Cognitive Accessibility of Racial Stereotypes, Beliefs, and Self-esteem in Black and White College Students

A Thesis presented to
The School of Graduate Studies
Drake University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Deanna Carroll
March 1994
Cognitive Accessibility of Racial Stereotypes, Beliefs, and Self-esteem
In Black and White College Students

by

Deanna Carroll

Approved by Committee:

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Chairperson

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Dean of the School of Graduate Studies
ACKNOWLEDGEMENTS

I would like to thank my dear family and friends. Without your support and continued encouragement, I would have never made it through this endeavor. I am eternally grateful to Dr. Judith Allen, whose support and patience prevailed through endless revision after revision. I would like to express my sincere appreciation to the members of my committee, whose support was never ending. I also wish to thank other members of the faculty and administration, who never stopped believing in me and cheering for me. Thank you all from the bottom of my heart.
Cognitive Accessibility of Racial Stereotypes, Beliefs and Self-esteem in Black and White College Students

An Abstract of a Thesis by
Deanna Carroll
March 1994
Advisor: Judith Allen

The problem.
The purpose of this study was to assess whether internalization of racial stereotypes existed in black and white college students. It was hypothesized that cognitive accessibility of racial stereotypes would occur and would be displayed by differential reaction times to stereotypes following the racial categories of black and white. In addition, the cognitive accessibility of racial stereotypes was hypothesized to be related to levels of self-esteem and racial beliefs.

Procedure.
The sample was composed of 76 college students (39 Black - 20 male, 19 female, and 37 white - 14 male, 23 female) who performed a semantic priming task (Dovidio, Evans, and Tyler, 1986; Dovidio, Perdue & Gaertner, 1991) and completed questionnaires assessing self-esteem and racial beliefs.

Findings.
An internalization pattern of positive versus negative stereotypes emerged. Irrespective of race, black and white subjects associated positive more than negative stereotypes with the category of white and negative more than positive stereotypes with the category of me. There were no correlations between levels of self-esteem and internalization. Overall all subjects had an above average level of self-esteem, independent of whether they displayed any internalization of stereotypes. There were correlations between levels of racism and the degree to which subjects associated positive versus negative words to the two categories of people and the category of self. Those subjects exhibiting higher levels of racism had slower reaction times to positive stereotypes, when they followed the black and me prime.

Conclusions.
The findings of this study suggest that the internalization that existed was one of an evaluative nature. Subjects internalized the association of positive and negative stereotypes, regardless of levels of self-esteem. This was different from our prediction that subjects would display internalization of black and white stereotypes.

Recommendations.
Re evaluate the stereotypes to assess how they are defined by a sample of black students. It also may be more beneficial to examine the effects of internalization of positive versus negative traits.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>METHOD</td>
<td>41</td>
</tr>
<tr>
<td>RESULTS</td>
<td>45</td>
</tr>
<tr>
<td>DISCUSSION</td>
<td>51</td>
</tr>
<tr>
<td>REFERENCE</td>
<td>63</td>
</tr>
<tr>
<td>APPENDICES</td>
<td></td>
</tr>
<tr>
<td>A. Coopersmith's Self-Esteem Inventory</td>
<td>71</td>
</tr>
<tr>
<td>B. Modern Racism Scale</td>
<td>72</td>
</tr>
<tr>
<td>C. Informed Consent</td>
<td>73</td>
</tr>
<tr>
<td>D. Instructions to participants</td>
<td>74</td>
</tr>
</tbody>
</table>
LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Percentage of Error Responses (&quot;No&quot; responses to Correct Prime-Adjective Pairs) to Positive and Negative Adjectives as a function of Racial Category and Self Primes.</td>
<td>45</td>
</tr>
<tr>
<td>2. Percentage of Error Responses to White and Black Stereotyped Adjectives as a function of Racial Category and Self Primes.</td>
<td>46</td>
</tr>
<tr>
<td>3. Percentage of Error Responses to Positive and Negative White and Black Stereotyped Adjectives as a function of Racial Category and Self Primes.</td>
<td>46</td>
</tr>
<tr>
<td>4. Mean Reaction Times (in milliseconds) to Racial and Self Primes.</td>
<td>47</td>
</tr>
<tr>
<td>5. Mean Reaction Times (in milliseconds) to Positive and Negative Evaluative Adjectives as a function of Racial Category and Self Primes.</td>
<td>48</td>
</tr>
<tr>
<td>6. Mean Reaction Times (in milliseconds) to Racial Category and Self Primes as a function of Race of Subject and Evaluative Nature of the Adjective.</td>
<td>48</td>
</tr>
</tbody>
</table>
Introduction

The concept of a stereotype has been included in the psychological literature for some time. One of the earliest definitions was provided by Lippmann, who suggested that stereotypes were distortions, caricatures, and institutionalized misinformation. In addition to this, Lippmann further depicted stereotypes as pictures in our heads (Lippmann, 1922). Sherif and Cantril (1947) and Secord (1959) suggested that stereotypes were a special category of attitudes composed around and toward some given object or set of objects, without any basis in experience or knowledge. LaViolette and Silvert (1951) discussed stereotypes as emerging from social interaction and therefore, as being social attitudes in the strictest sense. They also believed stereotypes to be composed of two main attributes, those of persistence and rigidity; persistence referring to their continuation across generations or duration through time, and rigidity indicating that stereotypic attitudes are extremely resistant to change despite conflicting evidence (LaViolette & Silvert, 1951). Vinacke (1949) defined stereotyping as the tendency to attribute generalized and simplified characteristics to groups of people in the form of verbal labels and to act, according to those labels, in a certain way towards the individuals in the group. Allport (1958) described a stereotype as an exaggerated belief associated with a category. Tajfel believed stereotyping to involve "the attribution of general psychological characteristics to large human groups" (1969, p. 81-82). While these investigators have displayed some important differences in the way they have defined a stereotype or the process of stereotyping, they all agree on most of the defining features: it is an overgeneralization, a category concept that is learned, factually incorrect, rigid and persistent (Ashmore & Del Boca, 1981). In sum, a stereotype may be defined as a set of
beliefs about the personal attributes of a group of people based solely on the individual's membership in the group (Ashmore & Del Boca, 1981). Ashmore and Del Boca further explain that knowledge of the stereotypes does not mean belief in them. Instead, stereotypes are regarded as a component of an overall body of knowledge an individual possesses surrounding certain groups in the society. In this paper, I will focus on stereotypes ascribed to blacks, the extent to which knowledge of these stereotypes is learned and/or accepted by black individuals in our society, and consequences of that internalization of stereotypes for self-esteem.

Ethnic attitudes and stereotypes are part of the social heritage of a society (Ehrlich, 1973). Ehrlich argues that stereotyping is the structuring of the elements of belief statements about groups of people. He further explains that this structuring of elements of belief statements about groups of people is inherent in the basic history of society. Ehrlich feels that stereotypes are transported across generations as an element of the accumulated knowledge of society, and that no individual can grow up in a society without learning the stereotypes attributed to the major ethnic groups. Given this assumption that stereotypes are communicated over generations as an element of the accumulated knowledge of society and that any individual growing up in this society would inevitably acquire knowledge of such stereotypes, theorists believe that internalization of these stereotypes would occur even in members of stereotyped groups (Devine, 1989). Internalization refers to the process of taking in information and making it an integral part of one's attitudes or beliefs (The American Heritage Dictionary, 1982). It is theorized that black individuals, as well as white individuals, acquire knowledge of stereotypes concerning blacks merely from their existence in the society, and that these individuals may make this stereotypic information an integral part of their attitudes or
beliefs regarding themselves. Both empirical and theoretical work in the developmental psychological literature generally support this assumption that children will internalize cultural stereotypes about their own social groups (Clark & Clark, 1947; Goodman, 1952).

Theories and Research on Internalization of Stereotypes

Proshansky (1966) concluded from empirical studies that ethnic attitudes begin to form at the age of three or four, in both black and white children. During this period and as a part of the larger process of establishing a sense of self, children develop an awareness of their own ethnic identity. The child becomes aware that ethnic distinctions are made and that he or she as well as others are perceived as belonging to differing social groups. The child's racial awareness increases rapidly for the next several years and is well established by the time the child enters first grade. Porter (1971), and more recently Katz (1976), agree that most children become cognizant of race and ethnic attitudes during the nursery school years. Goodman (1952) studied 57 black and 46 white nursery school children between the ages of three and five. This study employed a number of observational procedures and play-interview techniques; for example, using pictures of children and dolls to determine how a child would respond to questions dealing with levels of racial awareness. Goodman found that 85% of both the black and white children had some awareness of racial characteristics, and that this racial awareness increased with age. Clark and Clark (1947) in their study of 253 black children between the ages of three and seven also found racial awareness to occur early and increase with age. Other researchers have obtained findings consistent with those of Goodman and the Clarks (i.e., Ammons, 1950; Horowitz & Horowitz, 1938; Landreth & Johnson, 1953; Morland, 1958; Stevenson & Stevenson, 1960;
Issues which continue to be under debate in the literature include the nature of the mechanisms which determine the content of racial attitudes, and whether or not these attitudes include internalized stereotypes about one’s own social groups in the same way that stereotypes about others’ social groups become internalized.

Tajfel and Turner (1986) provided a very different explanation for the internalization of stereotypes. Tajfel and Turner developed Social Identity Theory, in which they stated that attitudes are assigned to groups based simply on an individual’s membership or lack of membership in a group. The “in-group” consists of people with whom the individual identifies himself or herself, whereas the “out-group” consists of everyone else. Their general model suggests that people tend to attribute positive characteristics to the group to which they belong and to the individuals within their own group, while they attribute negative or less positive characteristics to everyone else; the out-group and its members. Tajfel and Turner believed the explanation for this ingroup enhancement-outgroup bias was that people derive a large part of their self-identity from their social identity. Social identity, in large part, comes from the status of the social groups to which the individual belongs. It consists of those aspects involved in self-image that derive from the social categories to which people perceive themselves as belonging. As a result, these social groups provide their members with a sense of identity. These identifications are relational and comparative. This means that they define the individual as similar to or different from, as "better" or "worse" than members of other groups. Individuals strive to maintain or enhance their self-esteem, and therefore, they strive for a positive identity. Since this positive social identity is based on favorable comparisons that can be made between the in-group and some relevant out-
groups, the in-group must be perceived as positively differentiated from the relevant out-groups. In turn, this leads to people attributing positive characteristics to the group to which they belong and negative or less positive characteristics to the relative out-groups. Given that individuals wish to achieve and maintain a positive self-identity, they will be motivated to see their own social groups as better, and others' social groups as worse.

