Beliefs About the Disconfirmability of Stereotypes: The Stereotype Disconfirmability Effect

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The stereotype disconfirmability effect suggests several general conditions for beliefs about stereotypes that may serve to sustain them: (a) the belief that stereotypes are exceptions to the rule, (b) allowing people to create stereotypes at will, and (c) confirming stereotypes. When people process information that disconfirms their stereotypes, they often explain away such instances by attribution (John, 1980; Weber & Crocker, 1983). When people are presented with information that disconfirms their stereotypes, they are more likely to think about the stereotype and confirm it. (Stephan, 1983; Hamilton, 1983; Hume, 1988; Killeen, 1989), thus helping to maintain and reinforce the stereotype.
control because they are unable to "fit in" a manner inconsistent with the stereotype. Further, being categorized as a group member makes people more likely to perceive themselves as belonging to the group (Steele, 1988; Tajfel, 1982). A concept of the stereotype is that people often attempt to maintain a positive self-image by evaluating the group stereotype (Hogg & Harry, 1996). This process is consistent with the belief that the self-concept is more favorably valued than the outgroup, although this effect is observed only in some circumstances (Haslam & Brown, 1992). There is also some evidence that the stereotype is more favorably valued than the outgroup, although this effect is observed only in some circumstances (Haslam & Brown, 1992).

How many of the following behaviors would you use to describe the group stereotype? 1. How many, if any, of the behaviors would you use to describe the group stereotype? 2. How many, if any, of the behaviors would you use to describe the group stereotype? 3. How many, if any, of the behaviors would you use to describe the group stereotype? 4. How many, if any, of the behaviors would you use to describe the group stereotype? 5. How many, if any, of the behaviors would you use to describe the group stereotype? 6. How many, if any, of the behaviors would you use to describe the group stereotype? 7. How many, if any, of the behaviors would you use to describe the group stereotype? 8. How many, if any, of the behaviors would you use to describe the group stereotype? 9. How many, if any, of the behaviors would you use to describe the group stereotype? 10. How many, if any, of the behaviors would you use to describe the group stereotype?

Methods

Design and participants. The study used a 2 x 2 design: Group (High vs. Low) x Group Size (Large vs. Small). Participants were randomly assigned to one of the four conditions: High Large, High Small, Low Large, Low Small.

In the course of normal social interaction, how frequently do you discuss the group stereotype that would have been more favorably evaluated than the outgroup, although this effect is observed only in some circumstances (Haslam & Brown, 1992)?
In the course of normal social interaction, how frequently do occasions arise that would allow Hispanics (Whites) to engage in behaviors that disconfirm (provide evidence against) the Hispanic (White) stereotype?

All of the questions were answered on 10-point scales ranging from 1 (very few—not at all easy, not at all frequently) to 10 (a great many—extremely easy, extremely frequently).

These questions were designed to be generic and not refer to any specific aspects of the different stereotypes. This was done in order to facilitate the comparison task. For example, laziness is a trait that is confirmatory of the Hispanic stereotype, but not the White stereotype. If participants had been asked to rate this aspect of the Hispanic stereotype specifically, their responses to this same question with regard to the White stereotype would not have been equivalent. None of the participants indicated any difficulty making these judgments.

To guard against order effects, half of the participants supplied their beliefs about the White stereotype first, then about the Hispanic stereotype. The other half of the participants responded to the two stereotypes in the reverse order. Participants were then presented with one ethnic identification item, which queried them about the extent to which they identified with their ethnic in-group. This question was rated on a 10-point scale ranging from 1 (not at all) to 10 (very much). Then, participants responded to a single item that asked them about the dissimilarity of the group members for each ethnic group. This question was rated on a 10-point scale ranging from 1 (not at all dissimilar) to 10 (very dissimilar). Finally, they answered one question regarding the favorability of the stereotype that was being judged on a 10-point scale ranging from 1 (very unfavorable) to 10 (very favorable).

