The Nature of Stereotypes: A Comparison and Integration of Three Theories

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In the present research we examined predictions derived from the following three theoretical approaches to stereotyping: complexity-extremity theory, assumed characteristics theory, and expectancy-violation theory. In order to assess these predictions, we manipulated the race, personal appearance, and dialect style of target job applicants. We also considered the effects of personal appearance and dialect style on the evaluations of white and black applicants. Results were consistent with all three theories. Specifically, the race of applicants' evaluations of black applicants was larger than the range of their evaluations of white applicants. The effects of personal appearance and dialect style were larger than the effects of race, and black applicants, on average, received more favorable ratings than white applicants.

First, we review the basic ideas of each theory to illustrate how they could lead to opposing predictions. For each theory, we outline one set of predictions by assuming that the theory describes the only influences on evaluations. These predictions are useful because they clearly reflect the ideas of each theory. However, researchers from each of these theoretical approaches generally acknowledge the possibility of other influences. Consequently, we also develop a second set of predictions for each theory. These predictions are more realistic and more complex because they reflect how each theory might function in the context of multiple influences on evaluations of individual in-group and out-group members.

Complexity-Extremity Theory

Complexity-extremity theory (Jones, 1982; Jones & Johnson, 1980) addresses a theory of how people evaluate in-group members differently than out-group members. According to this theory, the people have more contact with other in-group members than with out-group members. For example, white people usually have more contact with other whites than with blacks. As a result, "this rich background of experience with the in-group generates a larger number of dimensions along which individual members may be characterized" (Jones & Johnson, 1980, p. 69). The theory also suggests that "when there are many independent dimensions on which an individual (or any stimulus) is judged, evaluations should be less extreme. When the perceiver uses many independent dimensions, the target probably should be evaluated favorably on some and unfavorably on others.

Thus, an overall evaluation that accounts for many dimensions is unlikely to be extremer or favorably or extremely unfavorable. When perceivers use few dimensions, however, extreme evaluations are more likely because the target can be more readily perceived as all good or all bad. Consistent with this perspective, research has found that white people's evaluations of black people involve fewer dimensions and are more extreme than their evaluations of individual whites (Jones & Johnson, 1980). Similarly, college students use more dimensions when evaluating young people than when evaluating older people, and they also evaluate older people more extremely (Jones, 1982).

Two characteristics often viewed as favorably or adversely are socio-economic status (SES) and postgraduate degrees (Bartley, 1956; Feldman, 1972; McKinnon, Smiths & Hamayu, 1983; Smedley & Bayton, 1978; Williams, 1970). In the absence of other influences, complexity-extremity theory suggests that white people's evaluations of blacks should be polar.

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Correspondence concerning this article should be addressed to Lee Jussim, Research Center for Group Dynamics, Institute for Social Research, University of Michigan, P.O. Box 1248, Ann Arbor, Michigan 48106.
ized in comparison to their evaluations of whites. Thus, this polarized-attitudinal hypothesis predicts that upper-class, Standard-English-speaking blacks should be evaluated extremely favorably—e ven less favorably than similar whites. In contrast, lower-class, Nonstandard-English-speaking blacks should be evaluated extremely unfavorably—even less favorably than similar whites.

However, complexity-extremity theory leads to a more general hypothesis that allows for influences leading people to favor one group over another (see Livston, 1982). If group main effects exist, the theory leads to the following more specific hypothesis: the difference between white evaluations of upper-class, Standard-English-speaking blacks and lower-class, Nonstandard-English-speaking blacks should be larger than the difference between their evaluations of upper-class, Standard-English-speaking whites and lower-class, Nonstandard-English-speaking whites. Complexity-extremity theory predicts an interaction between race and background characteristics rather than race main effects.

**Assumed Characteristics**

Other research indicates that stereotypes inform us of important background characteristics of group members. Stereotypes inform us about an individual's SES (Bayton, McCullister, & Hamer, 1956; Feldman, 1972; Smedley & Bayton, 1978), beliefs and values (e.g., Rokeach & Metz, 1966), and personality traits (e.g., Grant & Holmes, 1981; Lockley, Nespida, Breake, & Hupburn, 1980). According to this perspective, people generally assume in-groups have more favorable characteristics (whether SES, values, or traits) than out-groups.

If no other processes influence evaluations, direct information about relevant background characteristics should eliminate effects of group membership. Consistent with this elimination of bias hypothesis, some research on stereotypes shows that when members of different groups behave similarly, estimates of similar beliefs and values have similar socioeconomic backgrounds or speak similar dialect styles in group members show no evidence of bias against out-group members (Lockley et al., 1982; Lockley, Hupburn, & Ortiz, 1982b; McKeeman et al., 1983; Rokeach & Metz, 1966; Smedley & Bayton, 1978).

