr>
<td>7. Some people believe that blacks have an individual responsibility to overcome prejudice and work their way up in this society. Some people believe that this responsibility rests on society as a whole. In your opinion, what percentage of this responsibility rests on the individual?</td>
<td>Less than 20%</td>
<td>Less than 75%</td>
</tr>
<tr>
<td></td>
<td>20-29%</td>
<td>75-79%</td>
</tr>
<tr>
<td></td>
<td>30-39%</td>
<td>80-84%</td>
</tr>
<tr>
<td></td>
<td>40-49%</td>
<td>85-89%</td>
</tr>
<tr>
<td></td>
<td>50% or more</td>
<td>90% or more</td>
</tr>
<tr>
<td>8. Out of 100 black males between the age of 16 and 24, how many do you think have spent time in prison?</td>
<td>Less than 1</td>
<td>Less than 30</td>
</tr>
<tr>
<td></td>
<td>1-3</td>
<td>30-34</td>
</tr>
<tr>
<td></td>
<td>4-6</td>
<td>35-39</td>
</tr>
<tr>
<td></td>
<td>7-9</td>
<td>40-44</td>
</tr>
<tr>
<td></td>
<td>10 or more</td>
<td>45 or more</td>
</tr>
</tbody>
</table>

NOTE: Item 3 is reverse scored.

different. For example, in Item 8, "Out of 100 black males between the age of 16 and 24, how many do you think have spent time in prison?" the normal response (i.e., the scale midpoint) in the condition reflecting more positive information was 4-5, whereas in the negative information condition it was 33-39.

Procedure. Participants were scheduled for two consecutive, separate experiments in mixed-gender groups of three to five. Each participant was randomly assigned to one of the two experimental conditions. Participants were informed that the first of the two experiments was part of a national survey regarding political attitudes.
among students, conducted by the university’s “Center for Political Studies.” After giving written consent and being advised that their responses were strictly anonymous, participants filled out a questionnaire that contained 45 items—the 8 items for the response scale manipulation, the 7 items of the MRS, and 30 filler items. The filler items included questions regarding race-unrelated facts, as well as race-unrelated political attitudes. For example, participants were asked, “What percentage of the federal budget is spent on the military?” (less than 20%; 20-24%; 25-29%; 30-34%; 35% or more). Another question read “The government should take a more active role in stimulating the economy” (strongly agree to strongly disagree). Response scales for the filler items did not differ by condition. The items for the response scale manipulation were placed in the second quarter of the questionnaire and were directly followed by the MRS items. The high number of filler items was chosen to conceal the race-related subject of the critical items, and the item placement in the questionnaire was intended to ensure participants’ attention to the critical items. The questionnaire did not ask for any personal information.

When each person had completed the questionnaire, approximately 15 min after the beginning of the study, the experimenter thanked the participants, explained that they would receive credit for their participation, and guided them back to the waiting room. Participants were informed that they would be picked up by another experimenter for the subsequent, unrelated study. Shortly thereafter, a different experimenter, who was blind to the individual participant’s experimental condition, guided the participants to another laboratory room at the other end of the hallway. Here participants were informed that they would take part in a study about jury decision making. Participants were told that they would read a summary of an existing court trial and would then be asked individually to decide about a verdict and possible sentencing. Next, the experimenter obtained participants’ written consent on a form that differed in wording and type style from the one used in the first part of the study.

In this “second” experiment, participants received a booklet with summaries of an allegedly existing court trial. The booklet contained brief background information about the participants in the trial (e.g., age, profession, marital status) as well as summaries of the testimony of four witnesses and the defendant. In the trial, the defendant, an African American 17-year-old, was accused of armed robbery of a small grocery store.

