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ABSTRACT

This theoretical paper is concerned with the evaluation and preference responses of preschool children to light- and dark-skinned human figures. The paper examines the hypothesis that in children the frequently observed bias favoring light-skinned persons over dark-skinned persons is not a racial bias but is related to early learning experiences such as the aversive experience of hours of darkness which becomes associated with negative affect. The major sections of the paper include: (1) a review of the well-known molar phenomena regarding racial attitudes and preferences and the customary explanations of these based on social learning experiences involving cultural norms, (2) a summary of some recent research findings which challenge the adequacy of an exclusive dependence upon social-cultural learning theories, (3) the proposal of a revised theoretical interpretation which takes into account the early learning experiences of the child and his subsequent contact with social norms, and (4) a brief consideration of some practical implications which stem from the revised theory (e.g., that pro-light/anti-dark bias in younger preschool children is not bona fide racial bias and is modifiable under appropriate learning conditions, and that generalization of bias to racial contexts could be prevented by abandoning the color coding practice of designating Afro Americans "black" and Euro Americans "white"). (GO)

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As a Determinant of Race Attitudes

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Invited Address

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This paper is concerned with the evaluation and preference responses of preschool children to light- and dark-skinned human figures. The general thesis which I will offer is that the often-observed bias favoring light-skinned persons over dark-skinned persons is related to a more general color bias which has its origins in early learning experiences of young children which have little or nothing to do with race. The major sections of the paper include: first, a review of the well known molar phenomena regarding racial attitudes and preferences, and of the social-cultural learning theories usually advanced to explain these phenomena; second, a summary of some recent research findings which challenge the adequacy of an exclusive dependence upon social-cultural learning theories; third, the proposal of a revised theoretical interpretation which takes into account the early learning experiences of the child as well as his subsequent contact with social norms; and, finally, a brief consideration of some of the practical implications which stem from the revised theory.

Molar Phenomena and Customary Explanations

Beginning with the classic studies of Clark and Clark in the late 1930s and 1940s, it has been demonstrated that preschool children generally tend to evaluate light-skinned human figures more positively than dark-skinned

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human figures. In addition, preschool children also tend to express a preference for light-skinned figures over dark-skinned figures, both as playmates and as the person they themselves would rather be. While these tendencies are more pronounced among Euro-American children than among Afro-American children, they are usually present in the majority of children in both racial groups (Morland, 1962, 1972; Williams, Best, Boswell, Mattson, & Graves, 1975; Williams & Morland, in press).

A second well-documented finding is that preschool children display a tendency to evaluate the color white more positively than the color black. This tendency is also found among both Euro- and Afro-American children although the tendency is more pronounced in the former group (Williams, Boswell, & Best, 1975).

It has also been demonstrated that the racial attitudes and white/black color attitudes of preschool children have a significant correlation, usually of the order of about .40. This indicates that those children who view the color white more positively than the color black, tend to view light-skinned persons more positively than dark-skinned persons.

The foregoing phenomena are usually explained by reference to the child's social learning experiences involving cultural norms. Preschool children in our society have many opportunities to learn that Euro-Americans generally occupy more favored positions than do Afro-Americans. They also are exposed to the use of the color white to symbolize goodness and the color black to symbolize badness in a great variety of contexts ranging from religion, to children's literature, to television advertising. In addition, since the color names "white" and "black" are often used to designate Euro- and Afro-American persons, it is not considered surprising that there should be some correlation between the child's attitude toward

the colors white and black and his attitude toward the Euro- and Afro-American persons designated by these color names. Such has been the conventional social-learning explanation.

It is not a question of whether influences such as those just mentioned have an impact on the preschool child. I am certain that, in fact, they do. The question is whether such influences are sufficient to explain the race and color bias which we observe in preschool children. My belief is that they are insufficient. Let me now share with you some recent research findings which seem to cast doubt upon the adequacy of an exclusive reliance on social and cultural influences. In order to place these findings in context, let me look ahead to say that I now believe that the typical young child develops a diffuse pro-light/anti-dark bias as a result of early learning experiences in the first years of life, and that this bias provides a general frame of reference for the incorporation of subsequent cultural influences.

Recent Research Findings

My first observation is of a rather general nature, and consists of noting the fact that many two- and three-year-old children demonstrate a pro-white/anti-black color bias, at a time of life when exposure to cultural influences of the type noted above have certainly not been very extensive (Williams & Morland, in press).

