Skin Tone Bias among African Americans:
Antecedents and Consequences across the Life Span

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Abstract

This article is a developmental review of research on skin tone bias and its consequences for African Americans. In the first section of the paper, we summarize research findings on skin tone attitudes, preferences, and stereotypes from childhood through adulthood. Next we summarize literature regarding African Americans as the target of skin tone bias. This section is organized in terms of individual and contextual factors that shape whether and how skin tone bias occurs; factors that moderate the target's reaction to such bias; and consequences of bias, including psychosocial and health outcomes, economic and educational disparities, and repercussions within the legal system. We conclude by discussing limitations of the extant research.

Keywords: racial discrimination, skin tone, African Americans, colorism

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In a society where racism is still common, skin tone is a visible cue that activates culturally embedded prejudices and stereotypes that may lead to race-based discrimination. This review summarizes research on skin tone bias toward African Americans, filling a gap in the existing literature by considering skin tone bias both from the perspective of the perceiver and the target; by examining age differences in effects; and by delineating antecedents, moderators, and consequences that shape the experiences of skin tone bias. We begin by discussing a few lexical and methodological considerations, then review empirical findings (mostly 1990-present) on skin tone attitudes, preferences, and stereotypes during childhood, adolescence, and adulthood from the perspective of the perceiver.

Our review of skin tone bias from the perspective of the target is organized through a schema that distinguishes among antecedents of skin tone bias, factors that moderate its impact, and the consequences of skin tone bias for African American children, adolescents, and adults (see Figure 1). As we describe in detail below, antecedents are characteristics of the individual and context that influence whether and how skin tone bias will occur. Moderators shape the individual's reaction to skin tone bias, and consequences are noted in psychosocial, health, educational, economic, and legal domains. Before beginning the literature review, we address terms used in this research domain.

Terminology Used in the Skin Tone Bias Literature

A variety of labels have been used to explain the tendency for individuals to attend to different shades of skin tone. Some scholars refer to this phenomenon as *colorstruck* or *colorism*, both reflecting the privileging of lighter skin over darker skin (Keith, 2009; Russell, Wilson & Hall, 2013). The term *racial phenotypicality bias* has been used to refer to the variety of physical

cues (i.e., including not only skin tone but also characteristics such as hair texture and shape of nose and lips) that lead to bias (Maddox, 2004). Some researchers have used the term *color consciousness* to refer to how African Americans differentially attend to and respond to shades of Black skin tones (Breland, 1998). Lastly, the term *skin tone bias* denotes a “general, affect driven preference or dislike for African Americans with specific skin tones or as stereotypes of individuals possessing light or dark skin” (Brown, Ward, Lightbourn, & Jackson, 1998, p. 55). The term *skin tone bias* is the preferred term for the purposes of this review, encompassing a broad spectrum of bias including preferences, prejudice, stereotyping, and discrimination, incorporating both the positive and negative effects of having dark or light skin.

Although there is substantial evidence of negative bias toward darker skin tones, scholars have argued that—particularly within the African American community--light-skinned African Americans also suffer bias (e.g., Hall 1992; Wade, 1996). If a light skin tone is perceived as too close to being White, an African American may be stigmatized as lacking solidarity with other African Americans. Thus, we began this review with the assumption that skin tone bias might operate both positively and negatively for both light- and dark-skinned Blacks.

Researchers who study skin tone bias often refer to Blacks or African Americans without making a clear distinction between the two. This imprecision presents potential confounds in that there are many ethnic sub-groups in the United States who can be represented under the label of *Black*. However, ethnic distinctions are ignored in much of the extant research, limiting the inferences that can be made to sub-groups of Blacks. In summarizing prior research, we use researchers' labels, and where it has been provided, we include information about ethnic subgroups. We turn next to our summary of research on skin tone preferences, attitudes, and stereotypes at different ages.

THE PERCEIVER: SKIN TONE PREFERENCES, ATTITUDES, AND STEREOTYPING AT DIFFERENT DEVELOPMENTAL STAGES

As discussed in greater detail below, skin tone bias occurs because of individuals' tendency to categorize others, perceiving them as members of a social group (in this case, a group with a certain skin tone) rather than as individuals (Allport, 1954). In this section, we summarize research showing individuals' tendencies to show preferences and stereotypes based on skin-tone categorization. These preferences, attitudes, and stereotypes of the perceiver (i.e., a preference of one skin tone over another; preference that one's own skin is lighter or darker; negative stereotyping of a specific skin tone) have been documented starting in childhood and continuing into adulthood.

Slavery and post-slavery discriminatory laws and policies in the United States were justified by beliefs that Blacks were mentally and morally inferior to Whites. The residual of those beliefs remain more than two centuries after the abolition of slavery in cultural stereotypes that depict Black Americans as violent, criminal, dirty/smelly, lazy, ostentatious, poor, sexually aggressive, and unintelligent (Maddox & Gray, 2002). Many scholars have hypothesized that phenotypic appearance that makes Black racial heritage salient is particularly likely to activate such stereotypes; therefore, individuals with darker skin are expected to experience more discrimination than lighter-skinned individuals (Hagiwara, Kashy, & Cesario, 2012; Maddox, 2004; Russell et al., 2013). Several studies have tested this and related hypotheses regarding preferences and stereotypes. We have organized this literature developmentally, beginning with research showing skin tone attitudes and stereotyping in young children.

Skin Tone Preferences and Stereotypes in Childhood

Although most children are not able to correctly classify individuals on the basis of race

until age 4 or 5 (Alejandro-Wright, 1985), attitudes toward different skin tones emerge somewhat earlier. In their classic doll studies, Clark and Clark (1947) assessed Black children's attitudes toward their skin color. The landmark doll study used a sample of 253 Black children ages three to seven from segregated and non-segregated schools. Children chose a doll in response to a request such as, "Give me the doll that looks bad." Black children showed a preference for White dolls and reported negative attitudes toward their own skin color. Clark and Clark concluded that racial segregation led to self-hatred and low self-esteem.

The Clark and Clark (1947) studies have been heavily criticized on methodological and conceptual grounds, leading other researchers to argue that the conclusion of self-hatred was unfounded (e.g., Hraba & Grant, 1972). When the doll study was replicated with additional controls, some researchers found a Black preference among Black children (e.g., Hraba & Grant, 1972), whereas others found a White preference (e.g., Justice, Lindsey & Morrow, 1999; Spencer & Markstrom-Adams, 1990), or either no preference or mixed results (e.g., Branch & Newcombe, 1986; Farrell & Olson, 1983).

In a recent study with 3- and 5-year old African American and European American girls, attitudes were assessed via children's preferential behavior (Kurtz-Costes, DeFreitas, Halle, & Kinlaw, 2011). The researchers invited the girls, who were tested individually, to help set up a birthday party using four dolls who varied in gender and racial physical traits (i.e., a Black boy, a Black girl, a White boy, and a White girl). Girls' behavioral choices when setting up the party were coded to measure their preferential behavior (e.g., which doll received the most party favors; which doll was first in line for party games). On average, both Black and White girls were most likely to show favoritism toward the White female doll, and 5 year olds showed stronger preferences than 3 year olds. When secondary favoritism was assessed (e.g., which doll

was second in line), African American girls were more likely to show favoritism based on gender than race, whereas European American girls were equally likely to show secondary preferential behavior toward their own race (i.e., the White boy doll) or gender (i.e., the Black girl doll). Like the studies modeled after the Clarks' classic research, Kurtz-Costes et al. (2011) only focused on attitudes toward Black versus White rather than exploring preferences for variations of Black skin tones.

Preference for varying Black skin tones was measured by Jordan and Hernandez-Reif (2009), who examined Black and White preschoolers' preferences using cartoons featuring characters who were White, light Black, medium Black, or dark Black. Participants were 3 to 5 years old ($M = 53$ months). Children's responses did not show a consistent pattern (i.e., neither Black nor White children were more likely to choose one of the four cartoon characters over others). Although these results indicate that preschoolers are not attentive to skin tone, conclusions should be tempered by the small sample size (20 White and 20 Black children).

Skin tone attitudes and stereotypes were measured by Averhart and Bigler (1997) in a sample of 56 African American kindergarten and first grade children in a predominantly Black school. The children heard stories in which illustrated characters were paired with negative (e.g., mean, dishonest) or positive (e.g., nice, honest) traits. The illustrated characters were lighter- or darker-skinned African Americans. The children's memory was subsequently tested for which attribute had been paired with the story characters. On average, children showed better memory for pairings of darker-skinned characters with negative traits and lighter-skinned characters with positive traits than the reverse, implying negative attitudes toward or negative stereotyping of individuals with darker skin (Averhart & Bigler, 1997). In the same study, the researchers exposed children to six stories about either light- or dark-skinned adults in high- and low-status

occupations. The story elements (e.g., stereotypic: dark-skinned person in a low-status occupation; and counter-stereotypic: light-skinned person in a low-status job) were counterbalanced. Children showed better memory for the stereotypic versus counter-stereotypic stories about adults with high- and low-status occupations (Averhart & Bigler, 1997). Thus, the authors demonstrated stereotyping of different Black skin tones in African American children in an all-Black school. However, it should be noted that children's responses in the occupation task may have reflected their everyday experiences, in which light-skinned Black adults were more likely to hold high-status jobs than darker-skinned Blacks.

A more recent study with a slightly older sample (7- and 9-years-old) in predominantly Black schools showed mixed results regarding skin tone-related attitudes. Williams and Davidson (2009) used a similar picture-story task as Averhart and Bigler (1997) and assessed whether children's memory differed according to pairings of trait valence and skin tone (i.e., darker-skinned characters more likely to be remembered when paired with negative rather than positive traits). Negative attitudes toward dark skin were found only in the condition in which the main character was a boy and the trait was positive: Children showed better memory when a light-skinned boy performed a positive action than when a dark-skinned boy performed a positive action. Children's memory did not differ for recall of stories about girls with positive traits, nor for stories about either gender performing negative traits.

Williams and Davidson (2009) also asked children to complete a modified version of the Preschool Racial Attitude Measure (PRAM) in which they sorted photos of light- and dark-skinned children to fit various positive and negative traits (clean, smart, ugly, etc.). Children were more likely to identify light-skinned Blacks as having positive traits and more likely to identify dark-skinned Blacks as having negative traits than the reverse. Effect sizes were robust

(e.g., 52% of children identified the dark-skinned group as “mean” and 64% as “ugly” compared to 12% and 8% of children, respectively, choosing the light-skinned group for the same adjectives). Although the results of this study indicate that these children held negative attitudes toward darker skin, significant individual differences were noted in responses: Children who had better memory on the picture-story task for pairings of negative traits with dark-skinned characters were also more likely to hold negative stereotypes of dark-skinned Blacks as measured on the PRAM. Children who had an unbiased view of race (i.e., their PRAM scores did not suggest they held a racial bias) also had an unbiased view of skin tone in response to the picture-story task (Williams & Davidson, 2009).

Negative attitudes toward dark skin have also been found in African American children in later elementary school grades. Using a sample of 6- to 13-year-old children, Porter (1991) asked children to designate which of six skin tones (very dark brown, dark brown, medium brown, honey brown, medium yellow, very light yellow) other children would most prefer and would least prefer. In response to the “least prefer” (i.e., most unhappy) question, 70% of girls and 72% of boys chose one of the two darkest skin tones as the least preferable. When children were asked to choose the most preferable skin tone, 44% of girls chose honey brown and 42% chose either medium yellow or light yellow. Boys were also most likely to choose honey brown (31%) or one of the two lightest tones (46%) as most desirable. Thus, Porter’s results substantiate results of other studies showing children’s negative attitudes toward dark skin tones, while also showing that some children viewed brown skin tones as more desirable than lighter skin tones.

More mixed results were found in a study of overweight and obese African American children (Young-Hyman, Schlundt, Herman-Wenderoth, & Bozylinski, 2003). Although Young-

Hyman and colleagues were primarily interested in weight-related self-views, they also measured children's perceptions of their skin tone and their preferred skin tone. About one third of the sample of 5- to 10-year-old children reported satisfaction with their skin tone. The researchers did not provide descriptive data, but report that "slightly more" of the two-thirds who reported dissatisfaction wanted to be lighter rather than darker (Young-Hyman et al., 2003, p. 470).

