
Cognitive Representations of Black Americans: Reexploring the Role of Skin Tone

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Although evidence from a variety of disciplines suggests that skin tone is a basis of discrimination among Blacks, research in social psychology has virtually ignored this topic. Two experiments examined the causal role of skin tone in the perception and representations of Blacks. Paralleling the effect of race and other social category dimensions, Study 1 showed that variation in skin tone can influence the organization of social information. Study 2 demonstrated differentiation in stereotypes of Blacks based on skin tone. Results from both investigations suggest that skin tone is an important factor in both Blacks' and Whites' representations of Blacks.

If you're White, you're right,
If you're yellow, you're mellow,
If you're brown, stick around,
If you're Black, get back.
—Parrish (1944, p. 90)

The saying quoted above was once common among Blacks. The first and last lines reflect the discriminatory divide between White and Black Americans that has existed throughout U.S. history. The second and third lines reflect a peculiar phenomenon in the Black community. Skin tone bias is the tendency to perceive or behave toward members of a racial category based on the lightness or darkness of their skin tone. Although similar to racial stereotyping, prejudice, and discrimination, skin tone bias is distinguished by its focus on the physical characteristics of individuals within a racial category. This tendency to differentiate based on skin tone within a racial category emerges in a number of countries around the world (e.g., Goldberg, 1973; Robinson, 1999) and among Blacks in the United States (e.g., Hall, 1992; Maddox, 1998; Russell, Wilson, & Hall, 1992). In all of these societies, light skin is generally valued over

dark skin, and a person's skin tone has broad implications for his or her relative social status.

Focusing on the phenomenon with respect to the perception of Black Americans, this article briefly reviews anecdotal and empirical evidence for skin tone bias in stereotyping. We later describe two studies that begin to address problems with previous research with the ultimate goal of reigniting research examining skin tone bias.

Anecdotal Evidence for Skin Tone Bias Among Blacks

With specific regard to Black perceivers, this phenomenon also has been referred to as "colorism" and "color-consciousness" (Okazawa-Rey, Robinson, & Ward, 1987). Blacks who displayed this tendency were once referred to as "color struck" or perceived as having a "color complex" (Russell et al., 1992). To these authors, these terms reflect a psychological preoccupation with skin tone that has consequences for person perceivers and persons perceived. During the early part of the 20th-century, social clubs, churches, fraternities, and sororities used a variety of methods to weed out potential dark-skinned applicants to create and maintain social dis-

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tance between Blacks with light and dark skin (e.g., Hall, 1992; Maddox, 1998; Russell et al., 1992). The "paper bag test" was one obstacle to membership for dark-skinned Blacks. This test required applicants to place their arm inside an ordinary brown paper bag. An individual was denied entry if his or her skin tone was darker than the bag (Hall, 1992). Skin tone bias was not limited to Blacks' interactions with other Blacks. Historians suggest that White perceivers also shared a preference for lighter skin tone in Blacks. White slave owners often favored their lighter-skinned slaves over others by giving them coveted assignments (e.g., as house servants rather than field workers) and limited training in skilled trades (Neal & Wilson, 1989; Russell et al., 1992). Perceived as more intelligent and skilled laborers, light-skinned Blacks also brought a higher price than their darker counterparts when sold on the slave market (Hughes & Hertel, 1990).

These are just a few examples that describe the occurrence of skin tone bias toward Black Americans. In general, these episodes suggest that the influence of skin tone was once widespread, extending to many different aspects of life experience and achievement. As the poem above suggests, this influence reflects more favorable views of lighter-skinned Blacks and less favorable views of darker-skinned Blacks. These anecdotes suggest the relatively widespread occurrence of skin tone bias in the past. The phenomenon is rarely discussed openly among Black Americans, suggesting perhaps that skin tone bias is no longer a factor in interpersonal perception. However, many authors suggest that skin tone bias continues to affect the lives of Black Americans (Hall, 1992; Neal & Wilson, 1989; Russell et al., 1992). In addition to anecdotal accounts of skin tone bias, empirical investigations have attempted to provide greater understanding of the phenomenon.

Empirical Evidence for Skin Tone Bias Among Black Americans

Correlational evidence suggests that Black observers associate light skin tone with positive traits and dark skin tone with negative traits. Marks (1943) found that Black college students perceived those with lighter skin tone as more attractive and possessing more personal charm compared to those with darker skin. Anderson and Cromwell (1977) found that Black teenagers associated light-brown skin tone with positive characteristics (e.g., the prettiest skin, skin color of the smartest girl), whereas black skin was associated with negative characteristics (e.g., skin color of the person one would not like to marry, skin color of the dumbest "Negro").