A second finding concerns the individual differences in racial bias and color bias obtained when one is testing preschool children. The interesting thing is that neither individual differences in racial bias nor individual differences in color bias show any appreciable correlation with IQ or with age during the preschool years (Williams, Best, Boswell, Mattson, & Graves, 1975; Williams, Boswell, & Best, 1975). What is the

significance of this? Simply, that behavioral tendencies which preschool children are acquiring as a result of cultural influences usually correlate with both IQ and age. For example, in some of our studies of race bias we have used a measure of the child's knowledge of conventional sex roles as a control measure. During the preschool years, individual differences in knowledge of sex roles correlates positively with both age and IQ-- that is, brighter children know more about sex roles than do less bright children, and older preschoolers know more about sex roles than younger preschoolers. By contrast, there is little relationship of this sort with the individual differences in racial bias or color bias during the preschool years.

Another finding which seems contrary to the notion that racial bias is learned solely through exposure to cultural influences is the fact that pro-light-skinned bias may be found in children who show little awareness of conventional racial classification. While it is true both Euro- and Afro-American children who are aware of racial classifications show a greater degree of pro-Euro bias, this bias is also observed in preschoolers of both races who show little awareness of formal racial classifications (Williams & Morland, in press). Apparently, the ability to classify persons according to race is not necessary for a child to have a pro-light-skinned person bias.

Another line of evidence comes from studies conducted outside the United States with children from countries in which there is little concern with race, as we understand it in the United States. We have conducted studies with preschool children in France and in Italy, and have found appreciable degrees of pro-light-skin bias, and pro-white color bias, in both groups. For example, on our racial attitude measure, 63% of our

French preschoolers showed a pro-light-skin bias, while only 5% showed a pro-dark-skin bias, and, among Italian preschoolers, 75% showed a pro-light-skin bias, with only 12% showing a pro-dark-skin bias. From these data it appears that it is not necessary to have contact with a culture which emphasizes race in order for children to have biases favoring light-over dark-skinned persons (Best, Naylor, & Williams, in press).

Another study which suggests the operation of a general bias favoring light over darkness is that of Robert Baugher (1973). Baugher developed a racial attitude procedure in which there were three pairs of stimulus figures which differed in skin color: a pinkish-tan figure paired with a light-brown figure; a pinkish-tan figure paired with a dark-brown figure; and a light-brown figure paired with a dark-brown figure. Baugher demonstrated that, among both Euro- and Afro-American children, there was a tendency to positively evaluate the lighter of the two figures, regardless of the particular combination employed. This meant that when the light-brown figure was paired with the dark-brown figure it was generally judged to be the "good" one, but when the light-brown figure was paired with the pinkish-tan figure it was judged to be the "bad" one. Somewhat analogous to this are the findings of Ken Morland with regard to the preference responses of Euro- and Afro-American children to photographs of three types of persons--Euro-American, Afro-American and Chinese (Williams & Morland, in press). For both Euro- and Afro-American children, the strongest preference was expressed for the Euro-American figures, the next most frequent preference was for the Chinese figures, and the least preference was expressed for the Afro-American figures. These findings suggest the operation of a light/dark gradient in the evaluative responses of preschool children to human figures.

In a study completed at Wake Forest this spring, Frank Kuhn demonstrated that the bias favoring light over dark stimulus figures is not confined to animate figures, nor is it confined to what might be called "race-related" colors. Kuhn employed three types of stimulus figures: animate figures, either persons or lower animals; inanimate objects, for example, houses, ships, cars; and geometric and nonsense figures. In each case the child was presented with two stimuli which were identical except that one was a lighter color and one was a darker color, and was asked to indicate which of the two was positively evaluated, or which was negatively evaluated. In analyzing his results, Kuhn found a general main effect through all of his data, such that lighter figures were positively evaluated more often than were darker figures. This was true regardless of the type of stimuli employed, and was true for such non-race-related colors as blue, green, orange and red, as well as for other race-related colors such as shades of tan and brown, black and white, etc. In the context of Kuhn's study, the preschool child's tendency to select light-skinned over dark-skinned human figures, which is often interpreted as evidence of racial bias, can be viewed as a special case of a more general tendency to evaluate light-colored things more positively than dark-colored things.

There have been some recent findings in the area of discrimination learning in young children which seem to bear on the general point I am trying to make. These findings suggest that it may be easier for preschool children to learn a discrimination when the correct cue is relatively light in color, as opposed to when the correct cue is relatively dark in color. Phyllis Katz, in her well-known "moonman" study (Katz, 1973), presented preschool children with a pair of schematic faces. For some subjects, the stimuli were light and dark green; for other subjects, light and dark brown, and for other subjects, light and dark pink. The

child's task was to learn which of his pair of stimuli was the moon person which "we should take back with us." Half of the children were reinforced on the lighter member of the pair and the other half of the children were reinforced on the darker member of the pair. What Katz discovered was a significant main effect of the color of the stimulus figure, such that when the light member of the pair was correct the children learned the discrimination in significantly fewer trials than when the darker member of the pair was correct.