**Assumed-characteristics theory**, however, does not exclude other influences. Theorists often acknowledge that even though background information may not eliminate the effects of group membership, it should have more impact (Insko, Nacoste, & Moe, 1963; Lockley, Hupburn, & Coats, 1982a). Although this importance of background characteristics hypothesis is an extrapolation of the theory, it has received much empirical support (Feldman, 1972; Lockley et al., 1982a; Mos, Nacoste, & Insko, 1981; Raszynski, Crocker, & Hastie, 1985; see Coats, 1984; Insko et al., 1983, for reviews).

This theory posits that stereotype-based assumptions about the negative characteristics of blacks lead to unfavorable evaluations by whites. However, if it is clear that black and white job applicants have similar relevant characteristics (e.g., similar SES and dialect style), whites' biases should be eliminated (as-fearing no other influences on evaluations). A secondary prediction of the theory is that in the presence of other influences, background characteristics should have larger effects than does race.

**Expectancy Violation**

The third perspective, expectancy-violation theory, also suggests that stereotypes provide information about an individual's personal characteristics. This perspective suggests, however, that when an individual's characteristics violate stereotype-based expectations, evaluations should become more extreme in the direction of the expectancy violation. Individuals who possess more favorable characteristics than expected should be evaluated even more positively than others with similar characteristics whom we expect to rate positively all along. Likewise, individuals who possess more unfavorable characteristics than expected should be evaluated even more negatively than others with similar characteristics whom we expect to rate negatively all along.

The attributional mechanisms of augmentation and discounting (Keiley, 1971) may underlie an expectancy-violation effect. The augmentation principle states that the perceived role of a particular factor in producing an outcome is enhanced when facets leading to an opposite outcome are also present. For example, racial discrimination may be seen as creating more obstacles to the occupational success of blacks than whites. Consequently, successful blacks may be perceived as possessing extremely favorable personal qualities (e.g., intelligence, motivation, etc.) — even more favorable than those of equally successful whites. Thus, the presence of obstacles augments the perceived role of positive personal qualities in the success of blacks.

The discounting principle states that the perceived role of a particular factor in producing an outcome will be diminished by the presence of other causal influences. Therefore, these same obstacles might lead observers to view lower SES blacks as having fewer unfavorable personal qualities than lower SES whites. In general, perception of obstacles leads to the discounting of negative personal qualities as a cause of low SES among blacks.

**Expectancy-violation theory** predicts that whites will evaluate blacks more favorably than similar whites if either (or both) of two conditions are true: (a) blacks have an unexpected positive characteristic of (b) whites have an unexpected negative characteristic. Therefore, it is necessary to identify which characteristic violates whites' expectations for blacks and whites.

Several studies suggest that although whites expect blacks to come from low-SES backgrounds, they may not hold clear expectations regarding whites' SES. Specifically, white rating SES blacks much more favorably than high-SES whites, but they rate low-SES whites about the same (or more favorable) than low-SES blacks (Dienstbier, 1970; Feldman, 1972; Smedley & Bayton, 1978). These results suggest that upper-class blacks positively violate whites' expectations but that lower-class whites do not necessarily negatively violate their expectations.

Research also suggests that although whites expect other whites to speak Standard English, they may not hold clear expectations regarding blacks' speech style. Thus, black and white speakers of Standard English are evaluated similarly (Mckee,
<table>
<thead>
<tr>
<th>Theory</th>
<th>Lower class, Nonstandard English speech</th>
<th>Upper class, Nonstandard English speech</th>
<th>Lower class, Standard English speech</th>
<th>Upper class, Standard English speech</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complety-expectancy characteristics</td>
<td>Black &lt; white</td>
<td>No predicted difference</td>
<td>No predicted difference</td>
<td>Black &gt; white</td>
</tr>
<tr>
<td>Expectancy-violation</td>
<td>No predicted difference</td>
<td>No predicted difference</td>
<td>No predicted difference</td>
<td>Black &gt; white</td>
</tr>
<tr>
<td></td>
<td>Black &gt; white</td>
<td>Black &lt; white</td>
<td>No predicted difference</td>
<td>Black &gt; white</td>
</tr>
</tbody>
</table>

Note: Predictions were derived by assuming that each theory provides exhaustive and mutually exclusive descriptions of stereotyping.

Table 1: Evaluations of Black and White Targets With Similar Characteristics As Predicted by Each Theory Separately

Jussim, Coleman, and Lerch

mn et al., 1983; Williams, Whitehead, & Miller, 1971), perhaps because there is no expectancy violation for either group. How-
erver, when whites observe black and white speakers of Standard and Nonstandard English, they rate the Nonstandard-English-
speaking whites least favorably (McKenna et al., 1983). There-
fore, nonstandard-speaking whites may negatively violate white
observers' expectations.

In summary, this perspective on the nature of expectancy vio-
lation suggests that upper-class blacks positively violate whites' 
expectations, and Nonstandard-English-speaking whites nega-
tively violate whites' expectations. In the absence of other in-
fuences, therefore, upper-class blacks should be evaluated more 
favorably than upper-class whites, and Nonstandard-English-
speaking whites should be evaluated less favorably than Non-
standard-English-speaking blacks.