Experimental research has similarly focused on the beliefs and/or traits associated with light and dark skin tone. Bayton and Muldrow (1968) found that Black col-

lege students saw light-skinned Blacks as having greater ascendancy (social mobility), sociability, and emotional stability than dark-skinned Blacks. Chin-Quee (1993) found that Black and White participants stereotyped photographs of dark-skinned Blacks to a greater degree than photos of light- and medium-skinned Blacks. Not all the experimental evidence, however, supports the existence of skin tone bias. Secord, Bevan, and Katz (1956) asked White participants to rate photographs of Black and White men on personality and physiognomic trait scales. They found that the presence of European features in photographs of Blacks did not reduce stereotyping. Once a target was categorized as Black, he was stereotyped according to that categorization.

This brief review of the literature on skin tone bias raises two questions. First, to what extent are mental representations of Blacks differentiated by skin tone variation? Second, if present, is this difference limited to Black perceivers? The present studies seek to address these questions by bringing to bear a social cognitive perspective on the topic of skin tone bias. Research in social psychology over the last 20 years has provided a theoretical framework and a number of paradigms designed to investigate issues related to stereotypes, prejudice, and discrimination directed toward members of a variety of social categories (for reviews, see Fiske, 1998; Hamilton, Stroessner, & Driscoll, 1994). Noting the parallels between skin tone bias among Blacks and racial bias between Blacks and Whites, we suggest that the adoption of this framework and the approaches it provides can similarly benefit the understanding of skin tone bias while simultaneously developing and validating current social psychological theory. We report data collected from two studies that examined the role that skin tone plays in the cognitive representation (Study 1) and stereotypes (Study 2) of Blacks.

STUDY 1

Cognitive Representations of Blacks Based on Skin Tone

SOCIAL CATEGORIES BASED ON RACE

A great deal of research suggests that categorization is a necessary precondition to the existence of stereotypes (e.g., Hamilton, 1981; Taylor, 1981). Taylor, Fiske, Etcoff, and Ruderman (1978) investigated this issue with respect to racial categories. White participants watched a discussion involving three White and three Black men (Taylor et al., 1978, Experiment 1) presented using a slide projector and an audiotape player. Subsequently, participants were surprised with the task of matching the photographs of the speakers with the statements that they made. The primary dependent measures were two types of errors that participants could make in assigning the statements to speakers. A within-category error was

made if a participant incorrectly assigned the statement of a Black man to another Black man or the statement of a White man to another White man. A between-category error was made if a participant incorrectly assigned the statement of a Black man to a White man or a White man to a Black man. Taylor et al. (1978) reasoned that if perceivers represent Blacks and Whites as separate categories, race information (e.g., skin color) would be attended to and encoded during the presentation of the discussion and bias organization of the interaction. Because the perception of distinct categories leads perceivers to minimize within-category differences and exaggerate between-category differences (e.g., Tajfel & Wilkes, 1963), the number of within-category errors should exceed between-category errors. The pattern of errors in their data supported this prediction. Since that time, a number of researchers have used this matching paradigm to investigate a variety of bases of categorical representation such as physical attractiveness and sexual orientation (e.g., Arcuri, 1982; Miller, 1986). Essentially, this paradigm serves as a useful technique for detecting the underlying category structure of perceivers' cognitive representations of social groups.

SOCIAL CATEGORIES BASED ON SKIN TONE

Given that the anecdotal and correlational evidence suggest the existence of stereotypes, prejudice, and discrimination based on skin tone, it stands to reason that perceivers should represent Blacks as a function of light- and dark-skinned subcategories (e.g., Brewer, Dull, & Lui, 1981). Although some research suggests that Blacks can be represented in terms of subcategories, these subcategories are more closely related to social roles such as businessman or athlete (Devine & Baker, 1991). Theory in social psychology does not explicitly recognize skin tone as a meaningful social variable outside of its role in determining racial category membership (Fiske & Taylor, 1991; Taylor, 1981).

The experiment by Secord et al. (1956) described in the introduction found that stereotyping of Blacks did not differ as a function of skin tone and physical features. A follow-up investigation upheld this original conclusion (Secord, 1959). These investigations are unique in their focus on stereotyping based on skin tone and physiognomy; however, there is a reason to believe that the conclusion drawn from them may be premature (for a detailed discussion, see Maddox, 1998). Some of the stimulus photos of light-skinned Blacks were categorized as White by a majority of the participants. The question that remains to be addressed is the perception of photographs of Blacks with light skin that are spontaneously categorized as Black. Furthermore, the ratings of Black perceivers were not examined in those studies. Social cognitive theory and research examining social categori-

zation suggests that the categorization process itself often induces the exaggerated perception of homogeneity in outgroups (Linville, Fischer, & Salovey, 1989; Quattrone & Jones, 1980). Considering this perspective, Whites are less likely to make distinctions among Blacks that are based on skin tone. If skin tone is at all attended to, it is used to make a determination of racial category (e.g., Brewer & Feinstein, 1999; Fiske, Lin, & Neuberg, 1999). However, once a racial category has been determined, the role of skin tone is likely to be minimal (Secord, 1959; Secord et al., 1956). This position is contrasted with the anecdotal and research evidence supporting the existence of colorism reviewed here. That work makes a clear prediction that the tendency to represent Blacks based on skin tone should be evident in judgments made by Black and White perceivers. As mentioned above, skin tone discrimination in the United States was associated with the differential treatment of Black slaves by White slave owners, suggesting that the potential for differentiation by White perceivers was once realized.