Another discrimination learning study with generally similar findings was conducted at Wake Forest this spring by Charles Richman and Susan Selvey. These investigators studied the effect of white and black stimuli on discrimination learning in two groups of four-year-old children. Using white and black geometric forms, it was found that the children for whom the white form was correct took an average of 16 trials to learn the discrimination, while the children for whom the black form was correct took an average of 39 trials. When the experimental situation was reversed so that each group was now rewarded for responding to the other cue, it was found that the group trained on black and switched to white shifted more rapidly than the group which was trained on white and shifted to black. Thus, in both the original learning and the shift it appeared that the white cue facilitated learning and the black cue inhibited learning. I do not want to make this sound too pat, however. In another study conducted by one of my students this year, it was found that several variables interacted with the white/black color dimension in discrimination learning in young children.

A final line of research which bears on the question of a generalized pro-light/anti-dark bias in young children is represented in a study

conducted by Donna Boswell (Boswell & Williams, 1975). In this study, mothers and their kindergarten-age children were interviewed to ascertain the degree of the child's aversion to the dark of night, thunderstorms, etc. When a composite measure was developed on the basis of both the child's and mother's responses, it was found that this measure correlated significantly with individual differences in pro-white/anti-black color bias, as assessed by our color meaning test procedure. In other words, children who were judged to have a strong degree of aversion to darkness showed more evidence of pro-white/anti-black bias than did children with lesser degrees of aversion to darkness.

Finally, there are some findings from comparative psychology which are worth noting. In a series of studies conducted with the squirrel monkey, a diurnal primate with a visual apparatus highly similar to our own, Parker (1966) demonstrated that the squirrel monkey will endure long periods of extreme hunger rather than leave his perch to obtain food, when the consequence of leaving the perch is that the lights go out. It seems clear from Parker's studies that for these diurnal primates total darkness elicits an aversive reaction which is sufficiently strong to compete successfully with the primary drive of hunger. Zimmerman's (1973) findings with neonate rhesus monkeys are also relevant here. Zimmerman trained each newborn monkey to obtain food in a box attached to the home cage. For some monkeys the box was painted white; for other monkeys the box was painted black. After 20 days of such training, Zimmerman reversed the situation so that the young monkey now had to learn to go to a box of the other color. Under these conditions, the monkeys trained initially in the white box and shifted to black took over twice as long to learn the shift, as did the monkeys who were trained in the black box and shifted to white. By inference,

it appears that these infant monkeys had an attraction to the white box relative to the black box which facilitated the shift to the white box, and/or retarded the shift to the black box. As a final comment on the biological side, we can note the work of George Ungar and his associates at the Baylor Medical School which suggests that there may be a bio-chemical basis for dark avoidance in some species. These investigators have isolated and synthesized a brain protein, called scotophobin, which when injected produces dark avoidance in the laboratory rat which is, of course, a nocturnal creature which normally prefers darkness to light.

A Revised Theoretical Interpretation

It seems to me that all of the research findings which I have just reviewed challenge, in one way or another, the idea that what we observe and designate as racial bias in preschool children is a simple result of the child's learning from cultural influences. Again, this is not to say that cultural and familial influences are not important, but rather to propose that such influences may constitute the second stage of a learning process which is based on the earlier, individual learning experiences of the young homo sapiens. I now hypothesize that, well before cultural and familial influences have much impact, there develops a generalized pro-light/anti-dark bias which is based on the biological characteristics of the young human. Am I proposing an innate fear of darkness? No; although such is possible and something like this seems to operate in the case of other primate species. And one can even make plausible evolutionary arguments as to why such an innate fear of darkness might have been selected as an adaptive characteristic during the millions of years of human evolution. Such evolutionary speculation is, however, highly conjectural, and I prefer to base our revised theorizing on the early learning experiences of the young child.

We are all familiar with the phenomenon of "fear of the dark" in young children, and the solvency of the night light industry attests to the generality of the phenomenon. We speculate that children are fearful of the dark primarily because of their experience of loss of stimulus control under low levels of illumination. Alone in the dark, the child is subject to his own vivid imagination and dreams which he is unable to check out satisfactorily, because of its highly visual nature and the low level of illumination at night. This is an aversive experience and darkness comes to be associated with negative affect. In addition, there is the fact that for most children the daylight hours are the hours in which their major needs are satisfied--needs for nutrition, attention, affection, contact comfort, curiosity, etc. Nighttime, even if it is not aversive, is a time of deprivation. Out of their own particular constellation of such experiences, most young children develop a pro-light/anti-dark bias. Thus, I have come to believe that there is a generalized pro-light/anti-dark bias which develops in most children and which antedates any experience with cultural and familial learning regarding race.