This theory is not always descriptive of the judgments of minority or subordinate group members. Milner (1975) along with Tajfel and Turner (1986) found that minority or subordinate group members frequently derogate their own group and display positive attitudes towards the dominant out-group. In addition, subordinate groups often derogate themselves in self-evaluations. Since dominant group members derogate their out-groups, which would be subordinate groups, these negative evaluations are the dominating beliefs in the society. The subordinate group members internalize these beliefs, which leads to negative evaluations of themselves rather than the normal in-group appreciation evaluations. This would suggest that everyone internalizes the concepts put forth by the dominant group, even when these concepts are negative evaluations of groups to which one belongs (Tajfel & Turner, 1986)

Other theorists hypothesize that parental attitudes alone influence racial attitudes in children. In the case of prejudice, it is most commonly believed that children are prejudiced because their parents are prejudiced, and have subsequently transmitted these feelings and attitudes to their children (Katz, 1976). While this claim would seem reasonable, evidence has not supported its validity. For example, Radke-Yarrow, Trager, and Miller (1952) discovered that kindergarten and first grade white children often displayed negative reactions to blacks even when their parents possessed
more liberal attitudes. Radke-Yarrow, Trager, and Miller interviewed 101 parents of first and second grade children in four public schools in Philadelphia and compared the parental attitudes held towards differing social groups to those attitudes held by their children. They found that a positive or neutral attitude towards a group held by the parents generally led to a higher percentage of their children rating that group as positive or neutral in their attitudes. However, this was not the case when assessing white children's attitudes toward black children. In spite of positive parental attitudes, white children exhibited negative attitudes toward black children (Radke-Yarrow, Trager & Miller, 1952). Additional recent evidence of the seemingly weak relationship between parental racial attitudes and the racial attitudes of their children was found by Branch and Newcombe (1986). They found that children of black activists showed slightly more white preference than the children of non-activists. Branch and Newcombe reasoned that in homes in which parents have strong pro-black attitudes, they may confront the reality of race as an issue in the society in a clearer way than do parents with less strong beliefs. In turn, this initially may be disturbing to young children, who learn that the dominant culture has negative attitudes toward their race. Later, after these issues are processed more fully, this same family environment may be a source of strength. Bird, Monachesi, and Burdick (1952), Frenkel-Brunswik and Havel (1953), and Pushkin (1967) have likewise found there to be no relationship between parental attitudes toward social groups and the attitudes of their young children. While the early attitudes of young children do not seem to be related to those of their parents, over time these attitudes change and the environment provided by parents is found to play a role in this change (Branch & Newcombe, 1986).

The mechanism of reinforcement also has been suggested as a method
of racial attitude acquisition, but there is not much evidence to support this idea (Katz, 1976). Proponents of this view say that peers and adults in the child's environment are seen as positively rewarding the expression of negative attitudes. It is argued, however, that racial attitudes are composed of complex responses not typically acquired under conditions of consistent reinforcement, since the communication of these attitudes is often ambivalent, and may lead to inconsistent reinforcement (Katz, 1976). Katz provides an example of this reasoning, involving a white first-grader, Jane, in an interaction with her mother. Jane asks her mother if she can invite her friend Lotus, who is black, over for lunch. The mother says "yes," but uses a different tone of voice than that generally heard by the child. Then Jane asks her mother if she can go to Lotus' house the next week; however, the mother says "no," and tries to rationalize her answer to the child. "The message, then, that often gets transmitted to the child is a confusing one with many overtones" (1976, p. 131).

Katz (1976) stated that the establishment of ethnic attitudes was related to the development of a child's self-identity. According to Katz, children learn the groups to which they do and do not belong as a part of the self-discovery process, and at this time positive and negative feelings are associated with various groups. Katz explained prejudice as being attributable to an authoritarian parenting style. This model stated that prejudice in children was generated by the environment provided by harsh and rigid parents.

Porter (1971) stated that one of the most important methods of attitude transmission was the family. She drew this conclusion based on the idea that since children would not be born with social values and attitudes, topics beyond their comprehension, they would have no alternative but to internalize the values, norms, and behavioral patterns of parents or
others. Porter (1971) said that as the individual would grow older, he or she would learn not only how to group people into social categories, but also what these classifications would mean in terms of social desirability. In addition, Demo and Hughes (1990) argue that socialization experiences, particularly parental messages were important in shaping racial identity. They further stated that the family context was generally felt to be the most influential socialization setting for forming the child's emerging sense of self, values and beliefs. Their findings from a study using the National Survey of Black Americans supported the idea of racial identity being shaped by the content of parental socialization.

If internalization of cultural stereotypes is linked to the social environment, then one would predict that as these environmental factors change, the individual's degree of internalization of attitudes should also change over time. Even though the attitudes of the children's parents do not seem to be the sole cause of the types of attitudes their children will develop, the overall environment created by the parents may have an effect on the child's attitudes. Environmental factors for blacks have changed since the onset of the Civil Rights Movement. Currently, the American socio-cultural environment includes more positive images of blacks in the society, and an overall concern for the social welfare of black individuals (Rosenberg & Simmons, 1971). Assuming that black children internalize stereotypes as a consequence of learning from the culture, there should be a corresponding pattern of change in the degree of internalization of black stereotypes by black individuals. Indeed, this pattern of change can be seen with a comparison of studies demonstrating racial preference and identification in black children prior to and after the Civil Rights Movement.
Research Prior to the Civil Rights Movement. Clark and Clark (1939) conducted the first study examining the degree of racial awareness and attitudes of black nursery school children. They modeled their study after the Horowitz (1939) study examining children's self-awareness with reference to specific social groupings. Clark and Clark wanted to investigate the degree to which black children would make selections preferring a stimulus representing a black individual to one representing a white person. They also wanted to measure the extent to which these children would make correct identifications with the appropriate dolls representing black individuals when asked to do so. Clark and Clark showed pictures consisting of various combinations of a white boy, black boy, lion, dog, or clown, to 150 black children, three to five years old. After the instructions of "Show me which one is you," for the boys and "Show me which one is _______?" using the name of the girl's brother, boy cousin or boy playmate for the girls, they found that, while overall the children made slightly more choices of the black child, this was not true at each age level (1939, p. 594). When the responses were interpreted in separate age levels, the findings showed that the youngest children chose the white child in the picture more often (44% of the time) compared to the black child (41% of the time) with 15% making irrelevant choices, such as one of the animals or the clown. The percentage of choices for the white child by black children remained constant at 44% as the children go from three to four years old; however, the children cease to identify themselves in terms of the animals or the clown and consistently identify themselves in terms of either the black or white children. This elimination of irrelevant choices of the three year olds by ages four and five led to a trend in black children of more choices of the black child with age. The black children chose to identify with the black child in the picture 55% of the time at age 4, and
56% of the time by age five. As the children grew older from age 3 to age 5, they increasingly identified with the black child. Nevertheless, a significant number of black children continued to identify with the white doll: 45% at age 4, and 44% at age 5 (Clark & Clark, 1939).

Several years later, Clark and Clark individually interviewed black children, ages three through seven, using a set of four dolls, two black and two white. They asked them the following questions:

1. Give me the doll that you want to play with.
2. Give me the doll that is a nice doll.
3. Give me the doll that looks bad.
4. Give me the doll that is a nice color.
5. Give me the doll that looks like a white child.
6. Give me the doll that looks like a colored child.
7. Give me the doll that looks like a Negro child.
8. Give me the doll that looks like you* (1947, p. 602).

They felt the first four questions measured racial preference, while questions five through seven measured racial self-identification. Clark and Clark found that black children preferred white dolls and rejected black dolls when asked to choose which were nice, which looked bad, which they would like to play with, and which were a nice color. Clark and Clark believed this finding implied that the children perceived black not to be beautiful. Hraba and Grant (1970) later interpreted these findings as being consistent with the dominating racial tones of the times.

In 1958, Stevenson and Stewart completed a study using 125 white and 100 black subjects between the ages of three and seven years of age. They studied racial awareness through doll assembly tasks, which required the subject to assemble four two-dimensional dolls differing in color. Second, there were discrimination tests, which evaluated discrimination tasks based on pictures displayed on cards. Third, there was a doll task, which requested the subject to choose the doll that looked more like himself or herself, and one with which he or she would rather play. Finally, the fourth
task involved incomplete stories consisting of seven cards in color depicting play situations, in which subjects were asked to answer questions concerning the children depicted in the cards. Stevenson and Stewart found that the black subjects made a lower rate of own-race choices than did white subjects in items involving the selection of a child as a playmate, as looking most like the subject, as whom they wanted to go home with, and as whom they wanted to attend their birthday party. In addition, the black subjects assigned negative roles to black children more frequently than the white subjects assigned such roles to white children.

Goodman (1952) found in her study of 103 black and white children that racial awareness was not only present at age three and four, but that 25% of the children at age four were already showing strongly embedded race-related values. For example, white children would never express a desire to be like a black person, whereas black children exhibited a large amount of denial and conflict regarding their evaluations of blackness.

Trager and Yarrow (1952) pointed out in their review of these earlier studies that, while the tendency of white children to prefer white stimulus figures in these experiments was not only congruent with the societal norms but was congruent with positive self-concept; the black children's preference for the white stimulus was congruent with the society's dominant ideas, but did not allow for the development of a positive self-image.

In sum, these early studies indicated a white racial preference among young black children and the tendency to attribute more positive characteristics to whites than they did to blacks (Branch & Newcombe, 1986; Clark & Clark, 1939; Stevenson & Stewart, 1958; Trager & Yarrow, 1952). As black children grew older, however, McAdoo (1971) found that they developed an increasing black preference. These results suggested
that, even in the period prior to the civil rights, children's racial attitudes were subject to change during the childhood years. These changes, McAdoo suggested were related to social awareness, life experiences and the ability to understand them.