Expectancy-violation theory, however, does not preclude the 
possibility of other influences on evaluations. If other processes 
do occur, the evaluations of similar blacks and whites may not 
completely correspond to the predictions described. Neverthe-
less, expectancy violation usually leads whites to evaluate 
blacks more favorably than similar whites (is the presence of 
background information). Consequently, even if other pro-
cesses do occur, the theory predicts a main effect whereby 
blacks receive more favorable evaluations than do whites.

Overview of Hypotheses

When considered separately, these theories generate the con-
flicting predictions presented in Table 1. Although the pro-
cesses specified by each theory are not mutually exclusive, we 
believe it is important to present these predictions because (a) it 
makes salient the conflicting predictions derived by considering 
each theory in isolation, (b) we plan to assess how well each 
theory, alone, accounts for the data, and (c) most studies fo-
cus on the development of a single theoretical perspective, often 
ignoring (or obscuring) other perspectives.

Method

Overview

In this experiment, judges viewed slides and listened to tape recor-
dings of black and white job applicants who spoke Nonstandard 
and Standard English and who were dressed to appear upper class and lower class. Judges then rated each applicant on characteristics relevant to evaluations of occupational competence and hiring decisions. This in-
cludes a set of general occupational evaluations, ratings of typical occu-
pational traits, and ratings of how much the judge would like to work 
with the applicant in various occupational relationships.

Judges

Two groups of white judges from a large midwestern university partic-
ipated in this study. One sample consisted of 118 introductory psychol-
ogy students who participated in the experiment as part of a course 
requirement. Eleven students indicated some suspicion during the ex-
periment, and their data were removed from the analysis. The remain-
ing judges were 107 introductory psychology students, including 56 fe-
male and 51 male students.

The other sample consisted of 95 undergraduates enrolled in ad-
vanced classes in the business school of the same university. These par-
ticipation was arranged by the experimenters and teachers of these 
classes as part of their classroom activities. We felt this business school 
sample was especially appropriate for investigating influences on judg-
ments of occupational competence and desirability because many of 
these students are expected to enter management positions and may 
be responsible for hiring decisions. In the business school sample, two 
students indicated some suspicion regarding the experiment, and 
their data were excluded from all analyses. The remaining 93 partici-
pants came from the business school and included 61 females and 31 male students and 
1 student who did not disclose his or her gender.

Stimulus Targets

The race (black or white), personal appearance (lower class or upper class), and dialect style (Nonstandard English or Standard English) of 
four male confederates were varied to create all eight possible stimulus 
combinations. Two target applicants were created from each confeder-
ate with the use of the matched-pair method (Lambert, Hodgeson, 
Gardner, & Pillemer, 1960). Each confederate dressed in both upper-
class and lower-class styles. Hence, differences in ratings of upper class and lower-class targets could only result from personal appearance 
differences and not from differences in the type of person appearing 
upper class or lower class.

A similar procedure was followed for dialect style. Each speaker con-
trasted in both Nonstandard and Standard English. Thus, differences in 
the ratings of speakers in nonstandard English and Standard English 
could only be due to differences in dialect style and not to actual differ-
ences in the type of person who spoke a particular dialect.
Materials

Slides of targets. Job applicants were presented through a series of slides. The upper-class-apparing targets were dressed in a conservative and formal style. This style consisted of a traditional dark suit with a light-colored shirt, dark-patterned tie, and conservative shoes. The lower-class-apparing targets were less expensive clothing that included an older sport jacket, a light-colored suit, a wide tie, clo-clo dress pants, and scuffed dress shoes. Each target was photographed walking into the office, sitting in the waiting room, filling out a job application, and waiting for the interviewer to enter the room.

Preserving of slides. Nine confederates were photographed and tested to ensure that their personal appearance conveyed the appropriate social class. Each confederate appeared both upper class and lower class, thus yielding a total of 18 slides (9 confederates appearing both upper class and lower class) that were then presented. Two confederates, one white and one black, were elected according to the following criteria: (a) When appearing upper class, all selected confederates had to be rated similarly to one another; (b) when appearing lower class, all selected confederates had to be rated similarly to one another; and (c) each confederate's upper-class appearance had to be rated significantly higher on social class than his or her lower-class appearance.

Scripts. Sixteen scripts containing responses to four job interview questions were developed. The questions included the following: 'How did you hear about the job?' 'What are your job strengths?' There were four answers to each of these questions. Each answer was written in both Standard English and Nonstandard English versions of the same response to the two questions: 'Why do you want the job?'

Standard English. This is the kind of job I have been trained to do. At my old job, I wasn't able to use all of my skills. This job would allow me to use more of my skills, while learning some new ones at the same time.

Nonstandard English. Dia de la kind job is what I been train to do. At my old job, I couldn't use some of my skills. This job show me how to use more of my skills while learn some new ones at the same time.