Results

An index of disconfirmability was created for each group stereotype separately, one for the Hispanic stereotype and one for the White stereotype. The disconfirmability index for each group stereotype was created by reverse scoring the items that assessed the confirmability of each stereotype and adding these reverse-scored items to the items that assessed the disconfirmability of the stereotype. This total was then divided by the number of items (6) dealing with each stereotype. The indexes were relatively coherent (Hispanic stereotype disconfirmation index, $\alpha = .66$, White stereotype disconfirmation index, $\alpha = .61$). Table 1 displays the means for the disconfirmability index as a function of participants’ ethnicity. Consistent with predictions, the means indicate a strong tendency to believe that the in-group stereotype is more disconfirmable than the out-group stereotype, as evidenced by the interaction of the group being rated and the ethnicity of the participants, $F(1, 52) = 12.54, p < .0008$. An examination of this interaction indicates that Hispanic participants believed the Hispanic stereotype to be more disconfirmable than the White stereotype, $F(1, 27) = 3.40, p < .05$, one-tailed. White participants, in turn, believed that the White stereotype is more disconfirmable than the Hispanic stereotype, $F(1, 27) = 7.90, p < .004$, one-tailed. The comparisons between ethnic groups were reliable as well ($p < .01$).

In order to conduct the correlational analyses, difference scores for the different measures were created. For participants within each ethnic group, we subtracted their out-group disconfirmability beliefs from their in-group disconfirmability beliefs so that higher scores indicate that the in-group stereotype is judged to be more open to disconfirmation than the out-group stereotype. The second difference score was created for the perceived variability measure, in which judgments for the out-group stereotype were subtracted from judgments for the in-group stereotype. Higher scores indicate that the in-group is judged to be more variable than the out-group. The third difference score resulted from subtracting the judgments regarding the favorability of the out-group stereotype from those of the in-group stereotype, with higher scores indicating that the in-group stereotype is judged to be more positive than the out-group stereotype.

The correlations among the three difference scores and ethnic identification variables are presented in Table 2, with ethnicity of participant partialed out. The results indicate that the more participants identify with their ethnic in-group, the more they believe the in-group stereotype is open to disconfirmation, relative to the out-group stereotype. Higher degrees of ethnic identification also result in judging the in-group stereotype more favorably than the out-group stereotype. Two other reliable correlations indicated that judging the in-group as more
Table 3: Regression Analysis in Which Disconfirmation, Beliefs in Group Stereotypes, and Ethnic Identification Are Considered as Predictors of Group Favorability

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Ethnic identification index</th>
<th>Ethnic identification differences</th>
<th>Disconfirmation of the in-group stereotype</th>
<th>Group stereotype favorability differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>3.42</td>
<td>9.71</td>
<td>3.42</td>
<td>7.02</td>
</tr>
<tr>
<td>β</td>
<td>0.22</td>
<td>0.04</td>
<td>-0.06</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Discussion

The results of Study 1 indicate that an in-group group stereotype exists in beliefs about stereotypes. However, the stereotype is not as strong as expected, and the role of disconfirmation in the prediction of favorability is not significant. The findings suggest that additional factors, such as ethnic identification, may contribute to the prediction of group favorability. Further research is needed to explore these relationships in more detail.
people believe that out-group stereotypes are more difficult to disconfirm than are in-group stereotypes. However, it appears that this bias is highest for people who are strongly identified with their in-group.

Analyses were conducted in order to take into account potential alternative explanations for the present results. These possibilities have to do with differences in the perceived dissimilarity among in-group versus out-group members and differences in the favorability of the stereotype content brought to mind when considering the stereotype of the in-group versus the out-group. Controlling for these influences had modest effects, but failed to eliminate the stereotype disconfirmability effect.

Study 2 was conducted to extend these findings to a different set of stereotype types and to investigate whether or not this bias in beliefs about the disconfirmability of out-group and in-group stereotypes is associated with attitudes (prejudice) toward the out-group. We expect that the higher people are in prejudice toward the out-group, the greater will be their belief that the out-group stereotype is harder to disconfirm than the in-group stereotype. People who are high in prejudice are more apt to rely on their stereotypes when processing social information than are people who are low in prejudice (Devine, 1989). Because people who are high in prejudice rely on stereotypes, they may have a greater stake in believing their stereotypes are true than people who are low in prejudice.