PREDICTIONS

In the present study, Black and White participants viewed a group discussion in which either the race or the skin tone of the discussants was varied. Shortly thereafter, participants were asked to match the statements with the photographs of the discussants that made them. Replicating previous research, it was expected that both Black and White participants would organize the discussion according to race, evidenced by the tendency to make more within- than between-category errors. In addition, we predicted that both Black and White perceivers would demonstrate organization of the discussion as a function of skin tone. Participants also were required to make confidence ratings for their responses during the matching task. Confidence judgments for within- and between-category errors were examined on an exploratory basis. Assuming that a correct response is based on a memory for the person who made the statement, participants should report a higher degree of confidence in their correct responses than their incorrect responses.

Method

PARTICIPANTS AND DESIGN

Ninety-four students participated in an experiment described to them as a study of first impression formation. Due to the specific nature of the hypotheses, the analyses focused on data from 62 students (32 White: 19 women, 13 men; 30 Black: 19 women, 11 men). Students were recruited from two universities in an urban metropolitan area in the Northeastern United States. Most of the Black students in the experiment were recruited

from one university in exchange for \$10 compensation. Most of the White students were obtained from the introductory psychology participant pool at the other university in exchange for partial course credit. The experiment used a 2 (discussion composition: race or skin tone) \times 2 (race of participant: Black or White) between-subjects design.

PROCEDURE

Participants were brought into the lab in small groups of one to six and were greeted by the experimenter, a White female. After being given a short orientation to the experiment, participants were directed to individual computer terminals and were asked to begin by reading the instructions already present on the screen. They were told that they would be watching a simulated interaction among six men discussing what activity they could engage in on a particular day. Their task was to watch the discussion while attempting to form an impression of the discussants from their statements. Once participants' questions about the procedure had been addressed, they were instructed to continue. At this point, participants were presented with photographs and statements made by the six men in the discussion.

Twenty-four statements were used as the content of a discussion. Each discussant made suggestions for potential activities on a given day (e.g., "We should decide what we're going to do today," "Let's find out what's playing at the movie theater," "We should do something outside since it's so nice"). Each statement was context-independent of any statement preceding it, permitting randomization of the order of presentation as well as randomization of pairings of statements with photographs for each participant. Through these randomization techniques, each statement had an equal chance to appear with each photograph and at each serial position in the presentation sequence.

Discussion composition manipulation. Head-and-shoulder color photographs of 12 men were used as stimulus persons in discussions of two different compositions. Half of the participants in the study, those in the race composition condition, were randomly assigned to observe a conversation among three White men and three Black men. The other half of the participants, those in the skin tone composition condition, were randomly assigned to observe a conversation among six Black discussants, three with light skin tone and three with dark skin tone. Stimulus photographs for the skin tone condition were chosen from a pool of photographs of Blacks that had been digitally manipulated to create a light- and dark-skinned version. The availability of different versions of each photograph allowed the construction and use of three skin tone replications in which the photograph composition of the light- and dark-skinned subgroups

was varied. For example, if photograph 1 was in the light skin category in the first skin tone replication, it was in the dark skin category in at least one of the other two replications. The criterion for inclusion in this study was that all the photographs of Blacks used for this experiment were predominantly (> 90%) categorized as "Black" by a separate group of participants.

Each photograph/statement pairing was displayed on the computer screen sequentially for 6 seconds until all 24 statements had been presented. Thus, with six speakers and 24 statements, each speaker made 4 statements. To eliminate recency effects in memory, participants were given a 90-sec filler task in which they were instructed to list the 50 United States on a sheet of paper. Ostensibly, the computer used the time to prepare for the next task. After the delay, participants were presented with the matching task. The screen displayed a numbered array of photographs of the six discussants. Below the array, a statement from the discussion was presented. Participants made selections by typing a photograph number into a specified field. Statements were presented in random order, one at a time, until responses to all 24 statements had been made. With each match they were instructed to indicate a confidence level (1 = *not at all confident*, 5 = *very confident*). The computer recorded both match choice and confidence rating before moving on to the next statement. Finally, participants completed a demographic questionnaire that included racial category membership. Participants were then debriefed, thanked, and excused from the session.