The Nonstandard English scripts were not written in Black English vernacular. Furthermore, confederates did not use southern accents when speaking Nonstandard English. Both blacks and whites speak Nonstandard English at the same rate as English. Both blacks and whites speak Standard English at the same rate as English. No separate stimulus was required to distinguish the credibility of our black Nonstandard English speaker.

A Signal designed in dialects confirmed that adequate Standard English and Nonstandard English scripts were developed. These scripts were presented to elicit any influence of script content on evaluations. Thirty judges received written copies of the Standard English scripts to rate for competence and intelligence. Pretesting of the Nonstandard English scripts was not necessary because the corpus of the Nonstandard English scripts was the same as the Standard English scripts. Furthermore, because people are not accustomed to reading Nonstandard English, each script would have been difficult to rate.

There were no significant differences in ratings of any of the scripts. Both each of four confederate speakers used two scripts (i.e., answered two job interview questions) for eight most similarly rated scripts were used.

Speakers

The recordings of the responses to chosen job interview questions were presented by speakers who were capable of speaking both Standard and Nonstandard English. Two white men and two black men approximately 30 years of age were recorded while answering two job interview questions. Each speaker appeared twice in the interview: standard twice—once using Nonstandard English and once using Standard English. Although different speakers consistently answered the interview questions, no ov-speaking provided the same response to any question.

Questionnaires

Questionnaires answered judges' evaluations of the job candidates. Each set of four questions addressed general evaluations, including judgments of the candidate's appearance, (a) intelligence; (b) overall occupational competence; and (c) the status of the job for which the applicant was most suited (job suitability). Another set of four questions referred to personal characteristics or traits that were relevant to occupational success, including statements of how hard-working, ambitious, or trustworthy the applicant was. The third set of four questions posed judges' preferences for working with each applicant in different types of occupational relationships. Specifically, judges indicated how much they would like to hire each applicant as an employee, coworker, and employer.

All questions except job suitability were answered on a semantic differential scale ranging from (1) to (10), with higher scores indicating more favorable ratings. For the job suitability question, judges selected from one of six specific occupational classifications of jobs, which ranged from unskilled labor to professional.

Experimental Design

Two sets of four stimulus targets each were created from the slides and recorded by confederates. One stimulus set consisted of a lower-class, Nonstandard English-speaking black, an upper-class, Standard English-speaking black, a lower-class, Standard English-speaking white, and an upper-class, Standard English-speaking white.

Slides and responses were combined as follows: (a) standard or nonstandard did not appear twice in the same set; (b) the same speaker was not used twice in the same set; (c) if a confederate appeared upper-class in one set, he appeared lower-class in the other set; (d) if a speaker used Standard English in one set, he used Nonstandard English in the other set; and (e) all four confederates appeared in each stimulus set; (f) the same four speakers were used in each stimulus set; and (g) none of the speakers within a set used the same script in response to interview questions. We presented the first stimulus set to one group of judges and the second stimulus set to a second group of judges. Within each stimulus set, presentation of targets was counterbalanced to eliminate order effects.

Our methodology has several aids in contrast to previous research on racial stereotyping. After reviewing the literature on discrimination in employment interviews, Aron (1979) called for several methodological improvements: (a) presentation of full stimulus person through "an interview procedure" (b) presentation of multiple stimulus persons so that effects are not due to the unique characteristics of any single stimulus person; and (c) use of within-subject designs because such designs have more statistical power and allow judges to compare conditions across jobs. Our design met all of these needs by presenting job applicants in both visual and auditory form, by presenting two of each type of standard (i.e., two whites, two blacks, two upper-class-apparing applicants, two lower-class-apparing applicants, two Standard English
Procedure

The slides and open were presented to judges who were told that a hidden cause and microscope had been used to obtain pictures and map of actual slice. The judges from introductory psychology classes drew lines of job applicants in our laboratory of 14 groups of 3 to 12. There were four classes of business school students, each of which observed one of the two stimulus traits. These judges performed their evaluations in their classrooms in groups of about 25. The four slides of each candidate (walking in the office, sitting in a worth room, filling out an application, and sitting by the interviewee's desk) were shown, and a record of the aptitudes answering two interview questions was played along with the fourth slide. The judges were car-tar- and answered 15 questions about him. This procedure was then repeated for the next three subjects. As at the end of the experiment, judges were debriefed, and the purposes of the study were revealed.

Results

Initial Analyses and Overview

We performed an initial set of z (race) x 2 (appearance) x 2 (dialect) x 2 (sex) x 2 (sample) repeated measures analysis of variance (ANOVA) for each of the 11 dependent variables. These analyses revealed few differences between the introductory psychology and business school samples and few sex differences. Therefore, we collapsed the remaining analyses across sex and sample. Cell means, presented in Table 2, indicated that the pattern of effects was similar across all 11 variables. Consequently, the clearest way to examine the predictions of the three theories was to analyze the data summary across all 11 variables. Reliabilities (Cronbach's alpha) computed for this 11-question set for ratings of each of the right applicants ranged from .87 to .93. The cell means for this summary index are presented in Table 3. The remaining analyses focus on this summary index of judges' evaluations.