The Civil Rights Movement was a time of open expression that it was "okay" to be black. "In 1963, Isaacs presented some evidence that black standards of beauty might be changing" (In Rosenberg & Simmons, 1971, p. 42). The Black Pride Movement had achieved considerable momentum by 1968 and was stressing the theme that "black is beautiful" (Rosenberg & Simmons, 1971). Grier and Cobbs are quoted as saying that "with the new black power movements under way, all that we have just said [in the studies of the 1940's and 1950's] may assume merely historical significance. The contorted efforts to be white, the shame of the black body, . . . - all may vanish quickly" (1968, p. 54). As a consequence of this establishment of a more positive image of blacks, black individuals could now achieve a more positive belief system and a more positive self-concept. With positive beliefs, a black individual may still possess knowledge of stereotypes about blacks, but should be less likely to believe them.

Research During and After the Civil Rights Movement. Hraba and Grant (1970) replicated the methodology of the Clark and Clark doll study of 1947 and found that a majority of black children ages three through eight preferred a black doll, with this preference increasing with age. They found 70% of the black children preferred the black doll as a playmate, 54% chose the black doll as the "nice doll," and 69% selected the black doll as the doll with the nice color. Hraba and Grant also found that more of their subjects, 86% as compared to 72% of the subjects in Clark and Clark, made the correct identification of which doll looks like a Negro child.

Johnson (1966) found, from his experiments with 18 black youths in a
Harlem freedom school, that these students rated black equal to white. Gregor and McPherson (1966) found that Southern, urban black children 6 and 7 years old generally preferred a black doll. Their results showed that 59% of the black children chose the black doll as the one that looked the best; 60% selected the black doll as the one with the nice color; and 59% identified the black doll as the "nice doll."

Results of a change in the image of blacks in society held by whites has also been found. Based upon the results of their empirical data looking at whites' stereotypes of blacks and whites, Gaertner and McLaughlin (1983) suggested that white college students no longer differentially associate or ascribe negative characteristics to blacks, even though they may ascribe more positive traits to whites. In order to prevent responding indicative of social desirability in this experiment, a lexical decision task was given to subjects and reaction times were measured. Subjects were unaware that the experiment involved stereotyping when responding, and therefore, would not have a reason to bias responses due to social desirability. In addition, Herrnstein (1990) further states that white attitudes toward blacks indicate a pattern of change, as the principle of equal opportunity has been generally accepted.

There have been various methodological problems in using pictures, and especially dolls, to measure racial identity (Vaughan, 1986). One such problem is found in the interpretation of the extent of misidentification found in the Clarks' studies. This issue of misidentification found by the Clarks, where black children were reported as incorrectly identifying the white doll as the one that looked like them, was further addressed by Greenwald and Oppenheim (1968). Greenwald and Oppenheim (1968) found that with the inclusion of an intermediate (mulatto) skin color alternative, there would be a reduction in the misidentification of the black children.
They performed an experiment modeled after Clark and Clark (1947), except there were three dolls instead of two, a dark brown, mulatto, and white one. They used 75 nursery school children, 39 black and 36 white. As hypothesized, the mulatto doll did play a role in reducing the percentage of misidentification, only 13% of the black children compared to 39% found by the Clarks' did not identify with the correct doll. If we look at the light-skinned black children, only 11% misidentified themselves as compared to 80% in the Clarks' study, and there was no misidentification found in the dark-skinned black children, compared to 19% in the Clarks' results. Misidentification among white children was 44%. However, Greenwald and Oppenheim (1968) concluded that the mulatto doll could be an appropriate choice for some white children as well. With this taken into consideration, they found the misidentification of white children to be only 19%. Greenwald and Oppenheim (1968) concluded that the 19% misidentification found in the white children was not significantly different from the 13% misidentification found in the black children. Their use of a white comparison group and a wider range of response choices suggested that there was nothing unusual about black children's misidentification as was previously concluded by the Clarks (Greenwald & Oppenheim, 1968).

Even though misidentification may have been incorrectly interpreted, there is still the issue of doll preference, and how black children responded to questions of which doll looks nice in the 1930's as compared to how they responded in more recent years. The trend would seem to indicate that, in fact, responses in this area have changed. There are, however, studies that would contradict this conclusion. Gopaul-McNicol (1988) examined racial identification and racial preference in 191 black preschool children in New York and Trinidad. The results reported a substantial majority of black preschool children in both New York and Trinidad displayed a preference for
the white doll and identified with the white doll. In addition, the children more frequently chose the black doll as the one that "looks bad." It was also noted that the children made disturbing remarks such as, "I don't like being black," and "I will be rich if I am like the white doll." This study could be criticized again as making an incorrect interpretation of the misidentification findings since an intermediate skin-colored doll was not used. In the case of doll preference, the same types of changes that were occurring in other parts of the United States in terms of the Black Pride Movement may have impacted these residents of New York and Trinidad to a lesser degree. Gopaul-McNicol (1988) found that while an area may be predominantly black, this will not prevent white supremacy to prevail if oppression is occurring. This is exemplified by the fact that while Trinidad's population is majorily black, the culture still possesses a perception of white supremacy fostered in the media, the classroom and at home. Consequently, many of these children are deprived of their share in the pride that one would expect to come from being a member of the majority group in a population (Gopaul-McNicol, 1988).

In addition, Fine and Bowers (1984) also replicated the Clark's (1947) study with 58 black children, ages 4 to 6 in New Jersey. Their results were also more similar to those of the studies during the period prior to the Civil Rights Movement. They found 52% of the children preferred to play with the black doll, 48% chose the black doll as the one that "looks nice," 52% chose it as the one that "looked bad," 52% chose the black doll as the one that "looks like a negro," and 69% identified the doll as looking like themselves. The authors concluded that their results could be an indication that black children are growing more ambivalent about racial identity and are experiencing the oppressive ideas that prevailed in the society before the Civil Rights Movement (Fine & Bowers, 1984).
I argue that perhaps there is another explanation as to why these studies may not support the basic theme that the concept of blacks held by blacks in the society has changed to be more positive. If change occurs at different rates due to differential impact, then studies done in areas where change may come slower will not produce the same results as studies done elsewhere (Vaughan, 1986). For example, in Lincoln, Nebraska, where Hraba and Grant (1970) performed their study, there had been a campaign to promote Black Pride in the two years prior to their research. This could not have been the case in New York, New Jersey, or Trinidad. The process of social change in race relations in the United States may not impact the entire nation at the same rate then nor now (Vaughan, 1986). In addition, by the mid to late 1980's, the gains of the Civil Rights movement may have been fading in some communities.

Based upon the trends in past research, I believe that currently, while blacks still have knowledge of the cultural stereotypes about blacks, it seems that their beliefs in these stereotypes have decreased at least for a period of time since the occurrence of the Civil Rights Movement. In turn, these studies since the Civil Rights Movement have depicted a greater occurrence of the rejection of negative black stereotypes by black children (Hraba & Grant, 1970; Johnson, 1966; Gregor & McPherson, 1966; but see Gopaul-McNicol, 1988; and Fine & Bowers, 1984). While, in general, there appears to be a greater rejection of stereotypes, recent contradictory findings could suggest a regression in what seemed to be a positive change in the attitudes of black individuals. While knowledge of the culture's stereotypes about blacks inevitably may be acquired by black individuals, the degree to which individuals believe in these stereotypes may be determined by other socialization processes. That is, although one may have knowledge of a stereotype, his or her personal beliefs may or may not be
congruent with the stereotype (Devine, 1989). If the individual is socialized to possess a positive belief system regarding an ethnic group, he or she will be less likely to employ in his or her belief systems the negative characteristics of the stereotype, even though this individual may have knowledge of such characteristics. Ashmore and Del Boca (1981) also made note that contemporary social scientists do not equate knowledge of stereotypes with belief in them. Instead, stereotypes are regarded as a component of an overall body of knowledge an individual possesses in regards to certain groups in the society. This body of knowledge may be consistent with the beliefs of the individual, or it may be inconsistent, which would lead the individual to dispute rather than believe in the information contained in the stereotype (Ashmore & Del Boca, 1981). Nevertheless, even though the individual may not believe in the stereotypic information, this information may still be cognitively accessible to the person, and therefore used in processing information about individuals in that group when conscious inhibition is prevented.

Social Cognitive Models of Internalization of Stereotypes

In recent years theorists have focused on understanding how knowledge, including stereotypes, is represented in memory. Current theories suggest that all knowledge acquired by individuals is contained within complex knowledge structures, sometimes termed schemata (Fiske & Taylor, 1984). Fiske and Taylor (1984) defined a schema as a cognitive structure that represents organized knowledge about a given concept or type of stimulus. These organized knowledge structures contain information that is congruent, as well as incongruent, with the overall content of the knowledge structure. For example, an individual's knowledge structure
concerning blacks may include knowledge of positive and negative stereotypic information as well as attributes that may contradict the stereotypes. They reasoned that people use these schemas to guide how they encode, retrieve, and make inferences about raw information that they receive from the environment. People have a tendency to simplify reality by interpreting specific instances in light of the schemas they possess, and to draw conclusions about a particular situation, object or person from information already existing in their memory. Further, this organized prior knowledge enables one to function in a social world that otherwise would be perceived as too complex (Fiske & Taylor, 1984).

This grouping of information can be found with reference to social categories (Ehrlich, 1973). Ehrlich feels that all social objects can be grouped and classified. He states that this shared classification of social objects represent both individual and societal responses to the management of the complexity of the culture. These shared classifications are termed social categories. Examples of social categories would be race, religion or nationality. These examples represent classifications of people based on distinctive, easily recognized and easily articulated criteria shared by members of the society. Stereotypes are descriptive characteristics or traits assigned to individuals based on their membership in a particular social category (Ashmore & Del Boca, 1981). A schema about a particular social category of people will include stereotypes, if any exist with regard to the category in the culture. This model would explain internalization as a process in which an individual incorporates the stereotypes of the culture, in addition to their own unique experiences with members of a given category, into the corresponding social schema. Individuals will then interpret the behavior of and react towards members of these social categories based, in large part, on the information contained within their
schemas. These schemas possessing stereotypical information are described as conservative, but not necessarily rigid structures, so that change, while difficult, is possible.

This understanding of knowledge structures offers an explanation as to why differences in the internalization of negative stereotypes of blacks occurred in some black children after the Civil Rights Movement. Over time, attitudes regarding blacks in the society changed and began to include more positive information contradictory to the negative stereotypes. People eventually began to incorporate additional characteristics, contradictory to the stereotypes about blacks, as a part of their revised schemas. With these modifications, in some instances, negative evaluations could be moderated (Hraba & Grant, 1970; Rosenberg & Simmons, 1971).