After the trial information, the booklet included “jury instructions” that specified the allegations that had to be proven beyond a reasonable doubt if the defendant were to be found guilty. Participants’ reading time for the booklet averaged about 20 min. When a participant had finished this part of the study, the experimenter handed a booklet containing the final dependent measures and an envelope to the participant. The participant was asked to answer the questions in the booklet and then return the booklet to the envelope provided. When all participants had completed their task, the experimenter probed participants for suspicion. The experimenter then explained the purpose of the study and debriefed participants about the deception involved. In particular, the experimenter presented examples of the scales used in the previous questionnaire and explained the nature of the experimental manipulation as well as its potential effects.

Dependent measures. Four different measures were obtained. First, participants’ racial beliefs as measured by the MRS were assessed directly after the experimental manipulation. The MRS consists of seven items that are commonly administered with 5-point response scales ranging from strongly agree to strongly disagree. For each participant an overall MRS score was calculated by averaging across the seven items; higher scores indicate more negative beliefs about African Americans. The remaining dependent measures were assessed as part of the jury decision task. The first measure during this part of the study was participants’ confidence that the defendant was guilty. Specifically, participants were asked: “Please, indicate your verdict by checking the most appropriate alternative.” The following response alternatives were provided: 1, very confident, not guilty; 2, moderately confident, not guilty; 3, not confident, ball leaning toward not guilty; 4, not confident, but leaning toward guilty; 5, moderately confident, guilty; 6, very confident, guilty. Participants who chose alternatives 4 through 6 were then asked to give an appropriate sentencing suggestion for the defendant. The possible sentence could range from 1 month to 60 months. Finally, participants were asked to indicate their personal impression of the defendant by rating the defendant on a list of 25 traits. Each rating was given on a 7-point scale, ranging from extremely (e.g., friendly) to not at all (friendly). The list included 19 evaluative traits (e.g., honest, sympathetic, sly, violent) and 6 traits with ambiguous evaluative connotation, which were added as filler items (e.g., athletic). Each participant’s rating on the 19 evaluative traits were combined to form an average score for the participant’s target impression, ranging from +3 = most positive, to 0 = neutral, to -3 = most negative.

Results and Discussion

MRS scores. We hypothesized that the manipulation of the available comparison information should affect participants’ beliefs about African Americans and thus result in higher MRS scores for participants in the negative information condition than in the positive information
condition. A comparison of participants’ scores on the MRS confirms this prediction. Participants who were given high response scales for the critical items in the questionnaire scored significantly higher on the MRS ($M = 3.25$) than participants who received the low response scales ($M = 2.67$), $t(31) = 2.67, p = .01$. That is, beliefs about African Americans, assessed directly after exposure to the comparison information, were significantly more negative when participants had been provided with negative rather than positive feedback.

Jury decision task. We predicted that the differences in participants’ racial beliefs would influence judgments in the mock jury trial such that those in the negative information condition would be more willing to find the African American defendant guilty, to advocate a higher sentence, and to report a more negative impression of the defendant than would participants in the positive information condition. The data are quite consistent with these predictions. Participants in the negative information condition were significantly more confident about the defendant’s guilt ($M = 5.58$) than participants in the positive information condition ($M = 4.73$), $t(19) = 2.76, p = .01$. Of all participants, only three indicated that they could not find the defendant guilty, although they had serious doubts about his innocence. All three individuals had received low response scales in the prior scale manipulation. A comparison of the suggested sentences for the defendant reveals a marked difference between the two experimental conditions: Participants in the negative information condition advocated a sentence that was, on average, 8 months longer than in the positive information condition ($Ms = 26.47$ vs. 18.53). Despite its size, the difference was not statistically significant, $t(27) = 1.59, p = .12$. Yet it should be kept in mind that three of the participants in the positive information condition found the defendant not guilty; naturally, these participants did not advocate any sentence and therefore did not enter the analysis. Finally, findings from the trait ratings reveal that, as hypothesized, the impression of the defendant reported by participants in the positive information condition was significantly less negative ($M = -0.50$) than that reported by participants in the negative information condition ($M = -1.04$), $t(22) = 2.65, p = .02$.