Complexity-Extremity

Polychoric-appraised hypothesis. If complexity-extremity theory described the only processes underlying whites' evaluations of blacks and whites, then low-race-appealing, non-standard-English-speaking black applicants should be evaluated less favorably than similar whites, but upper-caste-appealing, Standard-English-speaking black applicants should be evaluated more favorably than similar whites. Results were par- tially consistent with the polychoric-appraised hypothesis. As predicted, the upper-caste-appealing, Standard-English-speaking black applicants were rated much more favorably than the similar white applicants (z = 3.55, p < .001). However, the low- race-appealing, non-standard-English-speaking black applicants were not rated significantly higher than the similar white applicant (z < 1.00).

RANGE HYPOTHESIS

The polychoric-appraisal hypothesis may have received only partial support because of the occurrence of race main effects (see results for expectancy-violation theory). The range hypothesis, which was independent of group main effects, received clear support: The difference between evalua-
### Table 2
Cell Means for All Dependent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Lower class, Nonstandard English speech</th>
<th>Upper class, Nonstandard English speech</th>
<th>Lower class, Standard English speech</th>
<th>Upper class, Standard English speech</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likelihood of being hired</td>
<td>Black</td>
<td>2.86</td>
<td>5.85</td>
<td>5.27</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>2.59</td>
<td>5.37</td>
<td>5.42</td>
</tr>
<tr>
<td>Intelligence</td>
<td>Black</td>
<td>3.25</td>
<td>5.83</td>
<td>5.64</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>3.22</td>
<td>5.42</td>
<td>6.13</td>
</tr>
<tr>
<td>Competence</td>
<td>Black</td>
<td>5.00</td>
<td>6.45</td>
<td>6.29</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>4.00</td>
<td>5.56</td>
<td>6.03</td>
</tr>
<tr>
<td>Job suitability</td>
<td>Black</td>
<td>1.42</td>
<td>2.98</td>
<td>2.78</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>1.64</td>
<td>2.24</td>
<td>2.74</td>
</tr>
<tr>
<td>Hardworking</td>
<td>Black</td>
<td>5.66</td>
<td>6.61</td>
<td>6.47</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>5.52</td>
<td>5.87</td>
<td>6.04</td>
</tr>
<tr>
<td>Ambitious</td>
<td>Black</td>
<td>4.41</td>
<td>6.95</td>
<td>6.17</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>4.48</td>
<td>5.74</td>
<td>5.41</td>
</tr>
<tr>
<td>Organizational</td>
<td>Black</td>
<td>4.11</td>
<td>6.92</td>
<td>5.15</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>3.67</td>
<td>5.31</td>
<td>5.32</td>
</tr>
<tr>
<td>Warm/cold</td>
<td>Black</td>
<td>4.77</td>
<td>6.97</td>
<td>5.99</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>6.02</td>
<td>5.74</td>
<td>5.36</td>
</tr>
<tr>
<td>Employer</td>
<td>Black</td>
<td>2.10</td>
<td>5.82</td>
<td>4.63</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>2.48</td>
<td>3.02</td>
<td>3.71</td>
</tr>
<tr>
<td>Co-Worker</td>
<td>Black</td>
<td>3.33</td>
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<td>5.18</td>
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<td></td>
<td>White</td>
<td>3.88</td>
<td>3.89</td>
<td>4.38</td>
</tr>
<tr>
<td>Employer</td>
<td>Black</td>
<td>3.38</td>
<td>6.53</td>
<td>5.17</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>3.08</td>
<td>4.02</td>
<td>4.61</td>
</tr>
</tbody>
</table>

Note: Higher means indicate more favorable ratings.

Table 3
Observed Cell Means Obtained by Summing Over All Dependent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Nonstandard English speech</th>
<th>Standard English speech</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lower class</td>
<td>Upper class</td>
</tr>
<tr>
<td>Black</td>
<td>41.68%</td>
<td>70.50%</td>
</tr>
<tr>
<td>White</td>
<td>42.64%</td>
<td>51.40%</td>
</tr>
</tbody>
</table>

Note: Grand mean = 60.38. Means with different subscripts are significantly different at p < .05.

We were unable to test the central hypothesis, our results were consistent with extrapolated predictions of assumed-characteristics theory.

Expectancy-Violation Theory

Expectancy-violation theory predicts that white's expectations are positively violated by upper-class-speaking blacks and negatively violated by nonstandard-English-speaking whites. No expectancy violation (and therefore no difference) was predicted for lower-class-speaking, standard-English-speaking black and white applicants. In the absence of other influences, however, we predicted that all three of the other black applicants would be evaluated more favorably than similar white applicants, because the blacks' characteristics evoke a positive expectancy violation, or the whites' characteristics evoke a negative expectancy violation or both.