I propose that what we observe as racial bias in the young preschool child is often not racial in its origins, although it may very well become racial in its implications. This generalized bias coming out of early childhood sets the stage and facilitates cultural learning. When the child later encounters the cultural messages indicating that light-skinned, Euro-American persons are socially favored, he may feel that that is "as it should be." When he learns that the color white is used to symbolize goodness and black is used to symbolize badness he may say "it makes sense to me." When he further discovers that light-skinned Euro-Americans are designated as white, and dark-skinned Afro-Americans as black, he may say

"why not?" In addition to such general cultural influences there are, of course, more idiosyncratic family influences which may further act to amplify or suppress the child's bias. We now have research evidence suggesting that in addition to the model provided by their own attitudes toward race, parents may also influence their children by means of the degree of significance which they attach to race, and also by means of authoritarian childrearing practices (Williams & Morland, in press).

Implications of the Revised Theory

Let me now comment briefly upon some of the implications of the revised theory which I have proposed. One implication is that a pro-light-skinned person/anti-dark-skinned person bias in young children may be considered as natural, and should not be over-interpreted as evidence of racial prejudice among Euro preschoolers, nor as evidence of self-rejection among Afro preschoolers. Although the theory suggests that the development of some degree of pro-light/anti-dark bias is inevitable in most young children, it does not follow from this that such bias is immutable. Our own studies show that race and color bias in young children is modifiable under the proper learning conditions (Best, Smith, Graves, & Williams, in press).

The theory also suggests that the generalization of pro-light/anti-dark bias to Euro- and Afro-Americans might be partially avoided by abandoning the "color-coding" practice by which Euro-Americans are designated "white" and Afro-Americans are designated as "black." This practice can be criticized on a number of counts including the fact that it is descriptively inaccurate, that it tends to be exaggerative of differences between racial groups, and, of course, the fact that it is intrinsically evaluative in nature. To illustrate the problem, we know that most Afro-American preschoolers

negatively evaluate the color black. To tell a young Afro-American child, "You are Black, and Black is beautiful" may not accomplish the intended objective, and could result in the child receiving a garbled message such as, "I am bad, and it is good to be bad."

With regard to the generalized pro-light/anti-dark bias, it would seem best for parents and teachers to recognize and admit the bias, and discuss it with their children. Coupled with this is the need for adults and children to learn to talk about "race" in a sane and sensitive manner, while avoiding the over-simplified racist thinking which is so prevalent in the United States today. Racial bias may also be reduced by teaching children about human differences and their historical origins, and by encouraging interpersonal friendships among children across racial lines.

In conclusion, let me summarize what I have been saying by noting that I believe that American social scientists have been guilty of a serious over-interpretation of some of the customary findings regarding the responses of young children to light- and dark-skinned persons. I believe that evidence of such bias in the younger preschool child is often merely a reflection of a pro-light/anti-dark bias which has not been learned in the context of race; and has as yet no clear racial implications. On the other hand, if this bias is not corrected, it would appear likely that it may predispose the child to the development of bonafide racial bias, as he encounters the cultural messages indicating that Euro-Americans are advantaged, that white is beautiful, and that Euro-Americans are called white.

References

- Baugher, R., Jr. The skin color gradient as a factor in the racial awareness and racial attitudes of preschool children. Master's thesis, California State University, Fresno, 1973.
- Best, D. L., Naylor, C. E., & Williams, J. E. Extension of color bias research to young French and Italian children. Journal of Cross Cultural Psychology, 1975, in press.
- Best, D. L., Smith, S. C., Graves, D. J., & Williams, J. E. The modification of racial bias in preschool children. Journal of Experimental Child Psychology, 1975, in press.
- Boswell, D. A., & Williams, J. E. Correlates of race and color bias among preschool children. Psychological Reports, 1975, 36, 147-154.
- Katz, P. A. Perception of racial cues in preschool children. Developmental Psychology, 1973, 8, 293-299.
- Morland, J. K. Racial acceptance and preference in nursery-school children. Merrill-Palmer Quarterly, 1962, 8, 271-280.
- Morland, J. K. Racial attitudes in school children: From kindergarten through high school. Final report, Project 2-c009, Office of Education, U.S. Department of Health, Education, and Welfare, November, 1972.
- Parker, C. E. Total darkness as an aversive stimulus condition for the squirrel monkey. Psychonomic Science, 1966, 6, 111-112.
- Williams, J. E., Best, D. L., Boswell, D. A., Mattson, L. A., & Graves, D. J. Preschool Racial Attitude Measure II. Educational and Psychological Measurement, 1975, 35, 3-18.
- Williams, J. E., Boswell, D. A., & Best, D. L. Evaluative responses of preschool children to the colors White and Black. Child Development, 1975, 46, 501-508.

Williams, J. E., & Morland, J. K. Race, color, and the young child.

Chapel Hill: University of North Carolina Press, 1976, in press.

Zimmerman, R. R. Reversal learning in the neonatal rhesus monkey.

Developmental Psychobiology, 1973, 6, 245-250.