Thus the results provide strong evidence that the response scale information affected both participants’ general beliefs about the target group and their evaluation of a specific group member. At the same time, these data raise the question of how the scale manipulation might affect respondents who do not hold such negative views about the target group initially as the participants selected for the current experiment.

In fact, there is reason to suspect that individuals with relatively positive racial beliefs may be less influenced by the social comparison information provided in the current manipulation. Evidence from research on racial attitudes suggests that low-prejudiced individuals may assume the general public to be more prejudiced than themselves whereas high-prejudiced individuals may view the average person’s racial attitudes as rather similar to their own (O’Gorman, 1975). If so, then the social comparison information provided by the response scales should have less relevance for participants scoring low on the MRS, because these individuals should interpret the information as reflecting the beliefs of dissimilar others (Festinger, 1954) or others who are not considered members of the salient in-group (Turner, 1991). To test this hypothesis, a second experiment compared the response scale effects for two groups of participants who differed substantially in their initial beliefs about African Americans.

**STUDY 2**

**Method.**

Participants. Seventy-one undergraduate university students enrolled in an introductory psychology course participated in the experiment in partial fulfillment of their course requirements. As in Study 1, a larger sample (approximately 1,500 students) had been pretested on the MRS. For the current study, participants were randomly selected from the subset of respondents who identified themselves as Caucasian and who held either relatively positive racial beliefs (scoring in the lower 20% of the MRS distribution) or relatively negative racial beliefs (upper 20%).

Procedure and materials. The experiment took place in an identical fashion to Study 1, except that the scales used to manipulate the social comparison information were redesigned. In the first study, these scales had been constructed on the basis of pretest data from only those respondents who scored high on the MRS; scales for the current study were based on the entire pretest distribution. Because, in the pretest, individuals with lower MRS scores tended to respond with more positive estimates, this redesign led, in effect, to more positive feedback in the positive response scale condition. For example, the response scale used in the positive information condition for Item 5 ("Out of 100 black students at your university, how many gained access primarily because of affirmative action policies?") changed from less than 5, 5-14, 15-24, 25-34, 35 or more in Study 1 to less than 1, 1-3, 4-6, 7-9, 10 or more in the current experiment.

Manipulation check. In addition to the experiment proper, we conducted a pretest to ascertain whether this somewhat more extreme scale manipulation did indeed lead to differential inferences regarding other people’s
beliefs on the issues in question and whether the manipulation was equally effective for the two distinct participant groups. An independent sample of 117 individuals participated in this pretest, filling out a questionnaire that, besides several filler items, consisted of the MRS, followed by two manipulation items selected from the questionnaire to be used in the actual experiment (Item 5, on high school graduation rates, and Item 8, on delinquency rates). The manipulation items appeared with either the positive or the negative response scale and were succeeded by an explicit question regarding participants’ perceptions of existing social standards. For example, after Item 3, participants received the query: “Asked about how many blacks between the ages of 20 to 40 have a high school degree, what do you think the average student at your University would estimate?” An open response format was used for these social standard questions to maintain identical formats in the two experimental feedback conditions.

The responses to the two social standard questions of those participants who scored in either the lower or the upper 20% of the MRS distribution were submitted to two separate 2 (positive vs. negative scale information) by 2 (low vs. high premanipulation MRS score) analyses of variance (ANOVA). These analyses revealed only highly significant main effects for the scale manipulation: Item 3, F(1, 54) = 70.58, p < .0001; Item 8, F(1, 52) = 41.71, p < .0001. Participants who received positive response scales perceived the social standards for an average member of a comparison group. The pretest thus confirmed that both participant groups (high and low MRS) used the response scales to make inferences regarding dominant beliefs in a relevant comparison group (students at their university).