Pair-wise comparisons of blacks and whites with similar characteristics only partially supported these hypotheses. As predicted, the upper-class-speaking, standard-English-speaking
black applicants were rated significantly more favorably than the similar white applicant (t = 5.65, p < .0001); the upper-class-appearing, Nonstandard-English-speaking black applicant was rated more favorably than the similar white applicant (t = 9.28, p < .0001); and the lower-class-appearing, Standard-English-speaking black and white applicants were not rated significantly differently (t = 1.6, n.s.). The prediction that lower-class-appearing, Nonstandard-English-speaking white applicants would be evaluated less favorably than similar black applicants, however, was not supported (t < 1, n.s.).

Predictions for expectancy-violation theory may have received equivocal support because they were developed on the assumption that there were no other influences on evaluations. Even in the presence of other influences, however, expectancy-violation processes usually lead whites to evaluate black applicants more favorably than similar white applicants. Consistent with this second prediction, a significant main effect for race, (F(1, 197) = 96.05, p < .0001) occurred because blacks received (on average) more favorable ratings than did whites.

Verifying Stereotype-Based Expectancies Through Their Violation: The Middle Cells

Another reason for the failure to confirm predictions for expectancy-violation theory might be that we inaccurately identified the white expectancies for black and white job applicants. Further analyses were performed to assess the validity of this perspective. Specifically, we believed that white expectancies would be positively violated when blacks appeared upper class but not when they spoke Standard English. Consistent with this prediction, the upper-class-appearing, Nonstandard-English-speaking black applicant was evaluated more favorably than was the lower-class-appearing, Standard-English-speaking black applicant (t = 4.62, p < .001). Furthermore, this difference occurred because the rating of the upper-class-appearing, Nonstandard-English-speaking black applicant was much higher than the grand mean, and the lower-class-appearing, Standard-English-speaking black applicant received an evaluation similar to the grand mean (see Table 3).

Similarly, we predicted that white expectancies would be negatively violated when whites spoke Nonstandard English but not when they appeared lower class. Confirming this prediction, the upper-class-appearing, Nonstandard-English-speaking white applicant was evaluated less favorably than was the lower-class-appearing, Standard-English-speaking white applicant (t = 3.56, p < .05). Furthermore, this occurred because the ratings of the upper-class-appearing, Nonstandard-English-speaking white applicant were much lower than the grand mean, and the ratings of the lower-class-appearing, Standard-English-speaking black applicants were quite similar to the grand mean (see Table 3).

Integration of the Theories

None of these theories successfully predicted the relative evaluations of all four pairs of black and white applicants with similar characteristics. Only the set of predictions for each theory that allows for multiple influences received unequivocal support. Therefore, we have empirical evidence that multiple processes influenced evaluations. Consequently, this permits us to integrate these theories to more completely account for judges' evaluations of the applicants.

The effects specified by each theory that need to be integrated include the following: (a) the impact of background characteristics; (b) the extremity effects produced by expectancy-violation; and (c) the extremity effects produced by complexity-extremity processes. The simplest way to integrate these theories is to assume that the combined influence of processes specified by each theory is an additive function of their separate influences, all of which are of equal size. These are admittedly strong assumptions and should be viewed primarily as heuristic tools for simplifying our understanding of how these processes operate.

With this integration, we clearly specified all relations among all eight cells in our study. In Table 4, each cell received 1 for every positive effect or evaluations expected and a -1 for every negative effect expected. Positive effects were predicted for favorable background characteristics (upper class appearance or Standard English speech) and negative effects were predicted for unfavorable background characteristics (lower class appearance or Nonstandard English speech). A positive expectancy violation was predicted for upper-class-appearing blacks; a negative expectancy violation was predicted for Nonstandard-English-speaking whites; a positive complexity-extremity effect was predicted for lower-class-appearing, Nonstandard-English-speaking blacks. By summing the numbers for each cell, we identified every cell's hypothesized relation to every other cell and to the grand mean. For example, lower-class-appearing, Nonstandard-English-speaking whites and blacks both received three -1s, which indicated that the theories combined to lead to three negative effects and no positive effects for each applicant. Both targets received two -1s for having two negatively characteristic - lower class appearance and nonstandard speech. Whites received a third -1 because their nonstandard style speech should evoke a negative expectancy violation leading to an even more unfavorable evaluation. Blacks received a third -1 because 'whites' cognitive simplicity regarding blacks should lead to an extremely unfavorable evaluation. Thus, combining the predictions of the theories indicated that lower-class-appearing, Nonstandard-English-speaking black and white job applicants should be evaluated and approximated; equally unfavorably.