Results

CATEGORIZATION EFFECTS

Examination of the pattern of within- and between-category errors provided the major test of the hypothesis that perceivers distinguish social targets as a function of race and skin tone. A slight correction is necessary in comparing the number of within- and between-category errors in this paradigm (Taylor et al., 1978). Using this discussion composition (two categories composed of three individuals each), the baseline likelihood of a between-category error exceeds the likelihood of a within-category error by one third. To adjust for this baseline imbalance, the raw number of between-category errors was multiplied by two thirds. Throughout the remainder of this article, the adjusted between-category errors are referred to as between-category errors.

The data were analyzed using a 2 (discussion composition) \times 2 (race of participant) \times 2 (error type) mixed ANOVA using the error scores as a within-subjects factor. The means for this analysis are presented in Figure 1. The results revealed a reliable main effect of Discussion Composition, $F(1, 58) = 10.93$, $p < .01$. The pattern of means suggest that the matching task elicited more

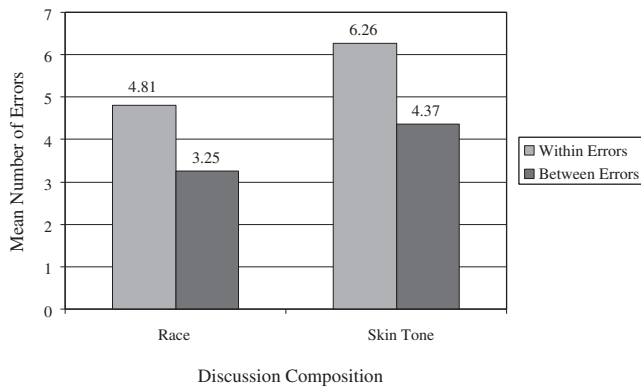


Figure 1 Within-versus between-category errors as a function of discussion composition.

errors in the skin tone condition ($M = 5.19$) than in the race condition ($M = 4.05$). More important, the results revealed a reliable main effect of Error Type, $F(1, 58) = 9.78$, $p < .01$. Consistent with hypotheses, participants made more within- than between-category errors in the statement-matching task. Furthermore, this main effect was not qualified by interactions with either Discussion Composition or Race of Participant (both F s < 1). These results suggest that all participants, regardless of race, organized the discussion around race or skin tone.

CONFIDENCE RATINGS

Average confidence ratings were computed for correct responses and errors. These scores were analyzed using a 2 (discussion composition) \times 2 (race of participant) \times 2 (judgment type) mixed-model ANOVA. The results revealed the predicted main effect of Judgment Type, $F(1, 58) = 100.14$, $p < .001$. Participants were more confident when they made a correct response compared to when they made an error (M s = 3.65 vs. 2.84, respectively). A similar analysis conducted on the average confidence ratings for within- and between-category errors revealed no main effects or interactions. Participants showed equal confidence when making both within- and between-category errors (M s = 2.83 vs. 2.87, respectively).

Discussion

The results from the race condition replicated the finding of Taylor et al. (1978) that participants tend to use race as an organizing principle in social perception. Of note, the race condition in the current study corroborates the results of only one previous experiment suggesting that Black as well as White participants use race as an organizing principle when observing a social interaction (Hewstone, Hantzi, & Johnston, 1991). In addition,

the results from the skin tone conditions support the hypothesis that perceivers can use skin tone as organizing principles in social perception, apart from the presence of other facial features. When observing a discussion among light- and dark-skinned Blacks, within-category errors were more frequent than between-category errors in a subsequent statement-matching task. Again, this pattern was present in the data obtained from both Black and White participants, suggesting that any tendency toward outgroup homogeneity did not mask social perceptual discrimination based on skin tone. In addition, recall that all of the photographs used were categorized as Black by an independent group of pretest participants. Thus, unlike the Secord experiments discussed above, the differences here can be attributed to perceived skin tone differences between targets that belong to the same racial category. The passage of time since those investigations may partially account for the difference in findings.

The analysis of the confidence ratings revealed that, as predicted, participants were much more confident in their correct responses than in their incorrect responses. Assuming that a report of confidence reflects a participant's memory, it seems that participants had a sense of when they were right and when they were wrong. However, in situations where they were wrong, participants were no more confident making a within- compared to a between-category error, even though they were more likely to make within-category errors. This provides support for the idea that the organization that takes place occurs implicitly rather than explicitly, even when the category dimension is as accessible as race.

Overall, the results of Study 1 support the notion that perceivers do notice skin tone and can use it as an organizing cue, suggesting that skin tone is a basis of categorization among both Black and White perceivers. From a social cognitive perspective, the existence of skin tone-based categories is a precondition to the existence of skin tone-based stereotypes, the focus of Study 2.