Results and Discussion

As can be seen in Table 2, Study 2 replicated in large part the results from the previous experiment. Participants who received positive response scale information again scored lower on the MRS and overall showed a more positive evaluation of the African American defendant. As hypothesized, this was true only for participants with high MRS pretest scores. The scale manipulation had no effect on low-MRS participants’ responses to the dependent measures.

Separate 2 (positive vs. negative scale information) by 2 (low vs. high premanipulation MRS score) ANOVAs confirm that this two-way interaction is significant for participants’ postmanipulation MRS score, F(1, 70) = 4.17, p = .045, and for their ratings of the defendant’s guilt, F(1, 70) = 4.03, p = .049, and for their ratings of the defendant’s sentencing suggestion, F(1, 70) = 2.65, p = .108. No such interaction emerged for participants’ impression ratings of the defendant, F < 1.

Looking at the results for the two participant groups separately, simple effect analyses confirm that the mean differences obtained for high-MRS participants’ postmanipulation MRS score and their guilt ratings were reliable, MRS F(1, 54) = 8.20, p = .007; guilt F(1, 54) = 12.93, p = .001. Similar mean differences observed for the other two dependent measures, sentencing and target impression, remained too small to reach statistical significance, Fs < 2. Thus these results replicate the findings from the previous experiment; however, the manipulation had a smaller overall effect on high-MRS participants’ evaluation of the African American target in the jury decision task.

In contrast to these results for high-MRS participants, the scale manipulation showed no effect on low-MRS participants’ responses to the dependent measures. Although the observed means reflect a slight contrast effect for low-MRS participants, in that negative response
scale information yielded slightly more positive measures of racial beliefs and target evaluation, these differences proved to be highly unreliable, all Fs < 1.

The analyses also revealed an additional set of main effects for participants' MRS score, indicating that, independent of the scale manipulation, high-MRS participants tended to evaluate the African American defendant more negatively, guilt, F(1, 70) = 13.62, p < .0001; sentence, F(1, 70) = 7.55, p = .008, and, not surprisingly, scored higher on the postmanipulation MRS, F(1, 70) = 178.24, p < .0001.

In summary, the data support our conjecture that low-MRS participants would remain uninfluenced by the scale manipulation. Moreover, the results for high-MRS participants generally replicate the findings from Study 1, demonstrating the influence of social comparison information on high-MRS participants' beliefs about the target group and their evaluation of a specific member of this group.

Although the present findings are consistent with our interpretation that the observed effects result from the differential feedback about other people's beliefs, an alternative interpretation could be that the scales instead provided participants with factual information on the questions at hand. In other words, participants may have taken the scales as indicators of the correct statistical facts (perhaps assuming the researcher had expertise on the issue in question) rather than reflecting the distribution of responses among a relevant comparison group. From this perspective, our manipulation check, which demonstrated that participants did infer social standards from the scale information, would be understood as a post hoc response that participants came to only after first inferring something about the state of some objective reality—not as a true indicator that the scales served as social comparison information, as we propose.

To pursue this possibility further, we analyzed participants' personal beliefs on the critical issues as indicated by their responses to the manipulation items in Study 2. For this analysis we coded participants' responses on the 5-point scales as 1-5, where higher numbers indicate more negative responses, and computed an overall score for each participant by averaging across the eight manipulation items. Because the experimental manipulation varied the response labels for these items, comparisons between conditions are not interpretable. Accordingly, we analyzed participants' response scores separately by manipulation condition as a function of their premanipulation MRS scores. In the positive feedback condition, both high- and low-MRS participants' average responses for the manipulation items fell slightly above the scale midpoint (high-MRS M = 3.99; low-MRS M = 3.26). The difference between the means for the two participant groups was unreliable, F < 1. In the negative feedback condition, however, high- and low-MRS participants' responses differed reliably. Whereas high-MRS participants again responded close to the scale midpoint, low-MRS participants gave, on average, significantly more positive answers (high-MRS M = 2.61; low-MRS M = 1.83), F(1, 36) = 18.47, p = .0001.