This integrative model not only accounted for all comparisons of blacks and whites with similar characteristics but also for nearly every possible pairwise comparison of cells and for the relation of every cell to the grand mean (cf. Tables 3 and 4). Additional analyses more clearly assessed, in two ways, how well this model accounted for our data. First, we determined how much of the variation attributable to our experimental manipulations (main effects and interactions) could be accounted for by the model. Second, we identified whether the residual variations were still significantly associated with any of our experimental manipulations (or their interactions).

We generated expected cell means from the model by regressing the observed cell means on the Table 4 values. This produced the equation Y = 66.377 + 6.176(X), where Y is the predicted cell mean and X is the Table 4 value. These predicted cell
means were then subtracted from each judge's ratings of the corresponding applicant in order to obtain residual scores. These residuals represented variations in judges' evaluations that our model does not explain. We then performed the same 2 × 2 × 2 repeated measures ANOVA on these residuals that we performed on the original ratings to determine how much systematic variation remained.

In the ANOVA on the scale, the sum of squares for all main effects and interactions combined was 154,432.16 (about 48% of the total variance in ratings). The ANOVA on the residual scores yielded a sum of squares for all main effects and interactions of 270.3, which indicated that only about 3% of the variance in ratings attributable to our experimental manipulations was not accounted for by our model. The residual sums of squares for the previously highly significant district and appearance main effects and the Race × Appearance interaction were reduced to nonsignificance (all Ps > .14). The sum of squares for the race main effects was reduced about 95% (from 12,722.98 to 661.87), but this remaining 5% was still statistically significant, F(1, 197) = 5.00, p < .03. Lastly, the significant three-way interaction effect, which was orthogonal to the expected values presented in Table 4, was not reduced at all, F(1, 197) = 4.93, p < .03. This effect, however, only accounted for 3% of the total variance in judges' ratings. Thus, we concluded that our integrated model accounted for most of the systematic effects of race, appearance, and dialect.

Discussion

For each theory, our research confirmed predictions that allowed for multiple influences or evaluations. Results consistent with expectancy–extremity theory showed that the range of whites' evaluations of black applicants was larger than the range of their evaluation of white applicants. Results consistent with second-order predictions of status theory showed that background characteristics had more impact than race did. The main effect showing that black applicants received more favorable ratings than white applicants was consistent with expectancy-violation theory. Lastly, a theoretical perspective integrating all three theories in a simple additive way provided a thorough explanation of the findings.

Certain limitations qualify the insights provided by this research. Most important, we did not directly assess certain assumptions underlying each finding. Our untested assumptions important to both assumed-characteristics theory and expectancy-violation theory, is that our white judges held more favorable stereotypes of whites than of blacks. This assumption seems tenable, however, on the basis of indirect evidence gleaned from our data and on past research.

Our data suggested that upper-class-apparent blacks and nonstandard-English-speaking whites violated judges' expectations. If this is true, it means that judges expected blacks to appear lower class and whites to speak Standard English. Consistent with past research (McKean et al., 1983; Simoody & Bayson, 1978; Welch & Nemecoff, 1974; Williams, 1970), we found that lower-class-apparent targets received very unfavorable ratings, and Standard-English-speaking targets received highly favorable ratings. Thus, if blackwears expected to appear lower class, and lower-class people are viewed unfavorably, it seems our judges did indeed hold relatively unfavorable expectations for blacks. Similarly, if whites were expected to speak Standard English, and speakers of Standard English are viewed favorably, it seems our judges held favorable expectations for whites.

Furthermore, much research shows that many whites have historically held, and continue to hold, unfavorable views of blacks (Allport, 1958; Chester, 1976; D. Katz & Braly, 1933; Kittner & Sears, 1981; Wagley & Howes, 1985). More generally, in-group members are usually biased in favor of themselves over out-group members, even when the criteria for designating group membership is minimal or arbitrary (Brown, 1979; Tajfel, Billig, Bundy, & Flament, 1971). Thus, it seems likely that our judges did indeed hold more favorable stereotypes of whites than of blacks. Nonetheless, our failure to directly test this assumption means that assumed-characteristics theory may derive stronger support than we can provide. Our results indicated that, in the presence of important background information, judges showed bias against black applicants. Had we demonstrated that judges held less favorable stereotypes of blacks than of whites, the prediction that direct scores to background information eliminates bias against blacks would have received more support.

Our failure to assess whites' prior stereotypes leads to an alternative explanation for our findings supporting expectancy-violation theory. Specifically, white judges may have tried to cre-
The Integrative Model and Past Research

How well does this integrative model explain past research findings? Research on whites' racial stereotypes should show the following: (a) range effects; (b) much larger effects of background characteristics than race; (c) whites judge highly favorable blacks more positively than highly favorable whites (owing to expectancy-violation and complexity-extremity processes); (d) whites evaluate unfavorable blacks either similarly or somewhat more negatively than unfavorable whites (depending on the nature of the background-characteristic manipulation); (e) overall stereotypes to rate blacks more favorably than similar whites.