In summary, negative attitudes toward and stereotyping of individuals with dark skin tones, and positive attitudes and preferences for medium-toned or lighter skin begin as early as kindergarten among Black children. However, results are not always consistent, and the research has mostly been conducted with Black children who attend predominantly Black schools. Thus, preferences might differ in other contexts. It is possible that in predominantly White settings, Black children attend to the Black-White race distinction and are less likely to attend to various skin tones among African Americans.

Skin Tone Preferences in Adolescence

Skin tone might be of increased importance in adolescence because of numerous developmental and contextual changes. With more sophisticated cognitive functioning and greater world knowledge, youths' increased awareness of race and racial discrimination might foster pride in Black skin, or alternatively, might lead to preferences for lighter skin because of awareness of White privilege. After puberty the increased pre-occupation with appearance, physical attractiveness, and romantic relationships might lead to more pronounced attitudes regarding skin tone. Breland (1998) argues that skin tone is related to perceived attractiveness, which, in turn, influences other identity constructs such as perceptions of competence. She asserts that Americans' views of attractiveness are based on European standards; thus, African Americans with lighter skin are viewed as more attractive. Moreover, because individuals who

are attractive are viewed as more competent, African Americans with lighter skin are judged as more competent than their darker-skinned counterparts (Breland, 1998; Okazawa-Rey, Robinson, & Ward, 1987). Thus, an increased awareness of physical attractiveness during adolescence might lead to increases in skin tone preferences.

Adolescents also experience a range of context changes that might increase their skin tone biases. For example, school transitions, the greater independence of adolescents, and the wide variety of school activities available to youth might lead to social selection factors that could increase students' awareness of skin tone. For all these reasons, skin tone may emerge during adolescence as an important variable shaping youths' social choices, identity, and well being.

Stephens and Few (2007) used qualitative methods to assess early adolescents' attitudes toward skin tone, physical attractiveness, and romantic relationships. Seven boys and eight girls aged 11-13 participated. Both boys and girls in the sample reported that lighter skin was viewed as more attractive than darker skin in their community. However, gender differences were evident in youths' own views of beauty: Whereas boys viewed African American women with lighter skin as more beautiful than darker-skinned women, girls reported that many dark-skinned women are beautiful. Lighter skin was also reported as more desirable—particularly with regard to romantic relationships—in a qualitative study with 78 African American girls (aged 9-18) who discussed body image in focus groups (Hesse-Biber, Howling, Leavy, & Lovejoy, 2004). In fact, a consistent preference for lighter skin was expressed in spite of girls' lack of internalization of the European American "thin ideal."

Using quantitative survey measures, Robinson and Ward (1995) measured adolescents' attitudes toward their own skin color and found differences in satisfaction that were related to

skin tone. Participants were from racially diverse schools and ranged in age from 11 to 19 ($M = 15$ years). Although 92% of the sample agreed with the statement, "I like my skin color," nonetheless, 29% of youth, when given a choice, expressed a preference for being lighter. Nine percent of youth reported that they wished they had darker skin, and 62% reported no desire for change. The adolescents who identified themselves as having dark skin were less likely than lighter-skinned youth to report satisfaction with their skin tone, and more than half (58%) of dark-skinned adolescents reported that they wished their skin tone was lighter (Robinson & Ward, 1995). Although these results lean toward the conclusion that on average, adolescents favor lighter skin, the results are neither as robust nor the studies as numerous as research with children. More research is needed addressing skin tone attitudes and preferences during adolescence to understand the development of youths' beliefs.

Skin Tone Preferences and Stereotypes in College Students

The attitudes of college students regarding skin tone have been studied with students at both predominately Black and predominately White universities. Harvey and colleagues (2005) found that Black students who attended predominately Black colleges were more likely than Black students at White institutions to report that skin tone plays an important role in their lives, that the skin tone of other Blacks matters, and that skin tone can tell you a great deal about a person (Harvey, LaBeach, Pridgen, & Gocial, 2005). Although these authors did not assess *how* skin tone plays an important role and what messages skin tone may convey, it can be concluded that skin tone bias may result from the significance college students place on skin tone within an all-Black setting.

Black college women's preferences for skin tone were measured at an urban university in the Southeast (Bond & Cash, 1992). Only 17% of students in the sample preferred to be darker,

compared to 36% wanting to be lighter and 47% preferring no change, leading the researchers to conclude that “dark skin was seldom an aspiration” (Bond & Cash, 1992, p. 883). Moreover, 70% of the women in the sample believed the opposite sex preferred the three lightest shades of skin tone, and 67% of the participants also preferred the three lightest shades of skin tone for their own skin (Bond & Cash, 1992). In contrast, in a sample of students at colleges in the Northeast, students reported self-preferences for medium skin tones (Coard, Breland & Raskin, 2001). Gender differences emerged in students’ reports of their perceptions of others’ preferences: Women reported that men preferred lighter skin on average; however men perceived that women have a preference for men with darker skin tones (Coard et al., 2001).

In addition to these studies of skin tone preferences, researchers have measured skin tone stereotypes of college students. Using a Black and White college student sample, Maddox and Gray (2002, Experiment 2) used an experimental design to test whether darker-skinned Blacks are more likely to be the targets of negative stereotypes than lighter-skinned Blacks. Students participating in the study were asked to list positive and negative stereotypes about certain social groups. The social groups included dark- and light-skinned Black men and women as well as other racial groups. Students of both races listed more negative stereotypes than positive stereotypes for dark-skinned Blacks, and the opposite (i.e., more positive than negative stereotypes) for light-skinned Blacks. For example, students were more likely to use the labels *lazy*, *poor*, and *unattractive* when describing dark- as compared to light-skinned Black women, who, in turn, were more likely to be described as *attractive* and *intelligent* (Maddox & Gray, 2002, p. 256).

In a later study with a racially and ethnically diverse college student sample, Dixon and Maddox (2005) explored criminality stereotypes as applied to dark-skinned Black males. The

participants viewed a 15-minute news story in which a 22-second segment was dedicated to a crime story about a Black (light-, medium-, or dark-skinned) male or White male perpetrator whose photo was shown for 3 seconds. At the end of the news story the participants were asked to recall the race of the perpetrator. Students were significantly more likely to accurately remember the perpetrator's race if the photo shown was of a dark-skinned Black male. Participants also reported greater emotional concern (e.g., "How much did the story make you worry?") when the portrayed perpetrator was a dark-skinned Black man. Dixon and Maddox (2005) concluded that darker skin tone increases the likelihood of stereotype activation.

In a qualitative study with 58 female college students, Wilder (2010) asked participants to list words used to label individuals of various skin tones and to describe the stereotypes or attributes associated with each label. Light skin was consistently associated with beauty, privilege, and intelligence. In contrast, darker skin was associated with many negative stereotypes, including "loud, suspicious, unattractive, and less intelligent" (Wilder, 2010, p. 195). Fewer labels were identified for medium skin tones compared to light or dark, and stereotypes associated with those tones were neutral.

Stereotyping as a function of both skin tone and other African features has also been examined (Blair, Judd, Sadler, & Jenkins, 2002; Livingston & Brewer, 2002). With attractiveness controlled, faces that were more phenotypically African were more likely to elicit negative evaluations in primarily White college student samples (Blair et al., 2002). Hagiwara et al. (2012) manipulated the width of noses and lips in photos of Black men in order to create photo stimuli that varied systematically in both skin tone and other phenotypic qualities. Participants completed a sequential priming task in which they were instructed to respond as quickly as possible, identifying words that were presented after the photo primes as either

positive (e.g., beauty, love, vacation) or negative (garbage, pest, vomit). The results showed independent effects of skin tone and race prototypicality (i.e., nose and lip width): Participants responded more quickly to negative words after viewing photos with more African-prototypical facial features and after photos of dark-skinned individuals (Hagiwara et al., 2012).

Skin Tone Preferences and Stereotypes: Summary

The literature examining skin tone preferences and stereotypes shows the pervasiveness of negative bias against dark skin tones, yet some developmental and individual differences. As might be anticipated given their rudimentary awareness of race, preschoolers are less likely to show consistent preferences than older children (Jordan & Hernandez-Reif, 2009; Kurtz-Costes et al., 2011). In middle childhood, children are more likely to remember negative behaviors performed by a dark-skinned individual and positive events performed by a lighter-skinned individual than the reverse. A consistent theme during adolescence and young adulthood is the linking of lighter tones to attractiveness, particularly for women. These research results are consistent with the widespread availability and use of skin-bleaching products as well as media portrayals that suggest that many adults value lighter skin tones (Charles, 2011; Hall, 1995). Although conclusions about developmental changes are complicated because of differing methodologies used across studies, youth in middle childhood show a clearer negative bias against darker skin tones than adolescents and young adults, the majority of whom report satisfaction with their own skin tone, and many of whom report a preference for medium skin tones.

Moreover, all of the studies cited found individual differences in preferences and stereotyping, and Williams and Davidson (2009) showed that children's tendency to stereotype (i.e., linking darker-skin to negative traits) was associated with biased memory that favored

lighter-skinned individuals. Several studies show gender differences in which men are more likely than women to report that lighter skin is attractive, and Harvey and colleagues (2005) illustrated the importance of racial context, finding that skin tone was rated as important by students at predominately Black- but not at predominately White colleges. These studies combined show preference for lighter- or medium skin and negative stereotyping of darker tones in childhood, adolescence, and young adulthood, with individual differences in attitudes emerging in many studies. Preferences of the perceiver are of course conceptually distinct from bias experienced by the target. We turn next to African Americans' experiences of skin tone bias and factors that shape it.

THE TARGET: AFRICAN AMERICANS' EXPERIENCE OF SKIN TONE BIAS

Given the unique historical and cultural position of African Americans, our synthesis of antecedents, moderators, and consequences is aimed at explaining the processes and mechanisms through which skin tone bias operates in African Americans and does not necessarily apply to other racial-ethnic groups in the United States or other countries. Because skin tone bias relies on categorization of individuals (in this case, perceiving that an individual is a member of a category based on the color of his or her skin), we focus first on five factors that influence whether and how categorization by skin tone and subsequent stereotyping might occur: characteristics of the perceiver, gender of the target, phenotypic characteristics of the target, racial context, and historical/cultural context (see Figure 1).

Once categorization and associated bias occur, the target may or may not be aware of the bias, and if aware, reactions will vary. We propose three factors that influence the target's response to skin tone bias: the target's developmental status, the target's racial identity, and attitudes and beliefs of significant others. We conclude by summarizing research findings on

consequences of skin tone bias in the psychosocial, educational, economic, health, and legal domains.

The Gateway to Skin Tone Bias: Categorization

Most theories of stereotyping and discrimination are based on the ideas that individuals are viewed as members of social groups, and that treatment of individuals is based upon their group membership (Aboud, 1988). Characteristics of the perceiver influence that categorization process; in the preceding section we summarized age differences in preferences and stereotyping. Although other characteristics of the perceiver are likely to influence skin tone bias (e.g., prior experiences; attitudes), a full summary of those topics are beyond the scope of this review. In this section, we propose two personal/individual characteristics of the target—gender and race phenotypic qualities--and two contextual factors—racial context and historical context--that shape this categorization process in the case of skin tone bias. Each of those is described below.

Gender

Research on skin tone bias suggests that it is a gendered phenomenon. The media are replete with examples of skin tone bias and its gendered nature in the U.S. Black women who appear in magazine and television advertisements are typically of light complexion, perpetuating the idea that Black women must be light skinned to be considered attractive/beautiful (Breland-Noble, 2013; Keenan, 1996; Okazawa-Rey et al., 1987). Historical images in the media of dark-skinned Black women were commonly unflattering, unattractive, and featured overly masculine portrayals of “mammy”-like characters. In contrast, Black men depicted in the media and popular culture reflect a variety of skin tones with many darker-skinned men reaching prominence (e.g. Louis Armstrong, Sidney Poitier, Michael Jordan, Denzel Washington). The gendered nature of skin tone bias is also evident in the beauty products marketed to women of

color, of which many are geared toward making women look more phenotypically White (e.g. chemical hair straighteners, skin bleaching creams) (Hill, 2002a).