STUDY 2

Stereotypes of Blacks Based on Skin Tone

Stereotypes have been defined as cognitive representations that contain a perceiver's knowledge, beliefs, and expectations about a social group (Hamilton & Trolier, 1986). A great deal of research in social psychology has focused on the stereotype construct, specifically on methods to assess the content of stereotypes about various social groups (e.g., Devine, 1989; Devine & Elliot, 1995; Esses, Haddock, & Zanna, 1993; Katz & Braly, 1933; Krueger, 1996; Niemann, Jennings, Rozelle, Baxter, & Sullivan, 1994). In general, these approaches have either provided participants with a checklist of traits purport-

edly associated with the stereotype of a social group or have asked participants to freely generate their own list of traits. Although many researchers have questioned the meaning and validity of the data provided by the trait checklist procedure (Devine & Elliot, 1995; Niemann et al., 1994), both checklist and free response formats are regularly used to measure perceivers' stereotypic associations with particular groups. The free response format is particularly useful when aspects of the stereotype are unknown to the researcher. Thus, this procedure was adopted for the current research question.

In this study, Black and White participants were asked to report their knowledge of the cultural stereotypes associated with light- and dark-skinned Blacks. Predictions were based on conclusions drawn from prior research examining stereotypes based on skin tone. According to our review, this work suggests that dark-skinned Blacks are more closely aligned to the (negative) cultural stereotype of Blacks. Thus, we predicted that dark-skinned Blacks would be associated with more negative traits and perceived more stereotypically than light-skinned Blacks. The skin tone research provides some clues as to the specific trait distinctions between light- and dark-skinned Blacks. Compared to those with darker skin tone, lighter-skinned Blacks have been more closely associated with attractiveness, personal charm, intelligence, social mobility, and emotional stability (Anderson & Cromwell, 1977; Bayton & Muldrow, 1968; Chin-Quee, 1993; Marks, 1943). Thus, we expected our trait listings to reflect these elements. Consistent with the results of Study 1, we also predicted that both Black and White perceivers would show evidence of stereotype differentiation of Blacks based on skin tone.

Method

PARTICIPANTS

Forty Black (20 women, 20 men) and 42 White (22 women, 20 men) students participated in an experiment described as a study of knowledge about social groups. The participants were recruited from introductory psychology courses at a university in an urban metropolitan area. Students received partial course credit in exchange for their participation.

PROCEDURE

A White female experimenter conducted the procedure in race-homogeneous groups of one to four. Upon entering the lab, they were seated at tables divided into four adjacent sections by three vertical barriers used to facilitate anonymity. Written instructions explained to the participants that they would be asked to complete a questionnaire designed to assess their knowledge of various racial and ethnic groups. Specifically, the instructions indicated that the questionnaire would examine

both cultural and personal beliefs about these groups (Devine, 1989). Definitions and examples using occupational groups were provided for clarification. The cultural/personal belief distinction was used in the current study to facilitate elaboration of the stereotype by giving participants the opportunity to distance themselves from endorsement of the stereotypic traits they listed. The personal belief data were not the focus of the current study and are not presented.

Each page of the materials had a specific social group written at the top, followed by subsections to list positive, negative, and neutral characteristics associated with each group. For each social group, the participant was to list as many cultural beliefs as they could. Twelve spaces were provided for trait listings under each subsection. The instructions stated that after all cultural beliefs were listed, the participant was to indicate which characteristics were consistent, inconsistent, or neutral with respect to their personal beliefs.

There were seven social groups in the questionnaire presented in counterbalanced order. Four were target groups: dark-skinned Black women, dark-skinned Black men, light-skinned Black women, and light-skinned Black men. Three additional target groups served as fillers: White men and women and Native Americans (sex not specified). The last page of each questionnaire asked the participants for demographic information, including racial category membership. Once completed, each participant put the questionnaire into an unmarked manila envelope and placed it in a folder on a nearby table. After all envelopes in a session were collected, the participants were debriefed and thanked for their participation.

Results

VALENCE OF TRAIT LISTINGS

The coding and analyses focused only on positive and negative trait aspects of the stereotype. The number of positive and negative traits listed by each participant were counted and analyzed using a 2 (race of participant) \times 2 (sex of participant) \times 2 (skin tone of target) \times 2 (sex of target) \times 2 (valence of trait) mixed-model ANOVA using the last three factors as within-subjects variables. Due to the complexity of the design, as well as the specific nature of the hypotheses, the results discussed will focus on interactions involving positive and negative traits associated with light- and dark-skinned Blacks (i.e., skin tone by valence interactions).