Consistent with this integrative perspective, past research has often found the range of whites' evaluations of blacks to be larger than the range of their evaluations of whites (Dembroski, 1970; Festinger, Mischel, & Jones, 1980; Smedley & Bay- too, 1979). These studies also find that blacks are more positively than negatively evaluated when they are favorable compared to whites. These studies support our proposal that complexity-extremity and expectancy-violation processes influence evaluations. Furthermore, these studies and many others (Cook, 1984; McKee, & Stiebel, 1983; Mee, et al., 1981; Ross, & Stiebel, 1986; Traub, & Levin, 1966) provide evidence for the assumed-characteristics processes by demonstrating that information about SES, beliefs and values, speech style, and occupational and educational qualifications that has a far larger impact on evaluations than does race.

In addition, research from the complexity-extremity and assumed-characteristics perspectives have often found results consistent with expectancy-violation theory. When background characteristics are orthogonally manipulated, whites usually evaluate blacks more favorably than whites, although the evidence is not always statistically significant (Feldman, 1972; Linville & Jones, 1980; Mee, et al., 1983; McKee, & Stiebel, 1985; Smedley & Baytoo, 1980). Thus, it seems that our integrative model not only provides a better account of our own data than does any of the three theories considered individually, it also provides a comprehensive understanding of much of the past research on racial stereotypes.

Generalizability of the Model to Other Stereotypes

The applicability of our integrative model to stereotypes in general is an important area for future research. Nonetheless, the available literature on stereotypes provides evidence that supports the occurrence of all three processes addressed by the current study. In support of the assumed-characteristics perspective, research on sex role, age, social, and ethnic stereotypes generally finds that information about an individual's personality characteristics and behavior has more impact on others' evaluations than does the target's group membership (Linville, 1982; Linville & Jones, 1980; Lockley, et al., 1980, 1982a, 1982b; Rastie, et al., 1983; Sherman, Gold, & Sherman, 1978). Furthermore, research has also demonstrated complexity-extremity effects with regard to sex role stereotyping (Linville & Jones, 1982) and age-based stereotyping (Linville, 1983). And the expectancy-violation perspective is supported by research showing that although older people are often characterized by relatively negative stereotypes (McVach, 1971), an active older woman receives more favorable evaluations than an equally active younger man, who is also consistent with complexity-extremity theory (Sherman, et al., 1978).

Conclusion

Perhaps our most important conclusion is that stereotypes may influence the evaluation of individuals within groups and out-groups, in important but highly complex ways. One can no longer simply assume that stereotypes lead only to favorably biased perceptions of in-group members. In the current study alone, we have shown that stereotypes may sometimes lead to more favorable evaluations of out-group individuals and that they may have multiple, and sometimes even conflicting, influence on evaluations (see Table 4). Although the current study integrates theories mainly by combining them, additional conceptual synthesis may be gained through research that more thoroughly identifies the limiting conditions of various theories. The current study provides some of this information by suggesting that whites hold

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Footnote:

We do not claim to have identified all conditions under which expectancy-violation theory is likely to occur. If the unfavorable background characteristics manipulated in past studies did not negatively violate expectations for whites, then complex-extremity processes would lead to less favorable ratings of unfavorable blacks. If the background characteristice manipulations did negatively violate expectations for blacks, then unfavorable blacks and whites would be evaluated similarly.
relatively strong expectations regarding ‘whites’ speech style and blacks’ social class, and they hold few expectations regarding ‘whites’ social class and blacks’ speech style. Our study also sug-
gests that complexity-extremity processes are mainly applicable
to targets who have clearly positive or negative characteristics,
and not to targets who fall between these extremes.

Other research has investigated limiting conditions for com-
plexity-extremity theory and assumed-characteristics theory. When attribute dimensions are correlated, fewer dimensions do not
necessarily lead to evaluative extremity (Judd & Lusk, 1984).
Furthermore, in comparison to race, beliefs and values have
more impact on evaluations and behavioral intentions mainly
for less ethnocentric people and for less intimate interac-
tions (Goldstein & Davis, 1972; McKimnan et al., 1983).

Lastly, these and many other perspectives on stereotypes have
been developed primarily on the basis of research involving
white subject populations. Nonetheless, the processes underly-
ing these theories are often believed to operate in similar fashions
among other populations. Research directly assessing the gener-
alizability of our current beliefs regarding stereotyping pro-
cesses to non-white subject populations could be especially in-
formative.

Therefore, it is important for future integrative research
not only to incorporate mechanisms described by several theo-
ries but also to delineate the conditions under which stereotyp-
ing processes occur. Simultaneously combining theories and
identifying limiting conditions may be a difficult task, especially
for empirical research. However, there are so many approaches
to intergroup interaction and perception that the attempt to
synthesize multiple perspectives could greatly enhance the rich-
ness and accuracy of our theories of stereotypes.

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NATURE OF STEREOTYPES

454
Jussim, Colesman, and Leach

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