As noted above, one gender difference that has emerged in skin tone bias research is in judgments of attractiveness. Specifically, lighter skin tone is of greater value in perceptions of women's as opposed to men's attractiveness (Breland-Noble, 2013). The importance of skin tone in girls' and women's attractiveness may be particularly detrimental to their psychological well-being because girls and women are more likely than boys and men to base their self-esteem and self-worth on the appraisals of others, particularly appraisals of physical attractiveness (Hill, 2002a; Okazawa-Rey et al., 1987).

Examining the intersection of gender, attractiveness, and skin tone using adult participants, Hill (2002a) used National Survey on Black Americans (NSBA) data in which Black interviewers rated the attractiveness of participants, and separately rated their skin tone ranging from very dark brown to very light brown. As attractiveness scores increased, there was a corresponding increase in lightness of skin tone for women, yet for men the link between skin tone and attractiveness was much weaker and not significant (Hill, 2002a). Men whose skin tone placed them in the second lightest skin tone group were considered to be the most attractive, yet this same group's attractiveness score was only marginally higher than the men in the darkest skin tone group. Skin tone was responsible for only 15% of the explained variance in the men's attractiveness model (which included controls for weight, age, income, friendliness and health satisfaction) versus more than 24% in the women's model.

Using a sample of 91 African American adults, Wade (1996) asked men and women to rate their own skin color on a scale from one to seven (light to dark). Participants also rated themselves on sexual attractiveness using a 7-point scale. Dark- and light-skinned women did not

differ in their self-ratings of sexual attractiveness; however, dark-skinned men rated themselves as more sexually attractive than fair-skinned men, suggesting that for men, dark skin may be perceived as an asset in terms of attractiveness. Although Wade (1996) and Hill (2002a) found different results, the studies are consistent in showing that dark skin is more likely to be a liability in terms of perceptions of attractiveness for African American women compared to African American men (see also Wilder, 2010).

In contrast to attractiveness and its psychosocial correlates among girls and women, much of the research on African American men and skin tone bias demonstrates a link between darker skin tones and decreased economic and educational attainment (Dixon & Maddox, 2005; Hall, 1995). Because negative stereotypes about race differences in academic abilities and aggression are applied more consistently to African American boys than girls (Evans, Copping, Rowley, & Kurtz-Costes, 2011; Hudley & Graham, 2002; Maddox & Gray, 2002), it is possible that dark-skinned boys are at higher risk of encountering bias in the educational context than dark-skinned girls. Thus, whereas the ramifications of dark skin for African American girls might be linked primarily to judgments of their attractiveness, dark-skinned boys might be more likely to encounter bias through others' distorted negative perceptions of their intellectual abilities and aggressiveness.

Other Phenotype Characteristics

Although skin tone is arguably the most readily visible feature to which individuals attend when making racial distinctions (Maddox, 2004), skin color is not the only salient cue of Black racial group membership. Indeed, as Caldwell (2003) elegantly showed in ethnographic work, hair texture is viewed as a primary marker of African ancestry in Brazil. Dark skin tone is a predictor of negativity toward Blacks even when race salient features are less prototypical (i.e.

thinner lips, narrower nose, straighter hair; Hagiwara et al., 2012). Nonetheless, scholars have found that more African features increase the likelihood of being a target of racial discrimination (e.g., Blair et al., 2002; Eberhardt, Davies, Purdie-Vaughns, & Johnson, 2006). Thus, individuals who have more African features are more likely than individuals with European features to experience bias regardless of skin tone, and individuals with both dark skin and other African features are most likely to experience bias in settings in which African features are likely to activate negative stereotypes.

As is the case with many other aspects of the skin tone bias literature, studies examining race prototypicality of features have focused on adults. Thus, critical questions for future research include developmental aspects of the influence of racial prototypicality. For instance, at what age are children's judgments of others linked to their perceptions of racially prototypic features, and what, if any, developmental differences are there in the ramifications of race prototypicality for the target? Gender and physical phenotype are characteristics of the target that are likely to influence the likelihood and the manner in which skin tone bias occurs. Next we discuss two contextual factors that influence this process.

Racial Context

Both the likelihood of occurrence and the manner in which skin tone bias is enacted varies according to racial context. Ways in which racial context influences the manifestation of skin tone bias include the race of the perceiver/perpetrator, the race of other individuals present, and the skin tones of other individuals present.

Experimental research has shown robustly that White Americans show skin tone bias in the form of negative stereotyping and harsher judgments of darker-skinned as compared to lighter-skinned Blacks (e.g., Eberhardt et al., 2006; Levinson & Young, 2010; Maddox & Gray,

2002). Livingston and Brewer (2002) suggested that skin tone bias in Whites may occur because darker-skinned Blacks are less familiar to them than lighter-skinned individuals, and unfamiliar stimuli are more likely to elicit anxiety or discomfort than familiar stimuli. Lighter-skinned Blacks are more phenotypically similar to Whites (and thus more familiar), and because of the link between lighter skin and economic mobility, the Blacks whom Whites encounter are relatively more likely to have light skin. Thus, Whites experience less anxiety or discomfort in the presence of light- as opposed to dark-skinned Blacks (Livingston & Brewer, 2002). Although the concept of familiarity has face validity with regard to inter-group bias, it does not explain intra-group skin tone bias.

In contrast to inter-group bias, intra-group skin tone bias might operate in either direction, with more negative attitudes and behaviors directed either toward light- or dark-skinned Blacks. Using data from the Detroit Area Survey and the National Survey of American Life, Uzogara and colleagues explored African American men's perceptions of out-group and in-group (i.e., from other African Americans) discrimination on the basis of skin tone (Uzogara, Lee, Abdou, & Jackson, 2014). Light-skinned men perceived the least out-group discrimination, and dark-skinned men experienced the most. In contrast, medium-skinned men reported the least in-group discrimination with both lighter- and darker-skinned men reporting greater amounts of discrimination from other Blacks. Light-skinned individuals might experience bias or rejection from other Blacks because of their phenotypic similarity to Whites and/or phenotypic distance from their African ancestry.

The likelihood of skin tone bias occurring and the manner in which it occurs may also differ according to the racial make-up of the setting, both with regard to the immediate context as well as the broader community. For example, if two adolescents are the only Blacks in a high

school class, they might be more likely to overlook differences in skin tone than if most of the students in the class are Black. In predominately European American settings, African Americans might be unified on the basis of being Black in a majority-White setting, ignoring or not attending to differences in skin tone.

In contrast, in a predominantly African American community, skin tone bias might function in two ways: If the community has a strong collective racial identity, darker skin tones might be appreciated and celebrated in their perceived connection to African ancestry, whereas lighter skin tones might be devalued because of links to European ancestry. The connection between light skin and European ancestry can act as a salient physical reminder of White privilege and of the European-based racialized oppression targeting African Americans. In contrast, if the predominately African American community has a weak collective racial identity, they may have internalized dominant social norms in which lighter skin tones are celebrated as they approximate desired European features that are associated with positive stereotypes (e.g., perceptions of intelligence and attractiveness). In that case, dark skin is devalued because it is more distant from European skin tones and is negatively stereotyped.

Finally, one important aspect of the racial context is the distribution of skin tones. A medium-toned child might have different experiences if she is the lightest person in her family compared to a peer with the same skin tone who is the darkest in her family (Wilder, 2010). Thus, any individual child or adolescent might have quite different experiences across contexts as he or she moves from home to neighborhood to school to church or other settings.

Historical Context and Cohort/Generational Differences

During the era of slavery, plantation slave owners commonly used skin tone differences among slaves as a means of creating a caste system (Harvey et al., 2005). In contrast to darker-

skinned slaves, many mixed-race Blacks or mulattos were afforded educational opportunities and more favorable jobs. Mixed-race Blacks may have received this privileged treatment either because of their greater phenotypic similarity to Whites, or because of their familial relationships to their slave masters (Keith & Herring, 1991). After the abolition of slavery in the United States, African Americans with lighter skin tones became a part of the Black elite and attempted to distance themselves from the lower status African Americans who had darker skin tones (Harvey et al., 2005).

In the 1960s there was a reversal of skin tone bias coinciding with the Civil Rights Movement. Darker skin tones were admired as a stronger and more authentic connection to African ancestry (“the blacker the berry, the sweeter the juice”; Thurman, 1929). The collective racial identity of the African American community was strong as Black pride was promoted nationwide. Although the Black pride movement was effective, the ideology was not long lasting as evidenced by ongoing negative attitudes toward and bias against darker skin in the United States. Individuals who came of age during the Civil Rights movement might be more likely to value dark skin than both older and younger generations (Gullickson, 2005). It remains to be seen whether current cultural trends that embrace multiculturalism will lead to less skin tone bias in future generations.

Skin Tone Bias: The Target’s Experience

In the prior section we discussed factors that influence whether or not and in what way skin tone bias might occur. When it occurs, the target’s experience of it and reaction to it could vary substantially. For instance, a child whose teacher has low academic expectations of him because of his dark skin tone might be unaware of the teacher’s bias, or might be aware of the teacher’s low expectations and assume that the teacher’s judgments are based on accurate

information about his abilities. As is evident in that example, the impact of bias on outcomes might vary substantially based on individuals' experience and interpretation of bias. In this section of the paper we discuss factors posited to influence the target's experience, including age or developmental status, racial identity, and the attitudes and beliefs of significant social others.

Developmental Status

A first important distinction early in development is whether or not children are able to perceive an act of discrimination. Young children who are not yet capable of understanding that they have encountered skin tone bias might be buffered from psychological or emotional consequences, yet—as with any form of racial discrimination—might still suffer practical consequences of bias. For example, a young child who is socially excluded (e.g., not invited to a birthday party) because of having particularly dark skin might be unaware of the exclusion and bias, yet suffer the consequences of missing an opportunity to develop friendships. Infants, toddlers, and preschoolers are likely to be unaware of discrimination linked to skin tone because of their lack of cognitive abilities and their limited social knowledge.

During the preschool years, children distinguish between individuals based on skin color (Kurtz-Costes et al., 2011; Quintana, 1998), but usually have only rudimentary racial cognition and are likely to be unaware of skin tone bias even if they show negative attitudes and beliefs toward darker skin tones (Averhart & Bigler, 1997; Porter, 1991; Williams & Davidson, 2009). Scholars have argued that children in this age group exhibit pro-White attitudes because of the strong tendency to show in-group favoritism (among Whites) and because of Black children internalizing racial attitudes of the dominant group (Aboud, 1988; Quintana, 1998). As a result, Black children in this age group might show negative attitudes toward darker skin color yet not link differential treatment they receive to skin tone.

If a child is aware that an act of bias has occurred, a second important consideration is the child's interpretation or understanding of the event. Skin tone bias in early childhood might be expressed through social encounters in which children are less likely to be welcomed by others into play groups because of their skin tone, or by instances in which teachers or other adults make more negative attributions regarding ambiguous behaviors of children on the basis of skin tone. Young children who realize they have been treated unfairly but who do not attribute the event to skin tone bias might blame themselves for negative social encounters or experience distress because of not understanding the source of bias.

As children progress from early to middle childhood, they have increased perspective taking and the ability to hold both positive and negative judgments regarding racial groups (Quintana, 1998). In addition to these changes in cognitive abilities, in late childhood and adolescence youth gain awareness of the long history of racial oppression in the United States, and also begin to explore and commit to an ethnic identity, which can include strong racial pride (Hughes et al., 2006). The increased racial cognition in adolescence, including the exploration of ethnic/racial identity may enable a more nuanced understanding of race and discrimination.