Negative evaluations are not always moderated, however, because the processing of stereotypic information appears to be somewhat more complex than described above. There is some evidence that once the content of our social schemas is extremely well-learned, it becomes so embedded in our knowledge structures that we may process or use this information relatively automatically. Bargh (1989) defines an automatic process to be "an effortless sequence of processing that is developed from frequent experiences within a particular stimulus domain, and triggered by the presence of this stimulus without the necessity of conscious intent or control" (page 2). Since automatic processing does not involve conscious intent or control, the information used in this type of processing is comprised of those data which are most accessible to the individual. He defines more conscious or controlled processes as involving consciously processed thoughts, awareness of what information is being evaluated, and control over one's responses to this evaluation. Conscious processes are flexible and easily adaptable to the particular features of the current
situation.

Devine (1989) reviewed evidence (Katz, 1976; Porter, 1971; Proshansky, 1966) that stereotypes are well established in children's memories before children develop the cognitive ability and flexibility to question or evaluate the validity of the stereotypes. As a consequence, she suggested that one's personal beliefs about the appropriateness of stereotypic ascriptions are newer cognitive structures than one's stereotypic knowledge structures. Stereotypes are believed to have a longer history of activation and therefore are more chronically accessible than are personal beliefs. In addition, because the stereotype has been frequently activated in the past, it is a set of well-learned associations (Dovidio, Evans, & Tyler, 1986). These well-learned associations are automatically activated and become highly accessible in the presence of a member of the stereotyped group (Devine, 1989). Devine further said that this unintentional activation of the stereotypes is equally strong and equally inescapable whether or not the person believes in the stereotype. The mere presence of the target stimulus will, in a sense, trigger these chronically accessible constructs (e.g., stereotypes), so that the person is more likely to use stereotypic information while processing information at that time. An individual who does not believe in a particular stereotype, and who deems it an inappropriate basis for behavior or evaluation will experience a conflict between the automatically activated stereotype and his or her own personal beliefs.

Because the stereotypic associations have a longer history of activation than the more newly acquired personal beliefs, rejection of the stereotype requires intentional inhibition of the automatically activated stereotype and activation of the newer personal belief structure. This inhibition and initiation requires controlled processing. Therefore, Devine
concludes that whereas stereotypes are automatically activated, activation of personal beliefs requires conscious processing.

This need for conscious processing in order to reject the stereotypes is a consequence of the individual's having to overcome a lifetime of socialization experiences which have taught the stereotypes of the culture. Therefore, if a stereotype is automatically activated in the presence of a member of the stereotyped group, and an individual who does not believe in the stereotype cannot or does not consciously monitor this activation, this activated stereotypic information will influence subsequent processing of information. Devine suggested that this is the way in which knowledge of stereotypes could influence responses even of those individuals who do not endorse the stereotypes. Further, Devine stated that in order for the individual to begin rejecting stereotypes at an automatic level, he or she must increase the accessibility of the cognitive structures that represent the newer set of associations which do not utilize the negative stereotypes. As a result, Devine theorized that if these new associations occur often and over time, the information in the belief structures of the individual should become as accessible as the stereotyped information.

In order to test these theories, Devine (1989) first performed a study in which she looked at the extent to which high- versus low- prejudice individuals differed in their knowledge of cultural stereotypes of blacks. Devine had forty white introductory psychology students participate in her study. She created the high- and low- prejudiced categories by administering to all subjects McConahay's (1986) seven-item Modern Racism Scale. This scale has proven to be useful in identifying an individual's level of racism. Subjects were assigned to a high- or low- prejudice group based on how they scored on the scale. Then she asked the students to list the characteristics forming the stereotype of black individuals.
Devine found no difference between the high- and low-prejudice subjects' description of the cultural stereotypes concerning blacks, indicating equal knowledge of the stereotype by all individuals. There were no statistically significant differences in the components of the stereotypes that were reported by the two groups, and judges could not identify the high-prejudice subjects' listings from the low-prejudice subjects' judging from the content of their lists. Although Devine's findings are based on white subjects, I believe that these findings would apply to any individual in the society as suggested by Ehrlich (1973).

In Study 2, Devine (1989) examined both the effects of level of prejudice (i.e., high- versus low-prejudice) and automatic stereotype priming on subjects' evaluations of ambiguous stereotype-related behaviors. These were performed by a race-unspecified target person under conditions that precluded the possibility of controlled processes explaining the effects that resulted. Automatic stereotype priming is the automatic activation of stereotypic information due to the presence of an activating stimulus or prime. A prime is a word representing the stereotyped group. Results suggested that automatic stereotype activation was equally strong and equally inescapable for high- and low-prejudiced subjects. Devine found that when the subjects' ability to consciously monitor stereotype activation was impaired, both high- and low-prejudiced subjects produced stereotype-congruent or prejudiced-like responses. As Bargh (1989) has suggested, those traits which were strongly associated with a social category, in this case blacks, were chronically accessible to the perceiver in the presence of a target stimulus.

In Study 3, Devine's (1989) results provided evidence that controlled processes can inhibit the effects of automatic processing, or chronically accessible constructs, when knowledge of the stereotypes is not congruent
with individuals' personal beliefs. In this study, subjects were asked to list their thoughts about the racial group of blacks under anonymous conditions. It was found that under these conditions, high- and low-prejudiced subjects wrote different thoughts about blacks. For example, high-prejudiced subjects gave responses such as "Blacks are free loaders," or "Blacks cause problems," as opposed to such responses such as "Blacks and whites are equal," or "Affirmative action will restore historical inequities," as given by low-prejudiced subjects. According to this model, although low-prejudiced individuals have changed their beliefs concerning stereotyped group members to be more egalitarian, the stereotypes have not been eliminated from their memory structures. Instead Devine demonstrated that the stereotype remained a well-organized, frequently activated knowledge structure.

Applying these constructs of relatively automatic to relatively controlled processing of information to the phenomenon of internalization, it would seem that the degree of internalization of stereotypes can be measured by at least two different cognitive factors: (1) the relative cognitive accessibility of the relevant stereotypic traits to the individual, and (2) the relevant belief systems of the individual. Previously cited definitions and studies of internalization (e.g., Clark & Clark, 1939, 1947; Katz, 1976; Goodman, 1952; Proshansky, 1966) have essentially represented internalization as being beliefs or attitudes about one's own social categories, or identification with another, higher status social category. In establishing a more complete description and understanding of internalization, the degree of cognitive accessibility of stereotypic information must be taken into consideration, as well as conscious beliefs. While some individuals may not consciously endorse the stereotypes of the culture about their own stigmatized group(s), this stereotypic information
still may influence the process of self-evaluation, judgment, decision-making, and behavior, to the degree that this information is cognitively accessible to them. If individuals automatically assign stereotypes to groups, this is indicative of a high degree of accessibility of those stereotypic knowledge structures. Responses made at a relatively more automatic level would not allow for active, conscious inhibition or evaluation of the stereotypic information, but instead, would result in decisions based on the relatively accessible stereotypic information rather than the person's more egalitarian belief system. If, however, the person does not consciously endorse these stereotypes, then controlled processing would be more likely to result in thoughts and decisions which do not indicate stereotypic judgements. Therefore, complete internalization might be described as both an integration of knowledge of relevant stereotypes into knowledge structures which are readily accessible, and conscious endorsement of this information. Conversely, an individual in whom stereotypic information is no longer internalized is one for whom this information is no longer readily accessible, and is not consciously endorsed. This individual still has knowledge of the stereotypes, but this knowledge simply is no longer easily accessible, and is not believed. Various degrees of partial internalization could exist when individuals do not consciously endorse the relevant stereotypes of the culture; but still access this stereotypic information in some decisions, as a result of this information being relatively accessible.

All individuals who grow up as a part of a stigmatized group are believed to experience some degree of internalization along a continuum from complete internalization and chronic accessibility of these stereotypes to total rejection of stereotypic beliefs and only relative accessibility of stereotypic knowledge structures (Atkinson, Morton, & Sue,
In order for individuals to move towards total rejection of internalized stereotypes, where stereotypic information is not accessible as well as not consciously endorsed, two difficult tasks must be undertaken. First, not only must belief structures about one's own group be changed to become positive, but the more difficult task of strengthening the cognitive accessibility of stereotypic-incongruent information must occur as well.

These theories suggest that for a person's chronically accessible stereotypic responses to change, the person needs to frequently activate and think about his or her egalitarian personal beliefs. The individual must increase the frequency with which the personal belief structure is activated when responding to members of the stereotyped group, so that the contents of the personal belief structures become more chronically accessible than the older stereotypic knowledge structures. The more chronically accessible the individual's personal belief structures become, the more likely they are to provide a strong, rival response to these responses that would normally be expected to follow from more automatic stereotypic activation. Before the contents of the newer belief system can be activated at a relatively more automatic level, the previously well-learned association between stereotypic attitudes and blacks will have to be weakened and the association of black individuals with the new counter-stereotypic, positive beliefs will have to be made stronger. In conclusion, the belief change process requires intention, attention, and time. The individual must not only inhibit automatically activated stereotypic information, but he or she must also intentionally replace such an activation with responses congruent with the new belief system (Devine, 1989).

Summary
Devine (1989) concluded that knowledge of negative stereotypes about
blacks is both inevitable and well-learned, so as to be chronically accessible at an automatic level by American white individuals, regardless of whether those individuals are egalitarian or prejudiced towards blacks in their personal beliefs. Theories of internalization (Ehrlich, 1973) would suggest that this process of learning negative stereotypes about blacks may be just as inexorable for American black children as for white children. Based upon my review of the recent trends in empirical findings on internalization of stereotypes, I believe that even though the beliefs of black individuals concerning blacks have changed to be more positive since the Civil Rights movement, the cognitive accessibility of negative stereotypic information for many black individuals has not been reduced in comparison to the accessibility of contradictory, counter stereotypic information.

This idea of chronic accessibility of stereotypic knowledge structures as a part of the internalization process has not been evaluated in blacks. Devine established a theoretical framework by which to evaluate such a phenomenon in her experiments involving high- and low-prejudiced white subjects. I will utilize this framework in the investigation of cognitive accessibility of black and white stereotypes for black subjects.