Study 2

Method

Design and participants. In this study, White students were asked to indicate their beliefs about the stereotypes of African Americans and Whites. African American students were not tested. Seventy-three students from the University of Michigan received course credit for participating in the study and were run in non-interacting groups of 4 to 6 participants.

Materials and procedure. The same questions used to assess beliefs about the disconfirmability of stereotypes used in Study 1 were used in the present study, except that the items applied to the African American and White stereotypes. As was done in Study 1, half of the participants filled out beliefs about the White stereotype first, then the African American stereotype. The other half responded to the African American stereotype first, then the White stereotype.

In addition to indicating their beliefs, students completed a measure of their attitudes toward African Americans. The attitude measure consists of a single item rated on a 10-point scale ranging from 1 (unfavorable) to 10 (favorable). After completing three filler tasks, participants then responded to a stereotype measure of the out-group. For this measure, they indicated the percentage of African Americans who possess each of 24 traits, half of which are positive (e.g.,

| Correlations Among In-Group/Out-Group Difference Indices in Disconfirmability Beliefs, Negativity of Evoked Stereotype and Degree of Prejudice |
|--------------------------------------------------|--|---|---|
| Index | 1 | 2 | 3 |
| 1. In-group/out-group belief difference | — | .15 | .52** |
| 2. Stereotype negativity | — | .57** | — |
| 3. Prejudice | — | — | — |

**p < .01.

versatile, loyal) and half of which are negative (e.g., unintelligent, quare/scone) in valence. The trait ratings were scored on a 10-point scale ranging from 1 (0% to 9%) to 10 (90% to 100%). Three participants failed to provide these ratings.

Results

An index of disconfirmability was created for each group stereotype separately—one for the African American stereotype ($\alpha = .65$) and one for the White stereotype ($\alpha = .55$) as was done in Study 1. One student failed to provide all of these responses. Participants’ responses were then submitted to within-subjects analysis. As seen in Table 1, the results from this analysis indicate that participants judged the out-group (African American) stereotype was more difficult to disconfirm than the in-group (White) stereotype, $t(1, 71) = 10.46$, $p < .002$, replicating the stereotype disconfirmability effect obtained in Study 1.

For the correlational analyses, difference scores for the different measures were created. We subtracted participants’ out-group disconfirmability beliefs from their in-group disconfirmability beliefs. The second difference score was created for the stereotype measure. Participants had indicated the percentage of out-group members who possessed various positive and negative traits. The responses to the positive traits were tallied separately from the responses to the negative traits. The positive trait score was then subtracted from the negative trait score so that higher scores indicate more negative stereotype content regarding the out-group.

The correlations among the two difference scores and the prejudice variable are presented in Table 4. The results indicate that the more negative the out-group attitudes expressed by participants, the more they judged the in-group stereotype to be open to disconfirmation, relative to the out-group stereotype. Higher prejudice levels were also related to greater negativity of the evoked stereotype content for the out-group.
Table 5
Regression Analysis in Which Disconfirmability Beliefs Were Regressed Onto Prejudice and Negativity of the Out-Group Stereotype

<table>
<thead>
<tr>
<th></th>
<th>( b )</th>
<th>( F )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prejudice</td>
<td>.21</td>
<td>4.20</td>
<td>&lt;.04</td>
</tr>
<tr>
<td>Stereotype negativety</td>
<td>-.01</td>
<td>0.00</td>
<td>&lt;.03</td>
</tr>
</tbody>
</table>

Participants high in prejudice brought to mind more negative stereotype content than did participants low in prejudice when considering the African American stereotype (Devine, 1989; Lepore & Brown, 1997). Because negative characteristics are more difficult to disconfirm than are positive ones (Rotbart & Park, 1986), this could potentially explain why participants might have judged that the out-group stereotype was more difficult to disconfirm than the in-group stereotype.

To examine this potential influence, we ran a regression analysis in which participants' disconfirmability beliefs (difference scores) were regressed onto degree of prejudice and negativity of evoked stereotype content for the out-group (Table 5). Despite the inclusion of the stereotype content measure, the relationship between prejudice and beliefs about the disconfirmability of the in-group and out-group stereotypes remained significant, \( F(1, 65) = 4.20, p < .04 \). Thus, the more prejudiced people are toward African Americans, the more they are likely to believe that the White stereotype is more open to disconfirmation, relative to the African American stereotype.