With the inception of more advanced social perspective-taking abilities, Black young people become more aware of the negative societal appraisals linked to skin tone (Fegley, Spencer, Goss, Harpalani, & Charles, 2008). Fegley et al. (2008) note that these negative appraisals are transmitted through "racially stereotyped media images, derogative labels, and sayings used to convey attitudes about dark skin tone" (p. 283). Thus, increased cognitive ability and understanding of social norms enable adolescents to perceive the devalued status that traits like dark skin hold in society. Youth might perceive that salient physical indicators of their race, including skin tone, lead to differential risks for and experiences of racial bias. As part of this

more nuanced understanding, youth might also attribute perceived racial biases to societal beliefs that cause stereotyping and racism. As attribution of bias moves from the self in early childhood to societal factors stemming from racism during adolescence, the change in attribution could provide a psychological buffer as adolescents are less likely to internalize skin tone bias, particularly if it comes from out-group members. With development, youths' reasoning about social groups and stigma becomes more complex. Because of this complexity, individual differences in attitudes might increase with age, and individual differences are likely to be shaped in part by racial identity, which is discussed next.

Skin Tone and Racial Identity

Racial identity is defined by Sellers and colleagues as “the significance and qualitative meaning that individuals attribute to their membership within the Black racial group” (Sellers, Smith, Shelton, Rowley, & Chavous, 1998, p. 23). By providing pride in one's heritage and a sense of belonging, racial identity acts as a protective factor that helps Blacks cope with race-related stressors (Chavous, Rivas-Drake, Smalls, Griffin & Cogburn, 2008; Sellers et al., 1998). A strong racial identity attenuates the negative effects of racial discrimination (Neblett, Smalls, Ford, Nguyen & Sellers, 2008; Stevenson & Arrington, 2009) and therefore might also serve as a buffer against skin tone bias.

Although few studies have examined the protective functions of racial identity as a function of skin tone, scholars have studied whether a strong racial identity is related to more positive attitudes toward one's own skin color and/or toward darker skin tones. Two studies—one with children and the second with adolescents—have found relationships between racial/ethnic identity and skin tone attitudes. In a previously mentioned paper, Avera and Bigler (1997) found that the more positive traits that young children (ages 5-7) assigned to

members of their racial group, the less likely they were to be biased against darker skin tones.

The researchers' measure prompting children to assign positive or negative traits to a racial group corresponds to the private regard dimension of racial identity as delineated by Sellers and colleagues (1998). Private regard indicates how positively or negatively an individual views his or her racial group. Thus, Averhart and Bigler's (1997) results support the hypothesis that aspects of racial identity might be related to skin tone attitudes, even among young children.

In the aforementioned study by Fegley and colleagues (2008), the authors explored the relationship between skin tone attitudes and ethnic identity in a multi-racial adolescent sample (mean age of 15). The authors used a self-report measure of perceived skin tone, assessed participants' attitudes towards their own skin color, and measured ethnic identity using an abbreviated measure of the Multigroup Ethnic Identity Measure (MEIM) (Phinney, 1992). Among African American participants, those who disliked their skin color had significantly lower scores on the MEIM, indicating a positive relationship between a positive ethnic identity and skin tone satisfaction.

In addition to these studies showing differences in skin tone attitudes linked to racial identity, several studies with both adolescents and adults have shown that aspects of racial identity mitigate the effects of racial discrimination on psycho-emotional adjustment (e.g., Neblett, Philip, Cogburn, & Sellers, 2006; Neblett et al., 2008; Stevenson & Arrington, 2009). Although these studies did not focus on skin tone, it is likely that the positive benefits associated with strong racial centrality accrue with regard to skin tone bias like other forms of discrimination. Fertile areas for future research are exploration of the mechanisms by which racial identity is protective against skin tone bias (e.g., pride in one's racial group, appreciation for cultural traditions and heritage, and supportive relationships with other African Americans

might all buffer individuals from discrimination-provoked stress) as well as developmental changes in these processes.

Family and Other Social Influences on the Target's Response

The family serves as one of the first contexts for the African American child's understanding of differences in skin tone. Skin tones within a family unit often show heterogeneity (i.e., a child's skin tone may differ from that of siblings and/or parents). Attitudes within the family that value darker or lighter skin or that promote no preferences are likely to form the foundation for children's subsequent attitudes and responses to the bias of others.

If parents have skin tone preferences, children within a family unit might be treated differently as a function of their skin tone. Children whose parents perceive them as having more desirable or attractive skin tones might be favored and might benefit from better parenting (i.e. supportive, warm) as predicted by child development research that documents better parenting practices for more attractive children (Langlois, Ritter, Casey, & Sawin, 1995). Children who are perceived as having unattractive skin tones might be less favored and receive poorer parenting, placing them at risk for psychological harm due to the potential for both poorer parenting and discrimination outside of the family.

Alternatively, parents might tailor their parenting with an awareness of skin tone bias and an attempt to prepare their children for resilience. The majority of African American parents report socializing their children about their racial group membership, both instilling pride and preparing them for racial discrimination (Hughes et al., 2006). Because of these racial socialization efforts, the psychological ramifications of skin tone bias are likely to vary. If the parent of a dark-skinned child perceives that the child is at higher risk for encountering discrimination than a sibling with lighter skin, the parent might deliberately prepare the child for

such discrimination. In contrast, parents might emphasize racial pride with light-skinned children to cement their attachment to their African American heritage. Landor et al. (2013) examined parenting within African American families as a function of skin tone and found that effects varied by gender. Dark-skinned sons received higher-quality parenting and more racial socialization promoting mistrust of Whites than sons with lighter skin. In contrast, light-skinned daughters received higher quality parenting than dark-skinned daughters.

Consequences of Skin Tone Bias

In spite of many gains in the fight for racial equality, compared to other racial/ethnic groups in the United States, African Americans rank at the bottom on nearly every measure of social, psychological, physical, and economic well-being (Grodsky & Pager, 2001; Hill, 2002b; Kurtz-Costes, Swinton, & Skinner, 2014; LaVeist & Isaac, 2013). Although researchers have explored intergroup factors leading to these race differences, intragroup distinctions have received much less attention. Stereotype activation linked to skin tone might lead to differential behavior toward darker- as compared to lighter-skinned Blacks, leading in turn to different outcomes for light- and dark-skinned individuals. As Maddox and Chase (2004, p. 544) state, “When an employer must make a decision between two Black job candidates, her choice may be driven by beliefs associated with skin tone.” If dark-skinned Blacks are stereotyped as lazy, poor, and aggressive, a potential employer may be less motivated to hire a darker-skinned job candidate whether or not the stereotypes are conscious (Harrison & Thomas, 2009). Studies reviewed above show that stereotypes regarding skin tone are activated among both Blacks and non-Blacks, with potential repercussions for differential treatment that might lead to skin tone differences in well being. In the following, we review extant literature on skin tone differences in these categories: psychosocial outcomes, including self-esteem and racial identity; health;

educational and economic attainment; and consequences within the legal system.

Psychosocial Consequences of Skin Tone Bias: Self-Esteem

Most studies examining psychological outcomes associated with African Americans' skin tone have focused on either self-esteem or racial identity, which is discussed in the next section. Self-esteem is a general evaluation of one's worth (Porter & Washington, 1979) and can be influenced by social comparisons or by others' reactions to us. Although some researchers have suggested that skin tone bias may lead to negative self-evaluations among Blacks (Thompson & Keith, 2001), on average Blacks have higher levels of self-esteem than members of other racial/ethnic groups (Gray-Little & Hafdal, 2000). Some researchers have speculated that this robust self-esteem stems from Blacks' sense of self being based on in-group evaluations rather than from the views of larger society (Keith, 2009). Others suggest that high levels of self-esteem in Blacks are linked to race differences in racial identity (Gray-Little & Hafdal, 2000) or to less body self-consciousness in the Black community (Capodilupo, 2014). These hypotheses address between-race differences and might be unrelated to within-race differences in self-esteem. Given the preferences for and attitudes regarding skin tone summarized above, skin tone bias may influence youths' self-evaluations, leading to within-race differences in self-esteem.

Childhood. In the study of overweight African American children mentioned above, dissatisfaction with skin tone was linked to lower self-esteem (Young-Hyman et al., 2003). Young-Hyman and colleagues examined weight, skin tone, and peer teasing as predictors of self-esteem in a sample of 5- to 10-year-old urban African American children. Although dissatisfaction with skin tone was not related to appearance self-worth in the sample, it was related to global self-worth, with children who expressed dissatisfaction with skin tone having lower self-worth. In a longitudinal study of African American youth, skin tone was classified

(light, medium, dark) by adult African American raters (Adams, 2014). In both Grade 5 and Grade 7, youth with darker skin reported lower self-esteem as measured on the Rosenberg Self-Esteem scale than children with light or medium skin tones. In addition to results of these two studies, the results summarized above on skin tone attitudes may be extrapolated to have implications for children's self-esteem. Although self-esteem was not measured in those studies, because Black children in all-Black settings tend to have negative attitudes toward dark skin, children with darker skin tones may be at risk for low self-esteem. However, additional research is needed to confirm if negative attitudes toward dark skin tones lead to negative self-evaluations among dark-skinned children.

Adolescence. For dark-skinned Black youth, the challenges of adolescence might be augmented not only because of membership in a stigmatized racial group, but also because of having a dark skin tone (Fegley et al., 2008). Increased preoccupation with physical appearance at this developmental stage may make skin tone more salient because of its association with attractiveness (Charles, 2011; Hesse-Biber et al., 2004; Maddox & Gray, 2002; Porter, 1991; Thompson & Keith, 2001). If youth do not feel that their skin tone is considered desirable or attractive, they may have lower self-esteem. Alternatively, for youth with a strong racial identity, dark skin might be a source of pride. Despite researchers' awareness of the many risks that Black adolescents face, few studies have examined the link between skin tone and self-esteem during this developmental period. Robinson and Ward (1995) assessed the relationship between self-esteem and self-reported skin tone in 123 African American adolescents (ages 11 through 19; mean age = 15). Darker-skinned youth had significantly lower self-esteem than the lighter- and medium-skinned youth. The researchers did not explore possible age differences in this relationship.

Two recent studies, both of which used interviewer ratings rather than self-ratings of skin tone produced results that are inconsistent with Robinson and Ward's (1995) findings. Using data from the National Longitudinal Study of Adolescent Health (Add Health), Keith (2009) measured skin tone differences in self-esteem reported by Black girls in Grades 7 through 12. Using four categories of skin tone (Black, Dark Brown, Medium Brown, and Light Brown/White), Keith found that girls in the lightest-skin category had lower self-esteem than the other three (darker-skinned) groups. In the longitudinal study of African American youth mentioned above (Adams, 2014), self-esteem was also measured when youth were in Grades 10 and 12. Youth with dark skin showed increases in self-esteem across time such that self-esteem was unrelated to skin tone in high school.

Self-esteem might differ by skin tone because of individuals' perceptions of their own attractiveness, or because of treatment from peers and others. Oyserman and colleagues measured skin tone differences in reports of social acceptance from peers (Oyserman, Brickman, Bybee, & Celious, 2006). In their sample of urban, low-income African American adolescents, darker-skinned youth reported higher social acceptance from peers than lighter-skinned youth. Although Oyserman et al. (2006) did not measure self-esteem, their data indicate that darker skin can be associated with more positive psychosocial outcomes, particularly for intra-group functioning.

Given the dearth of studies focusing on skin tone and self-esteem in adolescents, inconsistent findings, and measurement issues, no firm conclusions can be drawn about the relationship between skin tone and self-esteem during adolescence. Additional research with reliable methods of skin tone measurement, with samples from diverse contexts, and with attention to causal mechanisms is needed to better understand whether and under what

circumstances skin tone leads to differences in self-esteem among Black adolescents.

Young Adulthood. A few studies have examined the relationship between skin tone and self-esteem with college samples, and their findings are mixed. Coard et al. (2001) examined the relationship between participants' perceived skin tone and self-esteem in Black students at a predominately White college. The measures, originally introduced by Bond and Cash (1992), included interviewer-assessed skin tone, participants' satisfaction with perceived skin tone, and the Rosenberg's Self-Esteem Inventory. In contradiction to Coard's original hypothesis, men's satisfaction with having darker skin was associated with lower self-esteem. No significant relationship was found between skin tone satisfaction and self-esteem in women. Coard et al. (2001) suggested that their findings might be due to men reporting satisfaction with their skin tone, yet not accepting it. Men who report acceptance of their dark skin but who have not internalized such acceptance might experience emotional conflict, leading to lower self-esteem.