Cognitive accessibility of stereotypes will be measured through an analysis of reaction times of subjects in response to stereotypic traits following the names of groups using a modification of the priming procedure developed by Dovidio and colleagues (Dovidio, Evans, and Tyler, 1986; Dovidio, Perdue & Gaertner, 1991). Dovidio et al. used a computer task which required subjects to make "yes" or "no" responses to noun-adjective pairs based upon whether the adjective could ever be descriptive of the noun. The nouns were black, white, or house and the adjectives were traits descriptive of houses or traits descriptive of people that were identified as black or
white stereotypes. They found their white subjects displayed faster reaction times to white stereotypic traits and positive characteristics when they followed the white prime than when they followed the black prime. In addition, subjects had faster reaction times to black stereotypic traits and negative characteristics when they followed the black prime than when they followed a white prime. I will modify the Dovidio et. al. procedure in a pattern modeled after Dovidio, Perdue, and Gaertner (1991) by reducing the amount of time subjects view the prime and by adding a backward mask to make the task relatively more automatic. Further, a category prime of "me" will be added to access any differences in an individuals' internalized knowledge of the stigmatized group to which they belong, and their perceived self (as a member of such a group).

Hypothesis 1

The Doll studies and effects of Civil Rights Movement suggest that the stronger the association of positive beliefs with blacks, the less accessible negative attitudes or beliefs should be at both the automatic and controlled levels of processing. I agree that the degree to which negative attitudes concerning blacks are chronically accessible by blacks will not be as great as in the past before such positive changes as brought about by the Civil Rights Movement. And in turn, acceptance of negative stereotypes also will not be as abundant. However, I do hypothesize that black college students will demonstrate some evidence of chronic accessibility of stereotypes and negative attributes about blacks in their knowledge structures concerning blacks. As a result, black subjects will have faster reaction times to black stereotypic and negative adjectives after the primes black and me than after the prime white, and faster reaction times to white stereotypic adjectives
after the prime white than after black or me. Black subjects also will respond faster to negative traits and black stereotypes as compared to positive traits and white stereotypes, after the primes black and me.

The Implications of Self-esteem for Internalization of Negative Stereotypes

Differences in self-esteem levels of black individuals may be related to internalization of negative stereotypes by blacks. Self-concept is described as a construct consisting of conscious and unconscious feelings of the self (Samuels, 1977). “It encompasses all that a child brings to the statement ‘This is me,’” and includes an understanding of one’s attitudes, capabilities, and the feelings accompanying these self-perceptions (Phillips & Zigler, 1980, p. 112). These feelings and thoughts are believed to be constantly changing by new learning and experiences from the individual’s interaction with his or her environment (McDonald, 1980; Phillips & Zigler, 1980; and Samuels, 1977). The evaluative component of the self-concept is self-esteem. McDonald (1980) and Samuels (1977) defined self-esteem as involving the acceptance of and respect for the self. Porter (1971) and Rosenberg and Simmons (1971) described self-esteem as one’s basic sense of personal worth and adequacy. Allport (1937, 1943, 1955) and Bloom (1964) suggested that self-identity and self-esteem begin to form as a part of racial awareness during the preschool years. According to Allport, the three-year old has achieved bodily sense, self-identity, and self-esteem (Samuels, 1977). Bloom (1964) suggested that the most rapid growth and development of the personality occurs in the first five years of life, and that the basic self is acquired within the family in these early years (Samuels, 1977). Although they start to form early, self-attitudes and self-conceptions are not static but are constantly changing and developing in the
process of building self-esteem (Felker, 1974). Yeatts (1968) and Beglis and Sheikh (1974) found that the content of the self-concept changed with age, which resulted in more abstract and symbolic identifications as the child grew older.

The concept of self-esteem seems to be more complicated for ethnic minorities than for dominant groups, because, in addition to the individual achieving an identity of self, they must also achieve an identity as a member of an ethnic minority group. This process of ethnic identity development has been shown to have an effect on levels of self-esteem in minorities. Porter (1971) suggested that the devaluation of one's racial group, as was the case in the past for blacks in the society, created feelings of inadequacy and insecurity regarding the self and that this was still happening after the black power movements. Porter conducted a study testing his theory that due to the low evaluation of blacks in American society, black children would have less positive personal identities than do whites. He found a significant difference in the overall scores by race. Whites had better personal self-concepts than did blacks, with sixty-three percent of the whites versus thirty-one percent of the blacks having high self-esteem (Porter, 1971). Clearly, some black children were learning cultural evaluations of race that unfavorably affected their self-esteem regardless of the Civil Rights movement (Porter, 1971).

Other research of the 1970's and 1980's (e.g., Clark, 1985; Rosenberg & Simmons, 1972) supported a belief that the evaluation of blacks in the society would affect the level of self-esteem of black individuals. However, this research showed a change in the trend of self-esteem levels of blacks. It was shown that black Americans did not have lower self-esteem or more negative self-concepts than white Americans, as was the case in the past (Clark, 1985). Theorists argued that white America was no longer the
looking glass for black America and that black Americans were internalizing positive attitudes from their immediate environment, such as their family, and neighborhoods (Clark, 1985; Wyne, White & Coop, 1974). Beglis and Sheikh (1974) suggested that the impact of the "black nationalism" movement, with the emphasis on "black is beautiful," and the appearance of more blacks on television and in advertising had a considerable effect on this generation of black children. They found that the self-concepts of the black children varied slightly in terms of the content, but not in terms of the extent to which positive evaluations were made. Beglis and Sheikh believed that the self-concepts of black children were being affected by the new social climate, and perhaps there was an increasing emphasis on racial pride in their self-perceptions. Empirical evidence has been supportive of their claims.

For example, Yeatts (1968) conducted a study of 8,979 children from a Florida public school system, of which approximately one-third were black, with all socio-economic levels represented. Yeatts evaluated the subjects' responses to the Gordon's "How I See Myself" self-report scale. The results rejected the hypothesis that self-reported self-concept would vary by race. Instead they found that self-reported self-concept was not a unitary concept, and it varied by sex and age.

Rosenberg and Simmons (1972) found that, while black subjects found lighter skin color to be more attractive regardless of whether they themselves had darker skin, this preference did not affect whether they considered themselves physically attractive. Sixty-three percent of the black children and 65% of the white children said that they were either "very good-looking" or "pretty good-looking." The subjects' evaluations of themselves as attractive were related to self-esteem. They found no differences in the overall levels of self-esteem in blacks versus whites.
They reasoned that the belief structures of Blacks had begun to change, allowing them to enjoy greater levels of self-esteem.

Samuels and Griffore (1979) conducted a study of 72 black, white, and Mexican-American boys and girls and evaluated their self-esteem using the Purdue Self-Concept Scale for Preschool Children. They too found no differences in self-esteem among black, white or Mexican-Americans.

Wyne, White, and Coop (1974) suggested that there was a shift from a self characterized by a sense of “nobodiness” to a self filled with “somebodiness;” that is, a change occurred in blacks from evaluating the self against white significant others, to an evaluation of self that is clearly and proudly reflecting of black significant others. They further stated that this increase in an orientation towards a positive black image helped black individuals overcome the negative stereotypic imagery ever present in society.

Porter (1971) felt that lower levels of self-esteem in black children resulted from the negative evaluations of blacks in the society. The changes in the image of blacks to a more positive one is posited to have resulted in higher levels of self-esteem in blacks (Beglis & Sheikh, 1974; Rosenberg & Simmons, 1972; Samuels & Griffore, 1979; Wyne et al., 1974; Yeatts, 1968). Since the evaluation of self would also involve the evaluation of blacks by black individuals, this higher level of self-esteem may be related to the individual's increased rejection of the negative stereotypes concerning himself or herself, and blacks in general, rather than the internalization of them.

While Porter (1971) found self-esteem levels of blacks to be lower than their white counterparts, Yeatts (1968) and others (e.g., Beglis & Sheikh, 1974; Rosenberg & Simmons, 1972; Samuels & Griffore, 1979) found self-esteem levels of blacks to be no different than those levels found in
whites. Theorists who have critiqued the literature on racial preference and self-esteem levels of minority ethnic groups say that since these studies have been conflicting in their findings, they are not a sound basis from which to draw conclusions (Banks, 1976). Banks suggested that there is a need to discard such studies as the Clark experiments because their findings did not show significant differences, and therefore, may be a result of chance. However, to disregard years of research and findings consistent among numerous researchers would be a greater error. Instead of ignoring inconsistent findings, one can seek to find an explanation as to why differences in self-esteem levels reported in research on minorities has resulted after the Civil Rights movement.

One explanation of why self-esteem levels vary among members of ethnic groups involves the individual’s level or position in his or her ethnic identity development process (Cross, 1978; White & Burke, 1987). This approach, referred to as identity theory, considers ethnic identity to be a portion of the self that contains shared meanings of what it is to be a member of a given ethnic group (White & Burke, 1987). Marcia (1980) and Cross (1978) each identify a stage model of ethnic identity development. In Marcia’s theory, Erikson’s model of ego identity development is operationalized for ethnic groups. Erikson makes the point that members of an oppressed and exploited minority, such as blacks, may internalize the negative views of the dominant society, and in turn, develop a negative identity and self-hatred. Both Marcia’s and Cross’s models share the idea that an achieved identity is the result of an identity crisis, which involves a period of search or exploration, leading to a clear commitment (Phinney, 1989). The models differ, however, in that Marcia’s paradigm does not suggest a necessary developmental progression, whereas Cross’ model describes a progressive pattern of change in the identity of blacks. Cross
describes blacks as progressing from lower to more advanced stages of black identity.

Marcia developed four identity statuses, based on the presence or absence of one’s exploration and commitment to one’s racial identity. The individual is characterized as having one of four types of identities: a diffuse identity, foreclosed status, moratorium or achieved identity. A person with a diffuse identity has neither engaged in exploration nor made a commitment. A commitment made without exploration, usually on the basis of parental values, characterizes an individual in the foreclosed status. A person in the process of exploration without having made a commitment is in moratorium. Finally, an individual who has made a firm commitment following a period of exploration is one who has an achieved identity. An achieved identity is characterized by a clear, confident acceptance of oneself as a member of a minority group, replacing the negative self-image.