Results revealed the predicted Skin Tone \times Valence interaction, $F(1, 78) = 69.34, p < .001$ (see Figure 2). Simple effects tests indicated that participants listed a greater number of negative traits for dark-skinned targets compared to positive traits ($M_s = 3.52$ and 2.20 , respectively). The opposite pattern emerged for light-

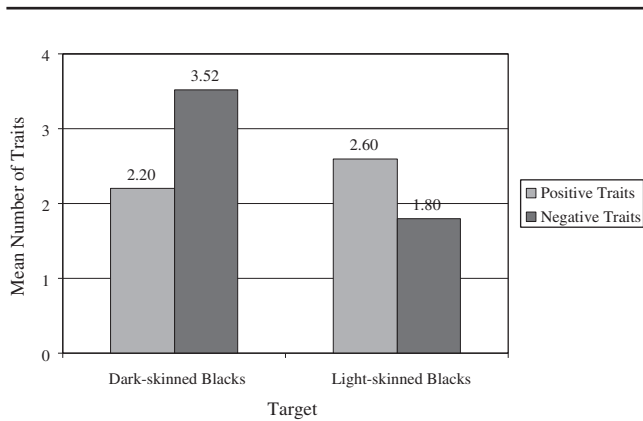


Figure 2 Valence of traits listed as a function of skin tone of target.

skinned targets, because participants listed fewer negative compared to positive traits ($M_s = 1.80$ and 2.60 , respectively). This interaction was qualified by a reliable three-way interaction involving Skin Tone, Valence, and Sex of Target interaction, $F(1, 78) = 17.69, p < .001$, and a reliable four-way Skin Tone \times Valence \times Sex of Target \times Participant Race interaction, $F(1, 78) = 4.76, p < .05$. Follow-up analyses focused on the four-way interaction, which was examined by testing the Skin Tone \times Valence interaction for each level of target sex and participant race. In each situation, the interaction was statistically reliable and with the predicted pattern found in the two-way interaction above, with one exception. Simple effects tests revealed that White participants associated a greater number of positive compared to negative traits to light-skinned male targets ($M_s = 2.19$ and 1.71), but this difference did not reach conventional levels of significance, $t(41) = 1.23, p < .13$ (one-tailed). However, in support of our argument, these individuals did use significantly more negative traits to describe dark- compared to light-skinned men ($M_s = 4.07$ and 1.71 , respectively).

STEREOTYPICALITY OF TRAIT LISTINGS

Coding. For the present analyses, two individuals (a Black and a White female) blind to the experimental conditions coded participants' trait listings with respect to 12 traits associated with the Black stereotype as reported by Devine (1989). The stereotypic traits included athletic, criminal, dirty/smelly, inferior, lazy, ostentatious, poor, rhythmic, sexually aggressive, tough/aggressive, uneducated, and unintelligent. When a trait listed did not fit into one of these categories, the coders were instructed to create a new one. This procedure resulted in the creation of 10 new categories, 6 of which were inconsistent with traits composing the traditional

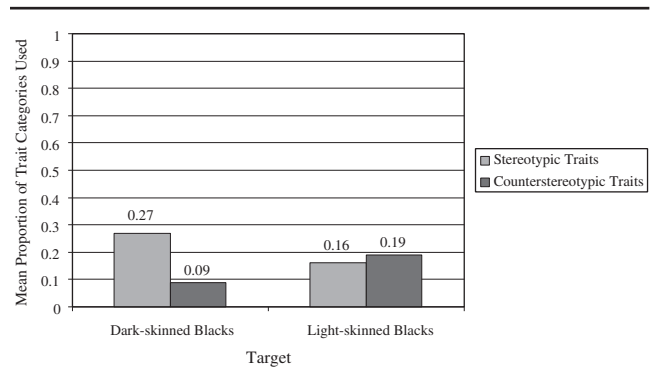


Figure 3 Stereotypicality of traits listed as a function of skin tone of target.

stereotype of Blacks. These 6 traits were aggregated into a counterstereotypic category: intelligent, kind, educated, motivated, superior, and wealthy. The remaining 4— attractive, bad attitude, self-assured, and unattractive— have not been found to be related to the stereotype in previous research. In sum, participants' trait listings were coded for the presence (coded 1) or absence (coded 0) of each of 22 different categories: 12 stereotypic, 6 counterstereotypic, and 4 neutral. The coders agreed on 82% of the category judgments. Conflicts were resolved through discussion. Characteristics that were not considered traits (e.g., food preferences) were not included in this analysis.