Using the college student samples described above, Harvey et al. (2005) predicted that self-reported skin tone would be more strongly related to self-esteem among students at a predominantly-Black university versus those at a predominantly-White one. Their hypothesis that self-esteem is correlated with skin tone was supported for students at the predominately Black university, but not at the predominately White university. However, the relationship was the opposite of what was predicted: Dark-skinned students reported higher self-esteem at the predominately Black university than their lighter-skinned counterparts. Skin tone was unrelated to self-esteem for students at the majority White university. Harvey et al. (2005) suggest that in a majority-Black environment, dark skin may be favored because it is most representative of "Blackness." Because students who choose to attend predominantly Black institutions tend to have strong racial identities, dark-skinned students at those schools may benefit from their

perceived proximity to their African ancestry, and subsequently experience increased self-esteem (Harvey et al., 2005).

Adulthood. The National Survey of Black Americans (NSBA) is a longitudinal study begun in the late 1970s with data from over 2000 African American households. The NSBA included an all-Black interviewer-assessed measure of skin tone on a 5-point scale (1 = *very dark brown*; 5 = *very light brown*) and the Rosenberg Self-Esteem inventory. Thompson and Keith (2001) used these data to assess the relationship between skin tone and self-esteem. After controlling for socioeconomic status, gender differences emerged. For women, as skin tone lightened, self-esteem scores increased. However, the relationship was nonsignificant for men even when control variables were excluded from the analysis. When Thompson and Keith examined interactions among self-esteem, income, and skin tone, they found that women with low and average levels of income reported increases in self-esteem as skin tone lightened. However, skin tone was unrelated to self-esteem in women with the highest reported levels of income. Women who were dark skinned and of low income had the lowest self-esteem. These findings support the idea that being low-income is stigmatized, and the combination of being low-income and dark skinned is a detrimental combination for self-esteem, particularly among women. However, among high-income women, dark skin was not detrimental for self-esteem. For men, body weight moderated the relationship between skin tone and self-esteem such that for lower-weight men, as their skin tone lightened, their self-esteem decreased. However, for overweight men, self-esteem increased as skin tone lightened (Thompson & Keith, 2001).

Wade (1996) used an African American sample that included both students and alumni of a northeastern university (M age = 26.7 years) to assess the relationship between skin tone and self-esteem. Participants rated their skin tone on a scale of 1 to 7, and individuals with a rating

of four or below were labeled dark, whereas the rest were labeled light. Overall, 74% of the sample rated themselves as light, and 26% rated themselves as dark. No significant relationships between self-reported skin tone and self-esteem were found for men or women. Using a median split to divide the sample into dark and light may have obscured potential differences linked to skin tone, and using self-report of skin tone may have decreased the reliability of that measure. Evidence of potential misplacement may be found in the relatively high percentage (74%) of the sample that was considered light.

Mucherah and Frazier (2013) examined skin tone satisfaction, body satisfaction, and self-esteem in 328 adult women (aged 18 to 41) of African descent. A majority of the sample (256 women) self-identified as African American; 44 were African, 12 were Afro-Caribbean, 16 were biracial, and 42 self-identified as “other.” About 80% of each group either disagreed or strongly disagreed with the statements, “I wish the shade of my skin were darker” and “I wish the shade of my skin were lighter.” However, biracial women reported the highest satisfaction with their skin tone, and African American women reported the lowest. Self-esteem was positively related to skin tone satisfaction (Mucherah & Frazier, 2013).

Summary

Two studies have examined the relationship between skin tone and self-esteem in childhood, one showing that children with darker skin had lower self-esteem than lighter-skinned peers, and the second showing that dissatisfaction with skin tone (which was reported in both light- and dark-skinned youth, but more commonly in darker-skinned youth) was linked to lower self-esteem. In the reported studies with adolescent participants, Robinson and Ward (1995) found that darker skin was associated with lower self-esteem, Keith (2009) and Oyserman et al. (2006) found that darker skin was associated with more positive outcomes, and Adams (2014)

found no differences. The small number of studies and potential measurement issues preclude firm conclusions about the relationship between skin tone and self-esteem in childhood and adolescence. In addition to influencing self-esteem, skin tone may influence African Americans' interpersonal relationships. During childhood darker-skinned children may be more likely to experience teasing and exclusion from their peers (Adams, 2014). During adolescence skin tone may play a gendered role in dating relationships if girls with darker skin are perceived as less attractive and thus less desirable (Gullickson, 2005). The associations among gender, skin tone and attractiveness may continue into adulthood and influence marital selection: Black women with dark skin are less likely than lighter-skinned women to marry higher status men (Hunter, 1998).

The findings related to skin tone and self-esteem in adult samples highlight the importance of mediating and moderating influences, and thus, the complexity of ways that skin tone shapes psychosocial adjustment. For example, Harvey et al. (2005) found a positive relationship between darker skin and self-esteem among students at a predominately Black college but no relationship for those at a White college, and data from the NSBA demonstrated that elevation in one's socioeconomic background can attenuate what was otherwise a negative relationship between self-esteem and darker skin tone among women (Thompson & Keith, 2001). The differences between results with college samples (which generally show that dark skin did not put students at risk for lower self-esteem) and adult samples imply that cohort differences might also be present. It can be concluded from these studies that many individual and contextual factors drive the phenomenon of skin tone bias and its psychosocial repercussions for African Americans. One such factor is racial identity, which is considered next.

Skin Tone and Racial Identity

In a previous section we discussed ways that racial identity might moderate the influence of skin tone bias—primarily by acting as a buffer protecting individuals from the negative psychological effects of bias. In addition, skin tone bias might have a direct effect in shaping individuals' racial identity. Scholars have suggested that individuals with dark skin are likely to have stronger racial identity because it is evocative of African ancestry and racial group membership (Harvey et al., 2005). Conversely, scholars have also argued that lighter-skinned Blacks may compensate for their lack of color by immersing themselves in "Blackness," engaging in more racial identity exploration in an attempt to affirm their African ancestry and to feel more connected to other Blacks (Coard et al., 2001). For example, a light-skinned African American child who is teased by peers for not being "Black enough" may emphasize shared racial heritage in interactions with African American peers, leading to a stronger racial identity. Thus, having skin shades at either end of the spectrum might increase individuals' exploration of their racial identity and their motivation to accentuate membership in their racial group.

To our knowledge, all of the research examining skin tone differences in racial identity has been conducted with adult samples. This research has generally supported the hypothesis that both light- and dark-skinned individuals are more likely than individuals with medium tones to have a strong racial identity. Coard et al. (2001) examined college students' racial identity using the Racial Identity Attitudes Scale-B (RIAS-B) (Parham & Helms, 1981). Participants' stage of racial identity was categorized as pre-encounter (pro-White/anti-Black), encounter (awakening Black identity), immersion-emersion (pro-Black/anti-White), and internalization (commitment to a Black Identity). Lighter-skinned participants reported higher levels of racial identity attitudes (immersion-emersion) than the other skin tone groups. Using college samples described above (i.e., Blacks attending predominately White and predominately Black

universities), Harvey and colleagues (2005) found that in both settings, darker skin was associated with stronger racial identity as measured by the MEIM.

Hughes and Hertel (1990) used NSBA data to explore skin tone differences in Black consciousness, which was operationalized by three indicators: Black identity, Black separatism, and racial self-esteem. A significant gender by age interaction was found such that women and older men with lighter skin had lower levels of Black identity than their darker-skinned counterparts, but for younger men lighter skin was associated with a stronger racial identity (Hughes & Hertel, 1990). Also using NSBA data, Brown et al. (1998) measured skin tone differences in racial identity using two racial identity items that correspond to Sellers et al.'s (1998) concept of racial centrality, or the importance of being Black to an individual. After controlling for background characteristics such as SES and gender, Brown et al. (1998) found a marginally significant difference in racial centrality for skin tone groups. Specifically, the second lightest group (considered Light Brown) was the most likely of the five skin tone groups to report that being Black was important to them. Racial centrality/importance did not differ across the three darkest groups (Very Dark, Dark and Medium Brown) and were the second highest. Individuals who were rated as Very Light Brown reported the lowest racial centrality.

Taken together, these studies provide preliminary evidence that individuals with lighter- and darker skin tones report stronger racial identity, on average, than individuals with medium-tones. However, results show that the relationship might differ across context (such as the race composition of the environment) and also depends on the type of racial identity measure used. Additional research is needed—particularly longitudinal studies with both child and adult samples—to better understand ways that skin tone might lead to differences in racial identity.

Health Consequences of Skin Tone Bias

Although research investigating the effects of skin tone on the daily lives of African Americans is a burgeoning area of research, relatively few studies have examined the relationship between skin tone and health outcomes. A great deal of research has examined telomere length as a possible mechanism explaining health disparities between Whites and Blacks (e.g., Rewak et al., 2014). However, to our knowledge, no within-race comparisons of telomere length have been conducted to compare lighter- versus darker-skinned Blacks. Of the studies that have examined skin tone differences in health outcomes, most assess hypertension. Results from these studies suggest that ongoing racial health disparities may vary systematically according to skin tone.

Hypertension is one of the many significant racial health disparities found currently in the United States: African Americans are a third more likely than European Americans to develop hypertension; hypertension tends to have an earlier onset among Blacks, and it tends to be more severe (American Heart Association, 2014). Moreover, darker-skinned African Americans are disproportionately at risk compared to lighter-skinned African Americans. In early research showing a higher incidence of hypertension among dark-skinned than light-skinned African Americans, particularly men, researchers often attributed these differences to a genetic or biological cause (Boyle, 1970; Harburg, Gleibermann, Roeper, Schork & Schull, 1978). Researchers subsequently established that it is very unlikely that there are any direct or genetic effects in the relationship between skin tone and hypertension, and therefore began to consider social-environmental causes.

In particular, researchers have hypothesized that skin tone differences in psychosocial stress (particularly due to racial discrimination) lead to differences in health outcomes (Borrell, Kiefe, Williams, Diaz-Roux, Gordon-Larsen, 2006; Keith, Lincoln, Taylor, & Jackson, 2010).

Some of these studies have shown that darker skin tones could serve as a proxy for increased psychosocial stress and thereby contribute to higher incidence of hypertension in darker-skinned African Americans (Klag, Whelton, Coresh, Grim & Kuller, 1991; Sweet, McDade, Kiefe, & Liu, 2007). Others have found little relationship between skin tone and health outcomes. For example, in the large-scale CARDIA study, neither self-reports of physical nor mental health were related to skin tone (Borrell et al., 2006). Borrell et al. (2006) found that reports of racial discrimination were related to poorer physical and mental health among both men and women, but the only relationship between skin tone and reported health—poorer physical health among individuals with darker skin—disappeared when socioeconomic factors were controlled. Similarly, skin tone was unrelated to depression in women who participated in the National Survey of American Life (Keith et al., 2010). In contrast, using a sample of adults in Puerto Rico, Gravlee and Dressler (2005) found that although skin tone as measured by skin reflectance was unrelated to blood pressure, among low socioeconomic status participants, discrepancy between self-perceived skin tone and skin pigmentation was associated with higher systolic blood pressure. Gravlee and Dressler (2005) concluded that higher blood pressure for this group resulted from cumulative small stressors in social interactions in which these individuals were in subordinate positions.

It is likely that relationships between skin tone and health outcomes are complicated by interactions with socioeconomic status and by whether individuals are in settings in which darker- versus lighter skin tones are disadvantaged. For example, Klag et al. (1991) found that among individuals who had not completed high school, darker skin was associated with higher blood pressure, whereas lighter-skinned individuals had highest blood pressure among participants who had more education. Similarly, in the research of Keil and colleagues, the

relationship between skin tone and hypertension disappeared after controlling for income and education (Keil, Sandifer, Loadholt & Boyle, 1981; Keil, Tyroler, Sandifer & Boyle, 1977).