As discussed by Parham and Helms (1985), Cross (1978) identified the process of developing a black identity as a progression through four distinct psychological stages. The person is believed to evolve from a perception in which they degrade themselves for being black to a perception in which they become secure about themselves as black people. The four stages, ranging from least secure to most secure with oneself, are pre-encounter, encounter, immersion-emersion, and internalization.

The pre-encounter stage is characterized by the individual viewing and perceiving the world as being non-black, anti-black, or the opposite of black. Individuals think, act, and behave in ways that devalue their black identity, and experience whiteness as an ideal. In the encounter stage, the individual experiences a shocking personal or social event that motivates them to challenge their present frame of reference and become receptive to a new interpretation of identity. The person starts to change from an antiblack
world-view. Immersion-emersion is the third stage. Here, individuals begin developing a sense of "Black Pride." Their level of black awareness is high, but the degree of internalized, positive attitudes about being black is at a minimum. Individuals tend to slander white people while glorifying blacks. In the final stage, which is internalization, individuals obtain a feeling of inner security and feel more satisfied with being black. This occurs when aspects of the immersion-emersion phase have been incorporated into an individual's self-concept. The individual has internalized positive frames of reference for being black. This would coincide with Marcia's achieved identity stage. There is a commitment to being black, and a secure understanding and acceptance of one's identity (Krate, Leventhal, & Silverstein, 1974; Parham & Helms, 1985; Phinney, 1989).

These earlier models of racial identity have come under criticism as not showing the complete concept of racial identity development (Atkinson, Morton, & Sue, 1989). Some of the criticisms of these models involve conclusions that they unintentionally blame the victim, they have become obsolete since they depend on societal factors that may have changed, they are erroneous in assuming that identity development follows a linear and continuous course and they are incorrect in making us view the stages as static, discrete entities rather than a dynamic and evolving process (Atkinson, Morton, & Sue, 1989). In addition, Smith (1989) criticizes earlier models as being based on racial self-hatred and a view of racial conflict that is relevant but perhaps somewhat outdated. Therefore, one needs to look for theories of development identifying positive racial identity development. Despite the criticisms, these earlier models provided a basis from which more sophisticated models could be developed (Atkinson, Morton, & Sue, 1989).

Due to the failings of the initial models of racial identity
development, researchers have in recent years modified the models in order to address these shortcomings. The more recent model we will look at is a modification of Cross' (1978) model and is put forth by Atkinson, Morton, and Sue (1989). They identify a minority identity model, which they feel eliminates the flaws of the earlier models. The model views minority attitudes and behaviors as a product of an identity development continuum, rather than a linear progression as suggested by Cross (1978). They feel that an individual may exist in any one of the five stages without following any progression. For example, a person could move from stage five back to any one of the lower stages. Their model identifies five stages of development that any oppressed group of people may experience as they struggle to understand themselves in terms of their own minority culture, the dominant culture and the oppressive relationship between the two. The stages are as follows.

Stage one is the Conformity Stage. Minority individuals in this stage are identified by their unequivocal preference for dominant culture values over those of their own culture. There is a high desire to "assimilate and acculturate." In this stage, the attitudes of minorities about themselves are those of devaluation and depreciation. Individuals have group-depreciating attitudes towards members of the same minority group, discriminatory attitudes towards members of other minority groups and group-appreciating attitudes towards members of the dominant group.

Stage two is the Dissonance Stage. The movement into this stage is often gradual; however, as with Cross' (1978) model, a monumental event may propel the minority individual into this stage. In this stage minority individuals begin to experience a breakdown in their denial system. In this stage, individuals experience a conflict between self-depreciating and self-appreciating attitudes, a conflict between group-depreciating and group-
appreciating attitudes, a conflict between dominant-held views of minority hierarchy and feelings of shared experience towards members of different minority groups, and a conflict between group-appreciating and group-depreciating attitudes toward members of the dominant group.

Stage three is the Resistance and Immersion Stage. The minority individual completely endorses minority-held views and rejects the dominant society and culture. Desire to eliminate oppression of one's minority group becomes the motivation of the individual's behavior. In this stage, the individual has self-appreciating attitudes, group-appreciating attitudes towards members of one's minority group, conflicting feelings of empathy for other minority experiences and feelings of culturocentrism, and group-depreciating attitudes towards members of the dominant group.

Stage four is the Introspection Stage. The individual experiences discontent and discomfort with group views rigidly held in the Resistance and Immersion Stage, and the person's attitudes change to notions of greater individual autonomy. In this stage, the person experiences concern for the basis of self-appreciating attitudes, concern with the nature of group appreciation, concern with ethnocentric basis for judging others, and concern with the basis of dominant group depreciation.

Stage five is the Synergetic Articulation and Awareness Stage. Minority individuals experience a sense of self-fulfillment with regard to cultural identity. Desire to eliminate all forms of oppression becomes motivation for behavior. Feelings of discomfort and conflicts from the Introspection Stage have all been resolved. The individual has self-appreciating attitudes, group-appreciating attitudes for members of the same minority group, as well as for members of different minorities, and attitudes of selective appreciating towards members of the dominant group.

Although five stages are presented in the model, Atkinson et. al.
(1989) state that their model is more accurately pictured as a continuous process, in which one stage blends with another and the boundaries between stages are not clear. From the presented models on racial identity development, one can see that an individual's position in the process of racial identity development will affect the types of racial attitudes towards self and others that the person will possess.

Through studying the identity development models, it has been shown that the stage of an individual is related to this person's level of self-esteem. Paul and Fischer (1979) found racial acceptance among black adolescents to be related to a more positive self-concept. Parham and Helms (1985) found that the encounter and internalization attitudes of Cross' (1978) model were positively related to self-esteem. Phinney (1989) found minority adolescents who had achieved ethnic identity to have higher scores in self-evaluation. White and Burke (1987) discovered a significant and positive correlation between commitment and global self-esteem. The more black individuals were committed to a black ethnic identity, the higher was their self-esteem. In addition, Phinney and Alipuria (1990) found in college students that ethnic identity commitment resulting in a confident sense of self as a member of an ethnic group was significantly related to self-esteem across four ethnic groups; not just blacks.

It would appear that self-identification, a sense of belonging, and pride in one's group are crucial aspects of ethnic identity that are present in varying degrees (Phinney, 1990). The extent to which individuals have obtained an achieved ethnic identity has been clearly shown to be related to self-esteem. These results may explain why certain studies have reported low self-esteem in blacks, while others have reported positive self-esteem levels. Cross and Marcia state that an achieved identity results from the individual encountering a startling event that motivates them to search and
explore new interpretations of identity and then to commit to this more positive interpretation as one's own ethnic identity. The Civil Rights movement can be identified as one key startling event that triggered for many black Americans the start of what previously may have been an undeveloped ethnic identity. Atkinson et. al. (1989) argue that not all minority individuals experience the entire range of stages of racial identity development. Furthermore, prior to the Civil Rights Movement, a time in which the transition of many individuals through the racial identity development process was accelerated, many people may have lived their lives in the first stage. Currently however, some minority individuals may be born and raised in a family functioning at level five and never appear to experience a level-one sense of identity. On the other hand, it is their opinion that many minority individuals are raised by parents functioning at level five, but in coming to grips with their own identity, these children often move from level five to one of the lower levels, and work through the process for themselves. From this I reason that more minority individuals may be able to function at level five due to the positive impact of the Civil Rights Movement (Atkinson, Morton, & Sue, 1989). During this period, many blacks found role models in politics, sports, the media and a decrease in the derogation of blacks (Paul & Fischer, 1979). Houston (1984) states that as a consequence of the Civil Rights movement, black communities began to show a markedly enhanced focus on unity, self-determination, power and racial pride. Blacks have been characterized as moving from a self-perception in which they degraded themselves for being black, to one where they have pride in being black (Parham & Helms, 1985).

Based upon these theories on ethnic identity development, researchers should not assume that all blacks have either high or low levels of self-esteem or possess similar racial attitudes (Parham & Helms, 1985). Blacks'
varying levels of self-esteem can be related to the extent to which they have achieved ethnic identity. The stage in which a black individual exists is believed to be affected by this person's socio-cultural environment. While the Civil Rights movement may not have been felt in the same degree by all individuals, as a result of its occurrence, more blacks seem to have achieved ethnic identity. Nevertheless, all blacks may not be at this point of ethnic identity achievement, which would explain differences in self-esteem levels among black individuals in the different studies. The present research will not attempt to identify or predict levels of ethnic identity development in subjects, but will focus on whether the degree of internalization of racial stereotypes, defined in two ways, by relative cognitive accessibility and degree of racist beliefs, will be related to differences in levels of self-esteem in blacks.

Hypothesis 2

Individuals high in self-esteem are found to have a higher achievement of ethnic identity (Parham & Helms, 1985; Paul & Fischer, 1979; Phinney, 1989; Phinney & Alipuria, 1990; White & Burke, 1987). This achievement of ethnic identity is characterized by a secure understanding and acceptance of being black, as well as internalized positive attitudes regarding being black (Parham & Helms, 1985). Therefore, this higher level of ethnic identity and higher self-esteem about oneself and one's ethnic group should be related to rejection of negative stereotypes about blacks and acceptance of positive traits by blacks. In the first hypothesis, I predicted that black college students would respond in a way indicative of relative accessibility of stereotypes and negative attributes about blacks in their knowledge structures concerning blacks.

As my second hypothesis, I further predict that high self-esteem will
be inversely related to the degree to which negative and/or black stereotypes are chronically accessible to black subjects. Specifically, black subjects with higher levels of self-esteem are predicted to demonstrate significantly slower reaction times to black stereotypes and negative traits after the primes black and me, than will blacks with lower self-esteem. In addition, it is anticipated that these subjects will not respond faster to negative, as compared to positive trait adjectives, nor black, as compared to white stereotyped adjectives, after the prime black or me. If so, these responses will indicate that negative stereotypic information for the categories of blacks and self is less cognitively accessible for blacks higher in self-esteem than for those blacks lower in self-esteem.

Additional secondary research questions were as follows. Would greater accessibility of positive and/or white stereotypes in white subjects be related to higher self-esteem in whites? This is being done in order to provide a comparison group to use in evaluating the results found in black students.