Thus low-MRS participants showed significantly less agreement with the information contained in the negative feedback condition than high-MRS participants, although high- and low-MRS participants inferred similar social standards in the manipulation check reported earlier. If participants had based their judgments solely on their perceptions of an objective reality, we would have expected that the differences high- and low-MRS participants show in regard to what they believe to be the correct item responses would also appear on their responses to the social standard items, yet no reliable differences were evident in the manipulation check (Fs < 1). Thus these findings are at odds with the alternative explanation of our results positing that the scale manipulation provided solely factual information, which was then used for inferences regarding social standards. Our original interpretation, however—that the scale information led participants to infer other people's beliefs and that low-MRS participants disregarded this information when they considered it to be prejudiced—remains quite consistent with the results. Nevertheless, we decided to conduct an additional experiment that would provide an even stronger test of our hypothesis by greatly limiting the possibility that the experimental procedure conveyed factual information about the issues of interest.

STUDY 3

Method

Participants. Participants were again recruited from the upper and lower 20% of the distribution for the MRS, which had been administered as part of a larger survey to approximately 800 undergraduate university students enrolled in an introductory psychology course. From this pool of students, 44 individuals participated in the experiment in partial fulfillment of their course requirements.

Procedure and materials. Participants were asked to fill out a questionnaire ostensibly designed to investigate how accurately people perceived the general public's beliefs on various political issues. The items on this questionnaire were largely identical to those used in the previous experiment. As in Studies 1 and 2, a set of manipulation items, followed by the Modern Racism Scale, was embedded in a larger number of filler
questions. However, we changed the questionnaire in the following ways.

1. Instead of asking participants about their own opinions on a given issue, the majority of the questionnaire items were concerned with participants' perceptions of other people's beliefs. Specifically, all manipulation items used from the previous questionnaire were transformed into explicit statements for which participants had to indicate how prevalent they thought those beliefs to be in the general public. For example, Item 3 from the positive social standard condition of Study 1 now read: “About 85% of Blacks between the ages of 20-40 have a high school degree.”

2. A manipulation different from the one used in the previous experiments varied the content of the stereotypic beliefs presumably shared by others. Rather than manipulating the information contained in the response scales, the experiment instead varied the content of the stereotypic beliefs reflected in the question itself. For example, Item 3 asked participants in the positive standard condition to estimate the percentage of the general public who agreed with the premise that 85% of Blacks in a given age group had received a high school degree. In the negative standard condition, this question asked participants to estimate the percentage of the general public who agreed that 50% of Blacks held high school degrees. For each condition, these statements were constructed by using the midpoint of the response scales from the corresponding condition of the previous experiment.

3. The response scales for these questions varied among items and were designed such that the scale midpoint for these manipulation items was always at least 60%, with all response alternatives referring to a reference point of 50% or higher (e.g., 50% or less; 55%; 60%; 65%; 70% or more). Following the rationale offered by Schwarz and his colleagues, these scales should have led participants, independent of condition, to infer that the large majority of the general public agreed with the statement presented in the question. Importantly, the researcher's expertise potentially reflected in these response scales concerned only his or her knowledge about social standards present among the general public, rather than knowledge about factual issues contained in the beliefs themselves.

4. Whereas the previous experiments used “students at your university” as the potential reference group, the current questionnaire referred to the general public as a whole. Items 1 (which referred to a particular state's welfare budget) and 5 (which asked for Blacks' access to a particular university) therefore had to be worded so that they applied to beliefs of a more general audience.

Question 6 (campus rallies) was dropped from the list of manipulation items because it was an issue specific to college populations. This left seven manipulation items, which were followed for all participants by the seven items from the MRS.

5. Finally, the set of fillers was adapted so that it included questions similar in format to the manipulation items as well as questions that asked participants about their personal opinion on various issues (comparable to the MRS items). The response scales used for filler items asking about other people's beliefs varied substantially, so as to increase the alleged diagnosticity of the response scales for participants' inferences regarding the prevalence of the beliefs in question.