In spite of the paucity of literature on relationships between skin tone and health outcomes, the substantial literature linking racial discrimination to poorer health outcomes and linkages between skin tone and discrimination support the argument that skin tone will predict health outcomes in settings in which skin tone differences lead to differences in experiences of discrimination. Moreover, researchers examining skin tone and its relation to health outcomes should consider other important measures of status, such as socioeconomic position and educational level to better understand these dynamics (Krieger, Sidney & Coakley, 1998).

Academic and Economic Consequences of Skin Tone Bias

As mentioned above, youth with darker skin reported higher social belonging in their peer groups compared to lighter-skinned peers (Oyserman et al., 2006). Oyserman et al. hypothesized that looking like in-group members can facilitate social support, thereby serving as a buffer against school disengagement. Their hypotheses were confirmed for boys in their urban, low-income sample of African American adolescents: Dark-skinned boys had higher academic self-efficacy and higher grade point averages than lighter-skinned boys, with group belongingness mediating the relationship between skin tone and academic outcomes.

In contrast to these advantages of darker skin that Oyserman et al. (2006) identified, dark skin could be a liability in educational settings because of stereotype activation. Because darker skin is associated with negative academic stereotypes (e.g., lazy, unintelligent; Maddox & Gray, 2002), these stereotypes put darker-skinned youth at increased risk for experiencing discrimination in the classroom. Discrimination has been linked to poorer academic achievement, lower academic self-concept, and less value placed on the importance of school

(Neblett et al., 2006; Wong, Eccles & Sameroff, 2003). Differential treatment of students by teachers—including lower expectations of and a tendency to use more severe disciplinary procedures with darker-skinned youth might put youth on different academic trajectories that lead to skin tone-related discrepancies in academic and educational outcomes during adulthood (Ferguson, 2003; Keith, 2009). These hypotheses linking darker skin to stereotype activation and associated discrimination within the school setting have not yet been tested in children and adolescents, but are supported in research with adults. For example, in a recent study of the school to work transition, both men and women with light skin were more likely to find employment than darker-skinned men and women (Ryabov, 2013).

Intragroup academic and educational attainment differences related to skin tone in adults have been documented in both experimental and survey research. For example, in the CARDIA study, each standard deviation increase in skin lightness among African Americans is associated with a quarter year increase in educational attainment, and dark-skinned African Americans are more than twice as likely as light-skinned individuals to have less than a high school education (Borrell, et al., 2006; Branigan et al., 2013). In NSBA data, the disparity in educational attainment of dark-skinned versus light-skinned Blacks is strikingly similar to the same contrast between Blacks and Whites, with light-skinned Blacks obtaining two years more education than their dark-skinned counterparts (Keith & Herring, 1991). Light-skinned Blacks in the NSBA were also more likely than darker-skinned Blacks to marry individuals with higher education. Within the same dataset disparities are also found in income: For every dollar earned by a light-skinned African American, a darker-skinned person earns twenty-eight cents less (Hughes & Hertel, 1990).

Gullickson (2005) re-analyzed NSBA data and found that with cohort controlled, skin

tone differences in educational attainment and income declined substantially in the last half of the 20th century. However, Goldsmith, Hamilton, and Darity (2006) challenged Gullickson's conclusions, pointing out that he failed to control for the high attrition across waves of the NSBA, and also did not provide any corrections for the very small cell sizes of light-skinned individuals at the final wave. Data from the Multi-City Study of Urban Inequality also show that skin tone is related to income, with dark-skinned Blacks earning lower hourly wages than lighter-skinned Blacks (Goldsmith et al., 2006). Using a racially-diverse immigrant population, Hersch (2008) found that while controlling for education, English proficiency, occupation in source country, and other variables, new lawful immigrants in the U.S. with the lightest skin earned 17% more than immigrants with the darkest skin tones.

Data collected from 2001 to 2003 from the National Survey of American Life, another nationally representative dataset, reveals that academic and economic gaps on the basis of skin tone have not waned: Skin tone was significantly associated with Black Americans' educational attainment, household income and occupational status, with darker skin tones being more disadvantaged (Monk, 2014). Thus, in spite of Oyserman et al.'s (2006) findings of higher grade point averages and higher school engagement among African American boys with dark skin tones, the research with adult samples suggests overwhelmingly that darker skin is associated with less educational success. In several large data sets, dark-skinned Black Americans have lower educational attainment and earn less than Blacks with lighter skin tones, and Monk's (2014) results show that educational and economic stratification on the basis of skin tone in the U.S. persists in the 21st century.

In 1990, one of the first court cases of skin tone discrimination, *Morrow vs. IRS*, was presented before the U.S. Federal District Court of Atlanta. In this court case the plaintiff, Tracey

Morrow, suggested that her supervisor discriminated against her on the basis of her skin tone through job performance evaluations (Morrow vs. IRS, 1990). This case is of particular significance as both the plaintiff and the defendant (Morrow's supervisor) are African American. However, Morrow is light skinned and the supervisor is darker skinned. Morrow vs. IRS (1990) sheds light on one way that skin tone may lead to differences in income—i.e., through discriminatory evaluations of job supervisors. Next we discuss other ways that skin tone has been a factor in legal cases.

Legal Consequences of Skin Tone Bias

Because dark skin presumably activates negative stereotypes, and because stereotypes may lead to discrimination, it is not surprising that darker-skinned individuals receive harsher treatment than lighter-skinned individuals within the legal system. Using Add Health data, Hannon, DeFina, and Bruch (2013) found that skin tone is related to the likelihood that youth will experience school suspension. Interestingly, the effect was stronger among girls than boys: Dark-skinned African American girls were 3.4 times more likely than their lighter-skinned counterparts to be suspended from school (the odds ratio was 2.5 for darkest-skinned compared to lightest-skinned boys). These differences emerged after controlling for variables such as parental socioeconomic status and youths' delinquent behavior (Hannon et al., 2013).

In adults, skin tone is linked to police harassment, severity of prison terms, and likelihood of receiving a death sentence. Experimental studies with college students have shown the “cost” associated with darker skin, particularly for African American men. In an experimental manipulation in which college students were presented with photos of supposed victims and perpetrators, perpetrators who looked more stereotypically “Black” (because of skin tone as well as other phenotypic features) were more than twice as likely to receive a death sentence from

research participants compared to fictional perpetrators with less stereotypically Black characteristics (Eberhardt et al., 2006). Using a similar experimental procedure in which supposed perpetrators varied by skin tone, Levinson and Young (2010) found similar results. Participants were significantly more likely to judge an African American perpetrator as guilty if he had darker-, as opposed to lighter skin. Moreover, when shown ambiguous evidence, participants were more likely to view it as indicative of guilt if the perpetrator had dark skin than if he had a lighter skin tone (Levinson & Young, 2010).

These laboratory findings are confirmed by analysis of court sentencing records. For example, Blair, Judd, and Chapleau (2004) examined a random sample of inmate records from individuals who had approximately equivalent criminal histories. Although no racial bias was found in sentencing (i.e., comparing Blacks to Whites), within each racial group, inmates who had more African features (specifically dark skin, wide nose and full lips) received significantly harsher prison sentences than those who had less African features. In an attempt to focus exclusively on skin-tone related differences in sentencing, Burch (2005, as cited in Hochschild & Weaver, 2005) found that after controlling for offense and socioeconomic status, medium- and dark-skinned Blacks received significantly longer sentences than light-skinned Blacks and Whites in Georgia. Interestingly, there were no statistically significant differences in sentencing for light-skinned Blacks when compared to Whites. This body of research provides unequivocal evidence that skin tone bias within the legal system puts darker-skinned African Americans at significant disadvantage.

Although sentencing records and experimental studies show clear evidence of skin tone bias within the legal system, it is often difficult to draw conclusions in other areas because of the paucity of studies at a particular developmental stage, varying methodologies used by

researchers, or other methodological limitations. In the next section we discuss limitations of the extant corpus of research on skin tone bias.

Limitations of Prior Skin Tone Research

Limitations of prior research in skin tone bias include (1) the paucity of developmental research and lack of recent, large-scale studies; (2) the failure to make distinctions among various groups within the Black Diaspora (e.g. African American, African Immigrant, Hispanic Black, and Caribbean American); (3) little attention to contextual differences such as region of the United States and race composition of the communities under study; and (4) the failure to identify moderators and mediators in the relationship between skin tone and outcomes. Each limitation is discussed in turn.

A major limitation of extant research is the predominance of adult samples, particularly in research using large national databases. Only one national dataset (Add Health: Keith, 2009) in this review used adolescents, and to our knowledge no existing studies have explored skin tone bias in children using a nationally representative sample. Very few studies have directly assessed age differences in skin tone bias and attitudes in children or adolescents. The dearth of research with children as well as the dearth of longitudinal studies leaves the field without a means of understanding the developmental processes and changes that underlie skin tone perception, attitudes, and consequences of bias.

An additional limitation of the literature is the paucity of recent large-scale studies. Many researchers addressed their questions using NSBA data, which were collected in 1979-1980 from an all-adult population. Thus, conclusions from those data are relevant for individuals who are currently 60 years or older, but are uninformative regarding subsequent generations. To the best of the authors' knowledge, the CARDIA project is the only longitudinal study with published

articles about skin tone. Additional large-scale longitudinal studies, particularly those focused on children and/or adolescents, are needed to understand skin tone bias in the 21st century.

The literature on skin tone bias rarely distinguishes whether the sample is comprised of African Americans (i.e., descendants of Africans who were involuntary immigrants vis-à-vis slavery) or other members of the Black Diaspora. The terms “Black” and “African American” are often used interchangeably in skin tone bias research. Particularly with regard to intra-group bias, it is important to distinguish among ethnic groups within the Black Diaspora because issues related to skin tone bias might vary across groups. For example, recent immigrants to the United States from African nations or Black Hispanics from South America or the Caribbean might have different attitudes and assumptions about skin tone than African Americans whose heritage is grounded in the U.S. history of oppression. Unfortunately, there is strong evidence that in many African nations, dark skin is devalued: African women have increased rates of skin cancer and still-births due to the prolonged use of various skin lightening methods (Hall, 2006). Nonetheless, more studies should distinguish among Black ethnic groups to identify possible group similarities and differences.

Differences in the microsystem (Bronfenbrenner & Morris, 1998) such as the racial make-up of the context (e.g., family, neighborhood, school) are likely to shape outcomes associated with skin tone bias. Many of the studies discussed in this review are limited in terms of their consideration of the racial-ethnic environment in which participants resided, worked, or studied. As found by Harvey et al. (2005), skin tone bias effects might vary considerably across racial contexts.

Independent of racial context, regional and neighborhood differences may also be related to skin tone bias. For example, Robinson and Ward (1995) found regional differences in

adolescents' attitudes toward skin color and dating. Their sample included youth from three states. When given the statement "Skin color makes a difference to guys when they date girls," 64% of youth from California, 53% of those in Massachusetts, and 34% in Maryland agreed. Few studies of skin tone bias have addressed possible regional differences.

Finally, there may be other possible mediators and moderators influencing skin tone bias processes. For example, received racial socialization may mediate the relationship between skin tone and racial identity. Parents may be aware of the risks associated with their child having dark skin and therefore impart more racial socialization messages to their darker-skinned child (Wilder, 2010). Alternatively, parents may use similar racial socialization tactics with children of different skin tones, but with varying consequences based on the children's skin-tone specific racial experiences. Either way, racial socialization messages influence racial identity in children and serve as a buffer to race-related stress (Neblett et al., 2008; Sellers, Copeland-Linder, Martin, & Lewis, 2006; Stevenson & Arrington, 2009). Yet to date, no studies have explored the relationships among racial socialization, racial identity and skin tone bias. It is important to understand what factors may attenuate the relationship between skin tone and negative psychological outcomes.