Second, racial beliefs will be measured in order to garner evidence that while blacks may still have cultural stereotypes about blacks cognitively accessible to them, they no longer demonstrate racist beliefs. A third research question will be addressed by evaluating black subjects' cognitive representations of white stereotypes. It is expected that black subjects will show the same pattern of accessibility for the white stereotypes as the white subjects, by displaying faster reaction times to white stereotyped target adjectives, as compared to black stereotyped adjectives, following the white prime.

White subjects will be used as a comparison group, in order to determine if the patterns found in black subjects are different or similar to
those that will occur in white subjects at this time.

A fourth research question will be to determine the extent to which black and white subjects consciously endorse the negative stereotypes regarding blacks in the culture, in order to see if there is a relationship between racial beliefs, accessibility of racial stereotypes, and self-esteem.

Method

Subjects

Originally 100 undergraduate college students at Drake University volunteered to participate in this research. However, due to insufficient computer data and incomplete surveys, 24 subjects were eliminated from the analysis (9 black subjects - 5 female and 4 males, 3 non-black minority subjects, and 12 white subjects - 6 female and 6 male), the majority being eliminated due to incomplete surveys. Of the remaining 76, there were 39 black (20 male, 19 female) and 37 white (14 male, 23 female) subjects. Some students obtained extra credit points towards their Introductory Psychology classes, while other students volunteered out of interest.

Materials

Coopersmith Self-Esteem Scale. In order to assess self-esteem, the Coopersmith Self-Esteem Adult Form was used. The Coopersmith Self-Esteem Inventories are widely used, with construct validity and reliability well documented (Peterson & Austin, 1985). In a study of 103 college students, Bedian et. al. (1977) reported Kuder-Richardson reliability estimates (KR20’s) of .74 for males and .71 for females. They also found test-retest reliability estimates to be .80 for males and .82 for females. Shaver and Robinson (1971) found adult form inter-item correlations to be
low for college students. For 453 students, the average correlation was .13. Convergent validity figures were found by Shaver and Robinson (1973). They found correlations of .59 and .60 between the adult form and the Rosenberg scale for college students (Coopersmith, 1990).

Semantic Priming Task. A priming task was run on Macintosh Plus computers. The task was a modified version of the Dovidio et. al. (1986) procedure for demonstrating cognitive representations of racial stereotypes. In this procedure, subjects were told that they would see a series of sets of two words; a noun followed by an adjective. Their task was to decide if the second word could ever be true of the first, and to answer as quickly as possible by pressing a "yes" or "no" key.

The pairs of words consisted of a category prime and a test adjective. There were four category primes: black, white, self, and house. Sixteen test adjectives were used; 8 words that describe a house and 8 that describe people. To choose the 8 words that describe people, Dovidio and Gaertner (1982) conducted a preliminary study which utilized an adjective checklist procedure developed by Katz & Braly (1933), and Karlins, Coffman, and Walters (1969). The Dovidio and Gaertner study asked 50 white males and 50 white females to identify out of 84 adjectives, 5 words they felt to be descriptive of a typical white American and 5 words they felt were descriptive of a typical black American. From this, Dovidio et. al. (1986) chose 4 words they felt to be most identified as being associated with the white American, and 4 words felt to be associated most with black Americans. These 8 words were then identified as representing white stereotypes and black stereotypes, respectively. Of the 4 stereotypic words for each group, 2 were considered positive evaluations and 2 were considered negative evaluations. In the present research I used these same 8 words. This resulted in 4 categories of person-descriptive trait
adjectives: positive white stereotypes (ambitious, practical), positive black stereotypes (musical, sensitive), negative white stereotypes (stubborn, conventional), and negative black stereotypes (imitative, lazy).

Modern Racism Scale. McConahay (1986) provided the following data on the validity of the Modern Racism Scale. The validity of the Modern Racism Scale was tested by evaluating how the items on the scale related to voter preferences in the 1969 and 1973 Los Angeles mayoral contest between Tom Bradley, the black challenger, and Sam Yorty, the white incumbent. The Modern Racism Scale correlated with voter preferences in both contests. Those whites scoring high on the scale were more likely than low scorers to vote for the white candidate. The correlations were .392 in a sample of white Claremont, California voters in 1969, .365 in a sample of white Los Angeles voters in 1969, and .338 in a sample of white Los Angeles voters in 1973, all of which were statistically significant (McConahay, 1986).

The scale also correlated with strength of opposition to busing in Louisville, Kentucky. From surveys done during the conflict there in 1976 and 1977, correlations were .511 in 1976, and .391 in 1977, these correlations were statistically significant in both years (McConahay, 1982). The Modern Racism Scale correlated .383 with antiblack feeling as measured by the Feeling Thermometer in Louisville (McConahay, 1982), and in Yale and Duke University student samples, the correlations with the Feeling Thermometer has averaged .441 for the past 16 years (McConahay, 1986).

Procedure

To begin, subjects were asked to read and sign an informed consent. Subjects were told that the study was dealing with category assignments, and that they would be asked to make some judgments at a computer.
Subjects first were allowed to familiarize themselves with the procedure by performing a set of practice trials. Subjects then began the priming task. On each trial, subjects saw one of four primes (black, white, me or house) appear on the screen for 67 msec. The disappearance of the prime was followed immediately by a mask; “PPPPP” (for person prime) or “HHHHH” (for house prime) for 250 msec in order to make subjects less consciously aware of the content of the words. Following an interval of 250 msec the target adjective was displayed for 250 msec (Dovidio, Perdue, Gaertner, 1991). All words appeared in the center of the screen.

Each person category prime (black, white, and me) was paired with each of the 16 test adjectives twice, which resulted in 96 trials using person categories. The house prime was paired 4 times with each test adjective, resulting in 64 trials using house. The house prime was paired more times than each of the person category primes in order to provide a more equitable number of occurrences for “yes” and “no” trials. These pairings resulted in 160 randomly ordered trials. For half of the subjects, the “yes” key was on the right and the “no” key was on the left; for the other half of the subjects, the assignment of keys was reversed. There was a brief intermission after the first 80 trials. For half of the subjects, the Coopersmith Self-Esteem Measure was given during this intermission. For the other half of subjects, the Coopersmith was not given at this time, but instead was administered at the end with other instruments. This variation was done in order to test for an effect of order of the Coopersmith and the priming task. The intermission was included so that subjects would not get too tired by completing all 160 trials at one time, which could result in more random responding.

At the conclusion of the priming task, subjects completed McConahay’s (1986) Modern Racism Scale in order to measure racial beliefs. In addition,
the subjects completed the Higgins Selves Questionnaire and the Rosenberg Self-Esteem Questionnaire as a part of another study. Upon completion of these questionnaires, subjects were thoroughly debriefed about the experiment and dismissed.

Results

Errors in Reaction Times

The percentage of "no" answers in response to person-descriptive test words that followed a white, black, or me prime (for which "yes" was the appropriate answer) was 24%. A multivariate analysis of variance (MANOVA) performed on the error scores revealed a main effect of Prime, $F(1,76)=29.96$, $p<.0001$, with subjects responding at a significantly higher error rate to the black prime than the white prime, $t(76)=3.87$, $p<.001$. Subjects also responded with a significantly higher error rate to the black prime when compared to the me prime, $t(76)=2.52$, $p<.025$.

There was a significant Prime by Evaluation interaction, $F(1,76)=5.81$, $p<.005$. Subjects responded with a higher error rate to negative words following the black prime versus the me prime, $t(76)=3.10$, $p<.001$, as well as with the black prime versus the white prime, $t(76)=7.15$, $p<.001$. Subjects also responded with greater error to negative words when they followed the me prime as compared to the white prime, $t(76)=4.06$, $p<.001$. With regards to positive words, subjects responded with greater errors to positive words following the black prime than the white prime, $t(76)=4.73$, $p<.001$, and the black prime compared to the me prime, $t(76)=4.63$, $p<.001$.

There was a significant Prime by Stereotype interaction, $F(1,76)=14.47$, $p<.0001$. Subjects responded with higher error rates to black
stereotypes following the white prime, $t(76)=2.28$, $p<.05$, and me prime, $t(76)=2.83$, $p<.01$, than they did to the white stereotypes. In comparison, they responded with lower error rates to black stereotypes when they followed the black prime, $t(76)=2.03$, $p<.05$. In addition, subjects responded with more errors to the black stereotypes when they followed the black versus white prime, $t(76)=2.99$, $p<.005$, and the me versus white prime, $t(76)=2.08$, $p<.05$. Likewise, subjects responded with more errors to the white stereotypes following the black prime compared to the me prime, $t(76)=5.78$, $p<.001$, and the black prime as opposed to the white prime, $t(76)=7.3$, $p<.001$.

Finally, there was a significant three way Prime by Evaluation by Stereotype interaction, $F(1,76)=10.16$, $p<.001$. Subjects made more errors in response to negative black stereotypes following the me prime, $t(76)=4.38$, $p<.001$, and positive black stereotypes when they followed the white prime, $t(76)=3.67$, $p<.001$. There were no interactions including race of subject. Due to the systematic patterns of error found in the error data, these data were removed and the correct answers to person-descriptive words after person primes were analyzed separately. This separate analysis eliminated three of the original 76 subjects due to the amount of their incorrect responses.

Correct Reaction Times

Post Hoc Scheffe, Stevens and Newman-Keuls Tests were performed on the data initially, however, these tests were not effective in indicating
significant interactions of the data.

A 2 (Sex of Subject) by 2 (Presentation Order) by 3 (Prime) by 2 (Stereotypic Trait Type) by 2 (Evaluative Trait Type) by 2 (Yes Key) by 2 (Race of Subject) multivariate analysis of variance was performed on 73 subjects' correct response times to person-descriptive words after person primes. There were no main effects or interactions associated with sex of subject, order of presentation of the Coopersmith Self-Esteem Inventory and the priming task, or "M" versus "Z" as the yes key; therefore, these variables were dropped from subsequent analyses.

There was a significant main effect of Prime, $F(1, 73)=15.54, p<.005$ (see Table 1). Overall, subjects responded faster to the black prime than to the white prime, $t(71)=3.2$ (M's = 529.05 vs 706.8).

There was a significant main effect of Stereotype that emerged in the initial analyses, $F(1,73)=13.22, p<.001$; however, subsequent post hoc tests found no significant differences in reaction times to black versus white stereotypes.