Once all participants had completed their questionnaires, the experimenter explained the actual purpose of the study. As part of this debriefing, the experimenter read aloud the manipulation items and explained how both the question wording and the response scales had been designed to influence the respondents' inferences.

Results and Discussion

If indeed the findings obtained in the previous two experiments are attributable to participants' assumptions about social standards conveyed by the response scales, then this alternative questionnaire manipulation should yield similar results. Results from Study 3 indicate that this is in fact the case. This more stringent test of our hypothesis obtains results for participants' postmanipulation MRS scores that are almost identical to those observed in the previous experiment (see Table 3). A 2 (positive vs. negative questionnaire information) by 2 (low vs. high premanipulation MRS score) ANOVA revealed significant main effects for both factors—questionnaire information, F(1, 43) = 5.44, p = .025; MRS score, F(1, 43) = 140.83, p < .0001, and a significant two-way interaction, F(1, 43) = 4.41, p = .042.

The obtained main effect for participants' MRS score simply confirms that high-MRS participants again scored higher on the postmanipulation test than low-MRS participants. Of considerably more interest is the fact that, as in the previous experiments, exposure to positive stereotypic standards led, on average, to lower scores on the postmanipulation MRS. Again, this effect was confined to participants who initially held relatively negative racial beliefs. High-MRS participants who received positive stereotypic standards scored lower on the postmanipulation MRS than participants who received negative information, whereas the questionnaire manipulation had virtually no effect on low-MRS participants' responses to the MRS items. Additional separate analyses for the two participant groups confirm that only the mean differences obtained for high-MRS participants'
When the information suggested that other people held negative information about the experimental procedure, participants in the specific African American target in an unrelated context carried over to participants' actual behavior toward the target group. Participants with relatively positive beliefs about African Americans, scoring low on the MRS, showed no differences in their responses to any of the postmanipulation measures.

**General Discussion**

To investigate the influence of a socially constructed reality on people’s stereotypic beliefs and their behavior toward a stereotyped target, participants received differential feedback regarding such a reality. In three experiments, participants were exposed to information designed to provide feedback regarding other people’s stereotypic beliefs about African Americans by means of a manipulated questionnaire ostensibly measuring political opinions. In support of our hypotheses, the differential feedback consistently influenced participants’ beliefs about African Americans across the experiments. When the information suggested that other people held relatively negative beliefs about African Americans, participants subsequently expressed more negative beliefs about the target group themselves. Furthermore, in the initial two studies, the effect of the scale information also carried over to participants’ actual behavior toward a specific African American target in an unrelated context, the jury decision task. In this allegedly independent part of the experimental procedure, participants in the negative information condition tended to perceive the African American defendant more negatively than participants in the positive information condition. Whereas this transfer to a specific target was observed reliably for participants’ evaluation of the defendant’s guilt, it proved to be less stable for the other two dependent measures employed, sentencing and trait impressions.

Importantly, results from Studies 2 and 3 indicate that the influence of the questionnaire information was qualified by participants’ initial beliefs about the target group. Participants with relatively positive beliefs about African Americans, scoring low on the MRS, showed no differences in their responses to any of the postmanipulation measures.

**The Subjective Meaning of the Questionnaire Manipulations**

The present effects were obtained using experimental manipulations that were based on an observation by Schwarz and his colleagues according to which survey respondents use response scales for inferences about the issues in question. As mentioned, our manipulations in the initial two experiments differed slightly from those employed in the Schwarz et al. (1985) studies. In the work by Schwarz and his colleagues, the actual fact about which the researcher presumably held expert knowledge was identical with the social standards that were to be inferred (i.e., the frequency of certain behaviors among the general public). In the present situation, however, objective reality was not necessarily the same as social reality (i.e., the socially dominant beliefs). The fact that a given belief about African Americans is objectively true (e.g., because the researcher knows of relevant statistics) on the issue) does not imply that this “truth” is shared by the general public.