Analyses. The average proportions of stereotypic and counterstereotypic trait categories used to describe each target were analyzed using a 2 (race of participant) \times 2 (sex of participant) \times 2 (skin tone of target) \times 2 (sex of target) \times 2 (stereotypicality of trait category) mixed-model ANOVA using the last three factors as within-subjects variables. The analyses focused on interactions involving the variables skin tone and stereotypicality. Results revealed the predicted Skin Tone \times Stereotypicality interaction, $F(1, 78) = 137.62, p < .001$ (see Figure 3). Simple effects tests revealed that participants used a larger proportion of the 12 stereotypic attributes to describe dark-skinned targets ($M = .27$) compared to light-skinned targets ($M = .16$), $t(81) = -6.44, p < .001$. In contrast, participants used a greater proportion of the six counterstereotypic attributes to describe light-skinned targets ($M = .19$) compared to dark-skinned targets ($M = .09$), $t(81) = 9.24, p < .001$. As predicted, the Skin Tone \times Stereotypicality \times Race of Participant interaction was not statistically reliable ($F < 1$).

INDIVIDUAL TRAIT CATEGORIES

Although the analyses discussed thus far do suggest evidence of evaluative and stereotype differences as a function of skin tone, they do not give an indication as to

TABLE 1: Percentage of Black and White Participants Listing Trait Categories Distinguishing Dark- and Light-Skinned Male and Female Targets

Trait	Male Targets				Female Targets			
	Blacks		Whites		Blacks		Whites	
	Dark	Light	Dark	Light	Dark	Light	Dark	Light
Athletic	55.0	42.5	47.6	28.6	27.5	35.0	11.9	9.5
Bad attitude	10.0	15.0	38.1	23.8	20.0	20.0	28.6	21.4
Attractive	10.0	10.0	4.8	14.3	5.0	27.5**	7.1	38.1**
Criminal	77.5	40.0***	66.7	35.7**	20.0	22.5	23.8	11.9
Dirty/smelly	0.0	0.0	0.0	0.0	7.5	0.0	7.1	0.0
Educated	0.0	10.0*	2.4	7.1	7.5	10.0	7.1	7.1
Inferior	0.0	0.0	0.0	2.4	5.0	0.0	4.8	0.0
Intelligent	15.0	40.0*	21.4	26.2	12.5	45.0**	11.9	28.6*
Kind	27.5	20.0	4.8	16.7	25.0	30.0	21.4	31.0
Lazy	20.0	17.5	16.7	9.5	22.5	2.5**	19.0	2.4**
Motivated	17.5	25.0	11.9	14.3	5.0	27.5**	11.9	19.0
Ostentatious	12.5	5.0	21.4	9.5*	15.0	5.0	23.8	9.5
Poor	55.0	27.5*	45.2	28.6	67.5	20.0****	50.0	14.3***
Rhythmic	17.5	20.0	14.3	14.3	15.0	32.5	16.7	26.2
Self-assured	12.5	12.5	7.1	16.7	17.5	35.0*	28.6	31.0
Sexually aggressive	37.5	37.5	31.0	16.7	27.5	42.5	33.3	31.0
Superior	2.5	0.0	0.0	4.8	0.0	0.0	0.0	2.4
Tough/aggressive	70.0	30.0**	66.7	21.4****	40.0	22.5	45.2	19.0**
Unattractive	5.0	0.0	9.5	0.0*	17.5	2.5*	9.5	0.0*
Uneducated	22.5	17.5	26.2	7.1*	20.0	20.0	28.6	9.5*
Unintelligent	17.5	10.0	7.1	9.5	20.0	10.0	23.8	4.8**
Wealthy	2.5	37.5***	4.8	26.2*	12.5	20.0	9.5	21.4

NOTE: An asterisk denotes a statistically significant Cochran's Q statistic comparing across skin tone within type of participant.

* $p < .05$. ** $p < .01$. *** $p < .001$. **** $p < .0001$.

the specific trait categories on which light- and dark-skinned Blacks are perceived to differ. The number of participants using each of the 22 individual categories to describe light- and dark-skinned targets were analyzed using Cochran's test, a nonparametric test of the hypothesis that several related dichotomous variables measured on the same individual have the same mean (Conover, 1999). Separate tests were conducted for Black and White participants' category listings for male and female targets. In sum, 88 different tests were conducted, with 27 statistically reliable results ($p < .05$). Note that using this significance criterion, one would expect approximately four reliable results by chance.

Table 1 presents this information in terms of the proportion of Black and White participants who listed each trait as a component of the stereotype for male and female targets. Examination of this table corroborates our interpretation of the valence and stereotypicality data. Comparing the responses of Black and White participants, the data suggest that participants of both racial groups are aware of cultural distinctions between light- and dark-skinned Blacks. Both Black and White participants were significantly more likely to use the traits criminal and tough/aggressive and less likely to use the trait wealthy to describe dark-skinned men as compared to

light-skinned men. Although only statistically reliable for one group of participants, the traits poor, ostentatious, unattractive, and uneducated also tended to be more closely associated with dark men, whereas the traits educated and intelligent tended to be more closely associated with light men. There was even greater agreement in participants' descriptions of women. Both Black and White participants were significantly more likely to use the traits attractive and intelligent, and less likely to use the traits lazy, poor, and unattractive in their descriptions of light- versus dark-skinned women. Although only statistically reliable for one group of participants, participants also tended to be more likely to use the traits tough/aggressive, uneducated, and unintelligent and tended to be less likely to use the traits motivated and self-assured in their ascriptions to dark-skinned women as compared to light-skinned women.