Conclusion

Although there are many gaps in the literature, particularly with regard to developmental questions, the studies reviewed suggest that skin tone continues to have consequences for the well being of African Americans. Research consistently shows evidence of skin tone bias with darker-skinned Blacks facing more discrimination, lower socioeconomic attainment, and harsher penalties within the legal system. An important mechanism by which skin tone bias operates is through stereotype activation, which can lead to discrimination and prejudice. However, research

results suggest that educational attainment and racial identity may be mechanisms through which Blacks can mitigate potential negative effects of skin tone bias (Coard et al., 2001; Hughes & Hertel, 1990; Thompson & Keith, 2001). We have proposed five factors that influence whether and how skin tone bias occurs and three factors that shape the target's response. In addition to testing the hypothesized mechanisms shaping skin tone bias, we particularly encourage research exploring developmental aspects of skin tone bias. Such research would include the development of skin tone preferences in children, age-related changes in awareness of skin tone bias, identification of individual and family-based protective/buffering mechanisms and how they act across time, and historical change in these processes. Our hope is that skin tone bias will eventually disappear as different skin tones, like different cultures, are celebrated in the United States in the 21st century.

References

- Aboud, F. E. (1988). *Children and prejudice*. New York, NY: B. Blackwell, 1988.
- Adams, E. A. (2014). *The developmental influence of skin tone on psychosocial outcomes among African American youth*. (Doctoral dissertation, University of North Carolina). Retrieved from <http://dc.lib.unc.edu/cdm/ref/collection/etd/id/5946>
- Alejandro-Wright, M. N. (1985). The child's conception of racial classification: A socio-cognitive model. In W. R. Allen, G. K. Brookins, & M. B. Spencer (Eds.), *Beginnings: The social and affective development of Black children* (pp. 185-200). Hillsdale, NJ: Lawrence Erlbaum.
- Allport, G. W. (1954) *The nature of prejudice*. Garden City, NY: Doubleday.
- American Heart Association (2014). Heart disease and stroke statistics—2014 update: A report from the American Heart Association. doi: 10.1161/01.cir.0000441139.02102.80.
- Averhart, C., & Bigler, R. (1997). Shades of meaning: Skin tone, racial attitudes, and constructive memory in African American children. *Journal of Experimental Child Psychology*, 67, 363–388. doi:10.1006/jecp.1997.2413
- Blair, I. V., Judd, C. M., & Chapleau, K. M. (2004). The influence of Afrocentric features in criminal sentencing. *Psychological Science*, 15, 674-679. doi: 10.1111/j.0956-7976.2004.00739.x
- Blair, I. V., Judd, C. M., Sadler, M., & Jenkins, C. (2002). The role of Afrocentric features in person perception: Judging by features and categories. *Journal of Personality and Social Psychology*, 83(1), 5-25. doi: 10.1037//0022-3514.83.1.5
- Bond, S., & Cash, T. F. (1992). Black beauty: Skin color and body images among African American college women. *Journal of Applied Social Psychology*, 22(11), 874-888. doi:

10.1111/j.1559-1816.1992.tb00930.x

Borrell, L. N., Kiefe, C. I., Williams, D. R., Diez-Roux, A. V., & Gordon-Larsen, P. (2006).

Self-reported health, perceived racial discrimination, and skin color in African Americans in the CARDIA study. *Social Science & Medicine*, 63, 1415-1427.

doi:10.1016/j.socscimed.2006.04.008

Boyle, E. (1970). Biological patterns in hypertension by race, sex, body weight, and skin color.

Journal of The American Medical Association, 213(10), 1637-1643.

doi:10.1001/jama.1970.03170360035006.

Branch, C. W., & Newcombe, N. (1986). Racial attitude development among young Black children as a function of parental attitudes: A longitudinal and cross-sectional study.

Child Development, 57, 712-721. DOI: 10.2307/1130348

Branigan, A. R., Freese, J., Patir, A., McDade, T. W., Liu, K., & Kiefe, C. I. (2013). Skin color, sex, and educational attainment in the post-civil rights era. *Social Science Research*, 42,

1659-1674. doi:10.1016/j.ssresearch.2013.07.010

Breland, A. (1998). A model for differential perceptions of competence based on skin tone among African Americans. *Journal of Multicultural Counseling and Development*,

26(4), 294-312. doi: 10.1002/j.2161-1912.1998.tb00206.x

Breland-Noble, A. M. (2013). The impact of skin color on mental and behavioral health in

African American and Latina adolescent girls: A review of the literature. In R. E. Hall

(Ed.), *The Melanin Millennium* (pp. 219-229). Amsterdam: Springer.

Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes.

Handbook of Child Psychology, 1, 993-1028. doi: 10.1002/9780470147658

Brown, K., Ward, G., Lightbourn, T., & Jackson, J. (1998). Skin tone and racial identity among

- African Americans: A theoretical and research framework. In R. L. Jones (Ed.), *Advances in African American psychology: Theory, paradigms and research*. Thousand Oaks, CA: Sage Press.
- Caldwell, K. L. (2003). "Look at her hair": The body politics of Black womanhood in Brazil. *Transforming Anthropology*, 11, 18-29. doi: 10.1525/tran.2003.11.2.18
- Capodilupo, C. M. (2014, August 25). One size does not fit all: Using variables other than the thin ideal to understand Black women's body image. *Cultural Diversity and Ethnic Minority Psychology*. Advance online publication. <http://dx.doi.org/10.1037/a0037649>
- Charles, C. A. D. (2011). The derogatory representations of the skin bleaching products sold in Harlem. *Journal of Pan African Studies*, 4, 117-141.
- Chavous, T., Rivas-Drake, D., Smalls, P., Griffin, T., & Cogburn, C. (2008). Gender matters, too: The influences of school racial discrimination and racial identity on academic engagement outcomes among African American adolescents. *Developmental Psychology*, 44(3), 637-654. doi: 10.1037/0012-1649.44.3.637
- Clark, K. B. & Clark, M. P. (1947). Racial identification and preference among negro children. In E. L. Hartley (Ed.) *Readings in Social Psychology*. New York: Holt, Reinhart, and Winston.
- Coard, S., Breland, A., & Raskin, P. (2001). Perceptions of and preference for skin color, Black racial identity, and self-esteem among African Americans. *Journal of Applied Social Psychology*, 31(11), 2256-2274 doi: 10.1111/j.1559-1816.2001.tb00174.x
- Dixon, T., & Maddox, K. (2005). Skin tone, crime news, and social reality judgments: Priming the stereotype of the dark and dangerous Black criminal. *Journal of Applied Social Psychology*, 35, 1555-1569. doi: 10.1111/j.1559-1816.2005.tb02184.x

- Eberhardt, J. L., Davies, P. G., Purdie-Vaughns, V. J., & Johnson, S. L. (2006). Looking deathworthy: Perceived stereotypicality of Black defendants predicts capital-sentencing outcomes. *Psychological Science*, 17, 383-386. doi: 10.1111/j.1467-9280.2006.01716.x
- Evans, A. B., Copping, K. E., Rowley, S. J., & Kurtz-Costes, B. (2011). Self-concept in Black adolescents: Do race and gender stereotypes matter? *Self and Identity*, 10, 263-277. doi: 10.1080/15298868.2010.485358
- Farrell, W., & Olson, J. (1983). Kenneth and Mamie Clark revisited: Racial identification and racial preference in dark-skinned and light-skinned Black children. *Urban Education*, 18(3), 284-297. doi: 10.1177/004208598301800302
- Fegley, S., Spencer, M., Goss, T., Harpalani, V., & Charles, N. (2008). Colorism embodied: Skin tone and psychosocial well-being in adolescence. In W. Overton, U. Muller, & J. Newman (Eds.), *Developmental perspectives on embodiment and consciousness* (pp. 281-312). New York, NY: Lawrence Erlbaum Associates.
- Ferguson, R. F. (2003). Teachers' perceptions and expectations and the Black-White test score gap. *Urban Education*, 38, 460-507. doi: 10.1177/0042085903038004006
- Goldsmith, A. H., Hamilton, D., & Darity, W., Jr. (2006). Shades of discrimination: Skin tone and wages. *The American Economic Review*, 96, 242-245. doi: 10.1257/000282806777212152
- Gravlee, C. C. & Dressler, W. W. (2005). Skin pigmentation, self-perceived color, and arterial blood pressure in Puerto Rico. *American Journal of Human Biology*, 17, 195-206. doi: 10.1002/ajhb.20111
- Gray-Little, B., & Hafdal, A. (2000). Factors influencing racial comparisons of self-esteem: A quantitative review. *Psychological Bulletin*, 126, 26-54. doi: 10.1037/0033-

2909.126.1.26

Grodsky, E., & Pager, D. (2001). The structure of disadvantage: Individual and occupational determinants of the black-white wage gap. *American Sociological Review*, 542-567.

doi:10.2307/3088922

Gullickson, A. (2005). The significance of color declines: A re-analysis of skin tone differentials in post-civil rights America. *Social Forces*, 84(1), 157-180. doi:

10.1353/sof.2005.0099

Hagiwara, N., Kashy, D. A., & Cesario, J. (2012). The independent effects of skin tone and facial features on Whites' affective reactions to Blacks. *Journal of Experimental Social Psychology*, 48, 892-898. doi:10.1016/j.jesp.2012.02.001.

Hall, R. E. (2006). The bleaching syndrome: Manifestation of a post-colonial pathology among African women. *The Nigerian Journal of Guidance & Counseling*, 11, 1-13. doi:

10.4314/njgc.v11i1.36985

Hall, R. (1995). The bleaching syndrome: African-Americans' response to cultural domination vis-à-vis skin color. *Journal of Black Studies*, 26(2), 172-184. doi:

10.1177/002193479502600205

Hall, R. (1992). Bias among African-Americans regarding skin color: Implications for social work practice. *Research on Social Work Practice*, 2(4), 479-486. doi:

10.1177/104973159200200404

Hannon, L., DeFina, R., & Bruch, S. (2013). The relationship between skin tone and school suspension for African Americans. *Race and Social Problems*, 5, 281-295. doi:

10.1007/s12552-013-9104-z

Harburg, E., Gleibermann, L., Roeper, P., Schork, M. A., & Schull, W. J. (1978). Skin color,

- ethnicity, and blood pressure I: Detroit blacks. *American Journal of Public Health*, 68(12), 1177-1183. doi: 10.2105/AJPH.68.12.1177
- Harrison, M. S. & Thomas, K. M. (2009). The hidden prejudice in selection: A research investigation on skin color bias. *Journal of Applied Social Psychology*, 39, 134-168 doi: 10.1111/j.1559-1816.2008.00433.x
- Harvey, R., LaBeach, N., Pridgen, E., & Gocial, T. (2005). The intragroup stigmatization of skin tone among Black Americans. *Journal of Black Psychology*, 31(3), 237-253. doi: 10.1177/0095798405278192
- Hersch, J. (2008). Profiling the new immigrant worker: The effects of skin color and height. *Journal of Labor Economics*, 26(2), 345-386. doi: 10.1086/587428
- Hesse-Biber, S. N., Howling, S. A., Leavy, P., & Lovejoy, M. (2004). Racial identity and the development of body image issues in African American adolescent girls. *The Qualitative Report*, 9, 49-79.
- Hill, M. (2002a). Skin color and the perception of attractiveness among African Americans: Does gender make a difference? *Social Psychology Quarterly*, 65, 77-91. doi: 10.2307/3090169
- Hill, M. (2002b) Race of the interviewer and perception of skin color: Evidence from the multi-city study of urban inequality. *American Sociological Review*, 67, 99-108. doi:10.2307/3088935
- Hochschild, J. L. & Weaver, V. (2005). The skin color paradox and the American racial order. *Social Forces*, 86, 643-670. doi: 10.1093/sf/86.2.643
- Hraba, J., & Grant, G. (1972). The doll technique: A measure of social ethnocentrism? *Social Forces*, 50, 522-527. doi: 10.1093/sf/50.4.522