Yet the data from Studies 1 and 2 suggest that participants nevertheless used these response scales for inferences regarding other people’s beliefs. More important, in the case of low-MRS participants who were given negative scale information, social standards were inferred from the scales even though these participants apparently rejected the validity of the factual information contained in the scales. In Study 3, moreover, a manipulation that provided explicit information about the researcher’s assumptions regarding existing social standards, rather than his or her knowledge of factual issues, yielded identical results. In light of these data, it appears as if participants not so much thought that the response scales reflected the researcher’s expert knowledge about an issue but instead assumed that the survey’s authors made use of response scales that they deemed appropriate for capturing the expected distribution of answers. Such a “pragmatic scale design” heuristic would be consistent with the findings reported by Schwarz et al. (1985), but it would also clearly capture our own participants’ behavior more adequately than does the alternative “scales represent facts” heuristic. It seems...
necessary for future research to further address this issue of what underlying assumptions respondents make in their use of survey response scales.

In the present experiments, social comparison information affected participants’ beliefs regarding African Americans as assessed by the MRS, a measure that has been proven to adequately capture people’s beliefs about this particular target group and has been shown to predict behavior and social judgments related to African Americans (for a review, see McConahay, 1986). Similarly, in Studies 1 and 2, the postmanipulation differences in participants’ MRS scores also transferred to their evaluation of a specific group target. In addition to these effects on participants’ beliefs regarding African Americans, it is quite likely that the scale manipulation may have influenced other beliefs related to the issues raised in the critical items. After all, the items provided feedback not only about the reality of African Americans but also about, for example, welfare policies in general. As others have argued, stereotypic knowledge exists within a context of, and is intricately related to, other beliefs about the world. Stereotypes have been thought to depend on people’s knowledge of the history of group interactions (see Sherif, 1967), on their political ideologies (see Feather, 1984; Pettigrew & Meertens, 1995), and on their values (see Katz & Hass, 1968; Rokeach, 1968). That is, information about issues that are related to a person’s stereotypic knowledge of a given social group are likely to also affect the person’s stereotypic construal of this group itself. In fact, as the example of the “welfare queen” employed in the 1984 U.S. Presidential campaign suggested, one particularly effective strategy for agents of social influence (e.g., the media, politicians) to adopt is the communication of information about “abstract” political issues when indeed targeting people’s stereotypic beliefs about a specific social group (Edsall & Edsall, 1991).

The Validating Function of Social Influence

Throughout this article, we have emphasized the informational value of the comparison information for participants’ stereotypic beliefs. That is, our questionnaire manipulations provided participants with feedback about the content of other people’s beliefs. Although the present data do not address this question, it seems likely that such feedback would also affect respondents’ inferences about what are considered to be socially accepted beliefs. It is therefore plausible that the effects observed for high-MRS participants reflect to some degree their assumptions about how acceptable it was to express negative beliefs about African Americans. Nevertheless, there are several reasons to conclude that the present results document effects that lead beyond the mere manipulation of belief expression. First, we took several precautions to make it easier for participants to dissent from the purported standards (e.g., allegedly no identifying information was collected with the questionnaire responses; in Studies 1 and 2, the connection between the questionnaire and the “jury trial” was not disclosed to participants). Second, whereas the comparison information provided feedback about specific issues, the effects of this feedback were observed on much more general beliefs about the target group, in participants’ responses to the MRS. As Studies 1 and 2 demonstrate, the experimental manipulation also affected the evaluation of a specific target, presented in a quite different social context and measured approximately 30 min apart from the scale manipulation. Although we would be hesitant to draw any conclusions about the long-term significance of these effects, the finding does stand in contrast to the coercive effects of social influence that are traditionally associated with more specific and short-term compliance (see Asch, 1956; Nemeth, 1986; Rohrer, Blaron, Hoffman, & Swander, 1954; Sherif, 1935). Moreover, an interpretation of the present results as solely reflecting effects on participants’ belief expression is difficult to maintain in the face of our findings for low-MRS participants. Why were these participants less affected than the high-MRS participants by the feedback manipulation, if indeed they were faced with similar normative pressures to conform? Although there is evidence that individuals who subscribe to positive beliefs regarding African Americans tend to view their own opinions as dissimilar from those held by the average person’s (O’Gorman, 1975), we know of no findings suggesting that these low-prejudiced individuals are less affected by normative pressures.