Discussion

The current results provide strong support for the hypothesis that both Black and White participants are aware of a cultural distinction between light- and dark-skinned Blacks. Overall, this procedure tapped into common aspects of a predominately negative cultural stereotype of Blacks that appears to be closely associated

to Blacks with dark skin. Participants described dark-skinned Blacks using more negative and stereotypic traits, whereas light-skinned Blacks were described with more positive and counterstereotypic traits.

Because of the high correlation between stereotypicality and valence—most of the traits that compose the stereotype are also negative—to some extent the aggregation of traits as a function of stereotypicality is redundant with the valence analysis. Examination of the individual trait listing suggested that in each case where a reliable difference was found, it was always in the direction describing dark-skinned Blacks as more closely aligned to the traditionally negative stereotype of Blacks. Generally, dark skin tone was more often associated with poverty, aggressiveness, lack of intelligence, lack of education, and unattractiveness. This pattern was generally similar to traits that have distinguished light- and dark-skinned Blacks in previous research reviewed above.

To some extent, light- and dark-skinned men were distinguished by different traits compared to light- and dark-skinned women. In addition to the traits listed above, men were distinguished by the traits criminal and ostentatious, whereas women were distinguished by the traits lazy, motivated, and self-assured. This distinction could reflect specific representations of Black men and women in television news reports and other media depictions (e.g., Dixon & Linz, 2000). In popular media sources, men are often depicted as gang-related criminals, whereas women are depicted as welfare mothers. According to our data, those with lighter skin tone are less closely associated with those images.

GENERAL DISCUSSION

To what extent is skin tone involved in our mental representations of Black Americans? Various discussions and investigations concerning skin tone bias have provided mixed support for the notion that Blacks and Whites differentiate and stereotype Blacks according to skin tone. Using the group discussion paradigm developed by Taylor and her colleagues (1978), Study 1 demonstrated Black and White participants' encoding and use of skin tone information in a social context. This finding strongly suggests the existence of subcategories of Blacks based on skin tone. In addition, our use of racially unambiguous stimuli compensates for a weakness in prior research that failed to find an influence of skin tone and facial characteristics. The results of Study 2 complement the conclusion drawn from Study 1. To our knowledge, Study 2 is the first demonstration that both Black and White perceivers are aware of stereotypes relating to skin tone. The free response format used in this study provided data outlining the specific content of the light/dark distinction, suggesting that dark-skinned Blacks are perceived more stereotypically.

The current findings provide a theoretical foundation for the study of stereotyping, prejudice, and discrimination directed toward Blacks of various skin tones. Although these investigations only begin to scratch the surface, they suggest that the strategy of applying knowledge gained from the investigation of other social category dimensions can shed light on the processes involved in skin tone bias. Possible directions for future research include investigation of actual bias in evaluations and behavior. In other words, under what conditions do these stereotypes lead to prejudice and discrimination? In addition, future investigations might more closely consider how characteristics of the participants, targets, and the experimenters (race, gender, skin tone, and variation on other facial characteristics) may affect categorization, stereotyping, and discrimination. For example, the use of White experimenters may have had an influence on the current results. However, we believe that this fact would have made it less likely to observe the skin tone categorization evident in Study 1 by making a Black-White categorization salient. It is also possible that encoding and organization based on skin tone (Study 1) may vary as a function of the perceiver's skin tone. However, the results of the race condition in Study 1 did not reveal an interaction based on racial group membership—the ingroup/outgroup analog to skin tone.

Research also might examine the extent to which the experiences of those with light or dark skin tone parallel the experiences of members of other stigmatized groups. In-depth analyses of stereotypes, prejudice, and discrimination by a number of researchers will lead to a greater understanding of the issues surrounding skin tone bias.

Conclusion

These studies were motivated by theory in social psychological research suggesting that categorization is a necessary precondition to the existence of stereotypes of social groups. In the past, skin tone has been seen as important only in its role in determining racial category membership. This perspective eclipses the possibility that variation in skin tone may play a role as a subdimension within a racial category. The present demonstration of categorization and stereotypes based on skin tone suggests that skin tone plays a more complex role than past social psychological theory and research would suggest. At minimum, these results suggest refinements to this perspective.

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