- Hudley, C. & Graham, S. (2002). Stereotypes of achievement striving among early adolescents. *Social Psychology of Education, 5*, 201-224. doi: 10.1023/A:1014438702266
- Hughes, M., & Hertel, B. (1990). The significance of color remains: A study of life chances, mate selection, and ethnic consciousness among Black Americans. *Social Forces, 68*(4), 1105-1120. doi: 10.1093/sf/68.4.1105
- Hughes, D., Rodriguez, J., Smith, E. P., Johnson, D. J., Stevenson, H. C., & Spicer, P. (2006). Parents' ethnic-racial socialization practices: A review of the research and directions for future study. *Developmental Psychology, 42*, 747-770. doi: 10.1037/0012-1649.42.5.747
- Hunter, M. L. (1998). *Race, gender, and the politics of skin tone*. New York: Routledge.
- Jordan, P., & Hernandez-Reif, M. (2009). Reexamination of young children's racial attitudes and skin tone preferences. *Journal of Black Psychology, 35*, 388-403. doi: 10.1177/0095798409333621
- Justice, E. M., Lindsey, L. L., & Morrow, S. F. (1999). The relation of self-perceptions to achievement among African Americans preschoolers. *Journal of Black Psychology, 25*(1), 48-60. doi: 10.1177/0095798499025001004.
- Keenan, K. (1996). Skin tone and physical features of blacks in magazine advertisements. *Journal of Mass Communication Quarterly, 73*, 905-912. doi: 10.1177/107769909607300410
- Keil, J. E., Sandifer, S. H., Loadholt, C. B., & Boyle Jr., E. (1981). Skin color and education effects on blood pressure. *American Journal of Public Health, 71*(5), 532-534. doi: 10.2105/AJPH.71.5.532
- Keil, J. E., Tyroler, H. A., Sandifer, S. H., & Boyle Jr., E. (1977). Hypertension: effects of social class and racial admixture: the results of a cohort study in the black population of

- Charleston, South Carolina. *American Journal of Public Health*, 67(7), 634-639. doi: 10.2105/AJPH.67.7.634
- Keith, V. (2009). A colorstruck world: Skin tone, achievement, and self-esteem among African American women. In E. Glenn (Ed.), *Shades of difference: Why skin color matters* (pp. 25-39). Stanford, CA: Stanford University Press.
- Keith, K., & Herring, C. (1991). Skin tone and stratification in the black community. *American Journal of Sociology*, 97(3), 760-778. doi: 10.1086/229819
- Keith, V. M., Lincoln, K. D., Taylor, R. J., & Jackson, J. S. (2010). Discriminatory experiences and depressive symptoms among African American women: Do skin tone and mastery matter? *Sex Roles*, 62, 48-59. doi: 10.1007/s11199-009-9706-5
- Klag, M. J., Whelton, P. K., Coresh, J., Grim, C. E., & Kuller, L. H. (1991). The association of skin color with blood pressure in US blacks with low socioeconomic status. *Journal of The American Medical Association*, 265, 599-602. doi:10.1001/jama.1991.03460050053019
- Krieger, N., Sidney, S., & Coakley, E. (1998). Racial discrimination and skin color in the CARDIA study: implications for public health research. *American Journal of Public Health*, 88(9), 1308-1313. doi: 10.2105/AJPH.88.9.1308
- Kurtz-Costes, B., DeFreitas, S. C., Halle, T., & Kinlaw, C. R. (2011). Gender and racial favouritism in Black and White preschool girls.. *British Journal of Developmental Psychology*, 29, 270-287. doi: 10.1111/j.2044-835X.2010.02018.x
- Kurtz-Costes, B., Swinton, A. D., & Skinner, O. D. (2014). Racial and ethnic gaps in the school performance of Latino, African American and White students. *APA handbook of multicultural psychology: Theory and research* (Vol. 1, pp. 231-246), Washington,

D.C.: American Psychological Association.

- Landor, A. M., Simons, L. G., Simons, R. L., Brody, G. H., Bryant, C. M., Gibbons, F. X., Granberg, E. M., & Melby, J. N. (2013). Exploring the impact of skin tone on family dynamics and race-related outcomes. *Journal of Family Psychology*, 27(5), 817-826. doi: 10.1037/a0033883
- Langlois, J. H., Ritter, J. M., Casey, R. J., & Sawin, D. B. (1995). Infant attractiveness predicts maternal behaviors and attitudes. *Developmental Psychology*, 31(3), 464-472. doi: 10.1037/0012-1649.31.3.464
- LaVeist, T. A. & Isaac, L. A. (2013). *Race, ethnicity, and health: A public health reader (2nd ed)*. San Francisco, CA: Wiley.
- Levinson, J. D. & Young, D. (2010). Different shades of bias: Skin tone, implicit racial bias, and judgments of ambiguous evidence. *West Virginia Law Review*, 112, 307-350. <http://wvlawreview.wvu.edu/r/download/55727>
- Livingston, R., & Brewer, M. (2002). What are we really priming? Cue-based versus category-based processing of facial stimuli. *Journal of Personality and Social Psychology*, 82, 5-18. doi: 10.1037/0022-3514.82.1.5
- Maddox, K. B. (2004). Perspectives on racial phenotypicality bias. *Personality and Social Psychology Review*, 8(4), 383-401. doi: 10.1207/s15327957pspr0804_4
- Maddox, K. B., & Chase, S. G. (2004). Manipulating subcategory salience: Exploring the link between skin tone and social perception of Blacks. *European Journal of Social Psychology*, 34, 533-546. 10.1002/ejsp.214
- Maddox, K. B., & Gray, S. (2002). Cognitive representations of Black Americans: Re-exploring the role of skin tone. *Personality and Social Psychological Bulletin*, 28, 250-259. doi:

10.1177/0146167202282010

Monk, E. P. (2014). Skin tone stratification among Black Americans, 2001–2003. *Social Forces*, 92(4), 1313-1337. 10.1093/sf/sou007

Morrow vs the Internal Revenue Service, 742 F. Supp. 670 (N.D. Ga. 1990).

Mucherah, W. & Frazier, A. D. (2013). How deep is skin deep? The relationship between skin tone satisfaction, estimation of body image, and self-esteem in women of African descent. *Journal of Applied Social Psychology*, 43, 1177-1184. doi: 10.1111/jasp.12081

Neblett, E. W., Philip, C. L., Cogburn, C. D., & Sellers, R. M. (2006). African American adolescents' discrimination experiences and academic achievement: Racial socialization as a cultural compensatory and protective factor. *Journal of Black Psychology*, 32, 199-218. doi:10.1177/0095798406287072

Neblett, E., Smalls, C., Ford, K., Nguyen, H., & Sellers, R. (2008). Racial socialization and racial identity: African American parents' messages about race as precursors to identity. *Journal of Youth and Adolescence*, 38, 189-203. doi: 10.1007/s10964-008-9359-7

Okazawa-Rey, M., Robinson, T., & Ward, J. (1987). Black women and the politics of skin color and hair. *Women and Therapy*, 6, 89-102. doi: 10.1300/J015V06N01_07

Oyserman, D., Brickman, D., Bybee, D., & Celious, A. (2006). Fitting in matters: Markers of in-group belongingness and academic outcomes. *Psychological Science*, 17, 854-861. doi: 10.1111/j.1467-9280.2006.01794.x

Parham, T., & Helms, J. (1981). The influence of Black students' racial identity attitudes on preferences for counselor's race. *Journal of Counseling Psychology*, 28(3), 250-257. doi:10.1037/0022-0167.28.3.250

Phinney, J. (1992). The multigroup ethnic identity measure: A new scale for use with diverse

- groups. *Journal of Adolescent Research*, 7(2), 156-176. doi: 10.1177/074355489272003
- Porter, C. (1991). Social reasons for skin tone preferences of Black school-age children. *American Journal of Orthopsychiatry*, 61, 149-154. doi:10.1037/h0079219
- Porter, J., & Washington, R. (1979). Black identity and self-esteem: A review of studies of black self concept: 1968-1978. *Annual Review of Sociology*, 5, 53-74. doi: 10.1146/annurev.so.05.080179.000413
- Quintana, S. M. (1998). Children's developmental understanding of ethnicity and race. *Applied & Preventative Psychology*, 7, 27-45. doi:10.1016/S0962-1849(98)80020-6
- Rewak, M., Buka, S., Prescott, J., De Vivo, I., Loucks, E. B., Kawachi, I., ... & Kubzansky, L. D. (2014). Race-related health disparities and biological aging: Does rate of telomere shortening differ across blacks and whites? *Biological Psychology*, 99, 92-99. doi:10.1016/j.biopsycho.2014.03.007
- Robinson, T., & Ward, J. (1995). African American adolescents and skin color. *The Journal of Black Psychology*, 21(3), 256-274. doi: 10.1177/00957984950213004
- Russell, K. Y, Wilson, M. & Hall, R. E. (2013). *The color complex (revised): The politics of skin color in a new millennium*. New York, NY: Random House.
- Ryabov, I. (2013). Colorism and school-to-work and school-to-college transitions of African American adolescents. *Race and Social Problems*, 5(1), 15-27.
- Sellers, R. M., Copeland-Linder, N., Martin, P. P., & Lewis, R. H. (2006). Racial identity matters: The relationship between racial discrimination and psychological functioning in African American adolescents. *Journal of Research on Adolescence*, 16(2), 187-216. doi: 10.1111/j.1532-7795.2006.00128.x
- Sellers, R., Smith, M., Shelton, J., Rowley, S., & Chavous, T. (1998). Multidimensional model

- of racial identity: A reconceptualization of African American racial identity. *Personality and Social Psychology Review*, 2(1), 18-39. doi: 10.1207/s15327957pspr0201_2
- Spencer, M. B. & Markstrom-Adams, C. (1990). Identity processes among racial and ethnic minority children in America. *Child Development*, 61, 290-310. doi: 10.2307/1131095
- Stephens, D. P. & Few, A. L. (2007). The effects of images of African American women in hip hop on early adolescents' attitudes toward physical attractiveness and interpersonal relationships. *Sex Roles*, 56, 251-264. doi: 10.1007/s11199-006-9145-5
- Stevenson, H., & Arrington, E. (2009). Racial/ethnic socialization mediates perceived racism and the racial identity of African American adolescents. *Cultural Diversity and Ethnic Minority Psychology*, 15(2), 125-136. doi: 10.1037/a0015500
- Sweet, E., McDade, T. W., Kiefe, C. I., & Liu, K. (2007). Relationships between skin color, income, and blood pressure among African Americans in the CARDIA Study. *American Journal of Public Health*, 97(12), 2253-2259. doi: 10.2105/AJPH.2006.088799
- Thompson, M., & Keith, V. (2001). The blacker the berry: Gender, skin tone, self-esteem, and self-efficacy. *Gender and Society*, 15, 336-357. doi: 10.1177/089124301015003002
- Thurman, W. (1929). *The Blacker the Berry, the Sweeter the Juice*. London: Macaulay.
- Uzogara, E. E., Lee, H., Abdou, C. M., & Jackson, J. S. (2014). A comparison of skin tone discrimination among African American men: 1995 and 2003. *Psychology of Men and Masculinity*, 15, 201-215. doi:10.1037/a0033479
- Wade, T. (1996). The relationships between skin color and self-perceived global, physical, and sexual attractiveness, and self-esteem for African Americans. *Journal of Black Psychology*, 22(3), 358-373. doi: 10.1177/00957984960223006
- Wilder, J. (2010). Revisiting "Color Names and Color Notions": A contemporary examination

of the language and attitudes of skin color among young black women. *Journal of Black Studies*, 41, 184-206.

Williams, T. & Davidson, D. (2009). Interracial and intra-racial stereotypes and constructive memory in 7- and 9-year-old African-American children. *Journal of Applied Developmental Psychology*, 30(3), 366–377. doi:10.1016/j.appdev.2009.02.002

Wong, C. A., Eccles, J. S., & Sameroff, A. (2003). The influence of ethnic discrimination and ethnic identification on African American adolescents' school and socioemotional adjustment. *Journal of Personality*, 71, 1197-1232. doi: 10.1111/1467-6494.7106012

Young-Hyman, D., Schlundt, D. G., Herman-Wenderoth, L., & Bozynlinski, K. (2003). Obesity, appearance, and psychosocial adaptation in young African American children. *Journal of Pediatric Psychology*, 28, 463-472. doi: 10.1093/jpepsy/jsg037

Figure 1. Antecedents leading to the probability of skin tone bias, factors shaping the target's response, and consequences of skin tone bias