A perhaps more important role of normative aspects of the social influence for the present findings is their relevance for the validation of beliefs based on available social comparison information. As others have pointed out, existing social norms and the individual’s aspirations to comply with these norms are important factors in the acceptance of other people’s views (Moscovici, 1976; Turner, 1991). That is, true influence, the conversion of beliefs, requires that available comparison information be considered valid in the first place. Whether a given piece of information is considered valid is in large part determined by social rules and conventions; and acceptance of these conventions is a necessary precondition for the effectiveness of informational influence. Recently, Oakes, Haslam, and Turner (1994) emphasized this very point by arguing that “stereotypes are social norms,” definitions of reality by social consensus (p. 209). As such, socially shared stereotypes offer standards for potential meanings of the world around us.
Quite consistent with this view, we have interpreted our results for low-MRS participants as an indication of their disregard for societal standards—standards that this participant group might perceive as a reflection of widespread prejudice in U.S. society. Results from Study 2 indicate that high- and low-MRS participants used the response scales to infer other people’s beliefs, but both the dependent measures and participants’ responses to the manipulation items themselves indicate that these standards had limited effect for low-MRS participants’ beliefs.

Work in the tradition of social identity theory may provide an interesting venue for further research to better understand these findings. This work suggests that the acceptance of social norms should be mediated in important ways by participants’ salient in-group membership (Turner, 1991). That is, various studies have demonstrated that salient group membership in the group context renders comparison information more influential (see Hogg & Turner, 1987; Mackie, 1986). Future research could manipulate the salience of the reference comparison group to test whether it is in fact the disregard of social standards that prevents the response scale information from affecting low-MRS participants.

Conclusion

Our findings have implications for the broader issue of stereotyping and prejudice as they operate outside the laboratory. Whereas our scale manipulation was a subtle means of conveying social comparison information, society provides people with much stronger and more explicit social feedback—feedback about both stereotypic group attributes and the underlying causes of these attributes. Indeed, as mentioned at the outset of this article, researchers have accumulated ample evidence for the prevalence of social stereotypes in the mass media. In the face of such stereotype-congruent social “reality,” it is no wonder that stereotypes prove to be quite rigid. Yet, more optimistically, social influence not only may reinforce the status quo but can lead to change as well. Therefore, interventions at a societal level (i.e., targeting the media, school curriculums, and other broader socializing agents) may be particularly powerful factors in stereotype change and the alleviation of prejudice.

NOTES

1. Moscovici (1985) has pointed out that the effects of stimulus ambiguity on people’s motivation to seek out comparison with others are themselves dependent on a social construction of the stimulus situation. Only when social conventions suggest that there are valid, correct answers to a problem does it make sense to refer to other people’s beliefs on this issue.

2. All p levels reported in this article are two-tailed.

3. Note that a similar distinction between expert knowledge and social standards reflected in the response scales does not apply to the work by Schwarz et al. (1989). Indeed, these studies that concern concerns his or her knowledge of the frequency of certain behaviors that respondents are asked to report. Thus the expert knowledge provides information about existing social standards.

4. A comparison including only the two manipulation items from the manipulation check (items 3 and 8) yields identical results.

REFERENCES


Edsall, T. B., & Edsall, M. D. (1991, May). When the official subject is presidential politics, taxes, welfare, crime, rights, or value . . . the real subject is race. Atlantic, pp. 53-86.


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