The negativity of the evoked stereotype failed to predict the pattern of disconfirmability beliefs. These results indicate that the stereotype disconfirmability effect is not a function of the negativity of evoked evaluative content associated with the out-group stereotype.

Discussion
The results from Study 2 indicate that White participants believed the in-group stereotype to be more open to disconfirmation than the African American stereotype. Further, the results show that White participants' degree of prejudice toward African Americans was related to this bias in their beliefs about the disconfirmability of the African American stereotype. The higher people were in prejudice, the more they tended to believe that the African American stereotype was not open to disconfirmation, compared with the in-group stereotype.

A set of analyses was conducted in order to control for the negativity of the stereotype content brought to mind by participants, as people higher in prejudice brought to mind more negative stereotype content than did people lower in prejudice. Controlling for these influences had modest effects on the stereotype disconfirmability measure, but the basic effect remained.

General Discussion
The findings of the present studies have uncovered a basic tendency in people to believe that out-group stereotypes are more difficult to disconfirm than are in-group stereotypes. This stereotype disconfirmability effect is moderated by ethnic identity and level of prejudice toward the out-group. People who strongly identify with their ethnic in-group believe that it is more difficult to disconfirm out-group stereotypes than in-group stereotypes. Similarly, the higher people are in prejudice, the more they tend to believe that stereotypes of out-groups are more difficult to disconfirm than are stereotypes of the in-group.

One explanation for the findings of the first study is that people who identify strongly with the in-group perceive the out-group as an entity with relatively fixed characteristics because it facilitates the process of making favorable comparisons of the in-group to the out-group. According to social identity theory, people are often motivated to make favorable comparisons of their in-group and relevant out-groups in order to enhance their self-esteem (Tajfel, 1979, Tajfel & Turner, 1979). Making such comparisons is difficult if the out-group is not perceived as having relatively immutable characteristics. Perceiving the out-group stereotype as being difficult to disconfirm ensures that the traits attributed to the out-group are perceived as stable and unchangeable, and thus makes it possible to create favorable social comparisons. People who are strongly identified with the in-group are the most likely to wish to make such comparisons, which may explain why they perceive the out-group stereotype to be more difficult to disconfirm than the in-group stereotype to a greater degree than do people who identify less strongly with the in-group.

The findings of the first study are also consistent with research showing that people are more likely to stereotype out-groups than in-groups (Wildier & Shapiro, 1991). People who perceive that the in-group stereotype is easy to disconfirm most likely do not have a clear, consensual stereotype of the in-group (Linville et al., 1989). In contrast, people who believe that the out-group stereotype is difficult to disconfirm most likely have a clear conception of the out-group stereotype and believe that it is less subject to change.

In the second study, it was found that Whites who were prejudiced toward African Americans believed that the out-group stereotype (African American) was more difficult to disconfirm than was the in-group stereotype (White) to a greater degree than did Whites who were low in racial prejudice. These findings are consistent with the view that people high in prejudice have a greater stake in believing that their stereotypes are true. This may be the case because highly
People could be encouraged to think about the discrepancy between their stereotypes and the actual behavior of people based on this information. Alternatively, people could be asked to think about the discrepancy between their stereotypes and the actual behavior of people based on this information. A similar approach with social stereotypes was successfully used by John M. Voyer in his book "The Psychology of Social Stereotypes." Instead of using social stereotypes, other types of stereotypes could be used, such as cognitive or emotional stereotypes. These stereotypes can be used to encourage people to think about the discrepancy between their stereotypes and the actual behavior of people based on this information. Alternatively, people could be asked to think about the discrepancy between their stereotypes and the actual behavior of people based on this information. A similar approach with social stereotypes was successfully used by John M. Voyer in his book "The Psychology of Social Stereotypes." Instead of using social stereotypes, other types of stereotypes could be used, such as cognitive or emotional stereotypes. These stereotypes can be used to encourage people to think about the discrepancy between their stereotypes and the actual behavior of people based on this information.

References