A significant Prime by Evaluative Trait interaction emerged, $F(1, 73)=8.15, p<.001$ (see Table 2). For both black and white subjects, positive traits were responded to more quickly than negative traits following the white prime, $t(71)=2.41, p<.025$ (M's = 653.42 vs 760.17), while negative words were responded to more quickly than positive words following the me prime, $t(71)=2.22, p<.05$ (M's = 583.17 vs 681.43). Overall, positive traits were responded to more quickly following the black prime than after both the white prime, $t(71)=2.86, p<.01$ (M's = 526.63 vs 653.42), and the me prime $t(71)=3.496, p<.001$ (M's = 526.63 vs 681.43) and negative traits were responded to more quickly after both the black prime versus the white prime.
$t(71)=5.17, p<.001$ (M's = 531.47 vs 760.17) and the me prime versus the white prime, $t(71)=3.997, p<.001$ (M's = 583.17 vs 760.17). However, there were no differences in responding to negative traits following the black versus me primes.

The Prime by Evaluation interaction was qualified by a significant three-way Race by Prime by Evaluation interaction $F(1,73)=4.02, p<.022$ (see Table 3).

**Black Subjects.** Overall, black subjects responded more slowly to negative words following the white prime than to positive words, $t(36)=2.279, p<.05$ (M's = 816.34 vs 676.5 ms), and more quickly to the negative words as compared to positive words following the me prime, $t(36)=3.199, p<.005$ (M's = 559.22 vs 755.26 ms). There were no significant differences in their response times to positive versus negative words following the black prime. Black subjects responded more quickly to positive words following the black prime versus the white prime, $t(36)=2.13, p<.05$ (M's = 545.74 vs 676.5 ms), and more slowly to positive words following the me prime than the black prime, $t(36)=3.414, p<.005$ (M's = 755.26 vs 545.74 ms). There were no significant differences in response times to positive words following white versus me primes.

For responses to negative words, black subjects responded much more slowly to negative words when they followed the white prime as compared to the black prime, $t(36)=5.04, p<.001$ (M's = 816.34 vs 506.94 ms), and the me prime $t(36)=4.19, p<.001$ (M's = 816.34 vs 559.22 ms). There were no significant differences in response times to negative words following the
black prime versus the me prime. However, there was a significant difference between black and white subjects in reaction times to positive words following the me prime, \( t(142) = 2.457, p < .025 \) (M's = 755.26 vs 601.26). Overall, black subjects responded much more slowly to positive words following me than did white subjects.

White Subjects. For white subjects, there were no significant differences in response times to positive versus negative words following any of the three primes. There were no significant differences in responses to positive words following the black prime versus the white prime, the black prime versus the me prime, nor the white prime versus the me prime. However, white subjects did respond significantly more slowly to negative words following the white prime as compared to negative words following the black prime, \( t(33) = 2.206, p < .05 \) (M's = 558.11 vs 699.17 ms). There were no differences in responses to negative words following the prime of black versus me, or white versus me.

Reaction Times and the Self-Esteem Inventory

The mean score on the Coopersmith Self-esteem measure was 76.82 for black subjects and 75.03 for white subjects, on a scale of 1 to 100, with higher scores signifying higher self-esteem. The difference in these mean scores was not statistically significant. There were no significant correlations found between self-esteem scores and differences in reaction times for black or white subjects, although for white subjects, the correlation between self-esteem scores and the mean difference in reaction times of negative versus positive words following the me prime was marginally significant, \( r(37) = -.2507, p < .067 \). The greater the difference in reaction times to positive adjectives minus the reaction times to negative adjectives following the me prime, the lower the self-esteem scores for
white subjects.

Reaction Times and the Modern Racism Scale

There was a significant difference in the mean score on the Modern Racism Scale (MRS) for black versus white students, $F(76)=23.941, p<.0001$. The mean score on the MRS was 2.38 for black subjects indicating a lower level of racism, whereas for white subjects, the mean score was 5.95, indicating a low although significantly higher level of racism than that of the black subjects. In order to assess the relationship between cognitive representations of racial stereotypes and beliefs about racism, correlations between reaction times to positive and negative stereotypes (black and white) after the primes *black*, *white*, and *me* with scores on the MRS were computed. For black subjects there was one significant correlation between scores on the MRS and mean reaction times. In response to the *white* prime followed by positive white stereotypes, slower reaction times (which are larger values) were associated with lower scores on the MRS (which indicates less racism), $r(1,39)=-.2879, p<.038$. There were no other significant correlations for black subjects, but there were a few that were marginally significant. The correlation between MRS scores and mean reaction times to the *black* prime followed by negative black stereotypes was $r(1,39)=-.2289, p<.08$, indicating that the slower the reaction times to negative stereotypes following the *black* prime, the smaller the score on the MRS. The slower the subjects' responses to black stereotypes in general, the smaller their scores on the MRS, $r(1,39)= -.2524, p<.061$. Slower responses to white stereotypes in response to the *white* prime resulted in lower scores on the MRS, $r(1,39)=-.2287, p<.081$.

While there was only one significant correlation of response times with MRS scores found for black subjects, there were several significant
correlations of scores on the MRS with reaction times for white subjects. The results are summarized as follows:

Lower scores on the Modern Racism Scale were significantly correlated with slower response times to:

1. positive black stereotypes following the black prime, $t(1,37)=-.3492, p<.017$,
2. positive black stereotypes following the white prime, $t(1,37)=-.3740, p<.011$,
3. negative black stereotypes following the white prime, $t(1,37)=-.3238, p<.025$,
4. positive black stereotypes following the me prime, $t(1,37)=-.3970, p<.007$,
5. positive white stereotypes following the me prime, $t(1,37)=-.3288, p<.027$,
6. negative white stereotypes following the me prime, $t(1,37)=-.3016, p<.035$,
7. positive words following the black prime, $t(1,37)=-.3017, p<.035$,
8. positive words following the white prime, $t(1,37)=.3475, p<.018$,
9. positive words following the me prime, $t(1,37)=.3784, p<.01$,
10. negative words following the me prime, $t(1,37)=.3075, p<.032$,
11. black stereotypes following the black prime, $t(1,37)=-.3394, p<.02$,
12. white stereotypes following the me prime, $t(1,37)=-.3479, p<.017$, and
13. black stereotypes following the white prime, $t(1,37)=-.3877, p<.009$.

Overall, slower reaction times were significantly correlated with lower scores on the Modern Racism scale for white subjects.

Discussion

The results showed that, overall, both black and white subjects responded faster to all words following the black prime as compared to the white and me primes, and slightly faster to the me prime in comparison to the white prime. Consequently, conclusions are not easily drawn on the reaction times between primes; for example, adjectives after black versus white, or black versus me. However, we can evaluate responses to the different adjectives following the individual primes. In response to the white prime, both black and white subjects responded more slowly to negative words than they did to positive words. These results indicate that subjects associated positive words more than negative words with the category of white. This finding corresponds to Dovidio et. al.'s (1986)
findings, where subjects had faster reaction times to positive versus negative traits following the white prime. In addition, both black and white subjects responded more quickly to negative words versus positive words when they followed the me prime. In this two way interaction, subjects associated negative words more than they did the positive adjectives with the me prime. Finally, subjects did not associate either positive or negative traits more with the black prime. These results for the black prime do not agree with the findings of Dovidio et. al. They found their subjects responded faster to negative words than they did to the positive words when following the black prime. Dovidio et. al. concluded that that their subjects associated negative words more with the category of black than the positive words. These results, however, are qualified by race of the subject.

Black Subjects

Although black subjects' response times to positive as compared to negative stereotypes were not significantly different following the black prime, they were different for the white and me primes. After the white prime, black subjects responded more slowly to negative as compared to positive stereotypes. Responses to positive as compared to negative stereotypes were significantly slower following the me prime. This pattern of reaction times suggests that black subjects associated positive words more with the category white than they did negative words. However, they associated negative words with the category me more than they did the positive words. In addition, black subjects responded more slowly than did the white subjects to positive words following the me prime. These findings may indicate that black subjects associated positive words with their idea of self less than the white subjects. If one interprets “me” as representing “me as a black individual” for black subjects and “me as a
white individual” for white subjects, the results can be compared to those found by Dovidio et. al. (1986), in which white subjects responded to positive adjectives more quickly following the white prime than when they followed the black prime, and to negative words faster when they followed the black prime than when they followed the white prime. In the present study, black subjects' responses, both to the white prime and the me prime as it applies to “me as a black individual,” are similar to the pattern of responses to positive and negative adjectives of white subjects in Dovidio et. al.'s, after the primes of white and black. Dovidio, Perdue, Gaertner, and Ellyson (1991) in their study of automatic activation of the “we” versus “they” categories found that ingroup- and outgroup- designating words, such as “we,” “they,” and “me,” as in our study, can automatically and without conscious awareness, activate differentially evaluative constructs in one's memory. However, in their study, the in-group is evaluated positively and the out-group is derogated. The opposite has occurred with our black subjects. Black students showed evidence for derogation of themselves - the in-group, and positive evaluation of whites - the out-group. This pattern of reaction times indicates evidence for internalization of negative concepts associated with blacks or the self in our black college student sample. Because black children have grown up in a cultural context in which, at a very early age they learn the same stereotypes as white subjects, one can see how the results for black subjects in the current study resemble those found by Dovidio et. al. (1986) in their white subjects.

While the pattern of reaction times to evaluative constructs following the white and me primes for black subjects is consistent with a hypothesis of internalization of negative constructs, the data do not totally support my first hypothesis, that internalization of black stereotypes would be demonstrated in black subjects. This would have led to differential
responding with regard to stereotyped adjectives, which did not occur. There were no differences in responses to black versus white stereotypes to the primes. Instead, the internalization that was demonstrated involved the association of positive traits with whites, and negative traits with the self, for black subjects.

White Subjects

For white subjects, an interesting pattern of response times emerged. There were no significant differences in responses to positive versus negative words following any of the primes. They did, however, respond significantly slower to negative words when they followed the white prime versus when they followed the black prime, indicating that these subjects more quickly associated negative words with the category of "black" than with the category of "white." However, this difference in the average response time to negative words following the black versus white prime is not a valid indicator of differences in construct accessibility in light of the faster responses overall to the black versus white and me primes. Because of this main effect, overall reaction times were fastest in response to stereotypes following the black prime, regardless of whether they were positive or negative.

The fact that, overall, responses were very fast to all words following the black prime could indicate that the presence of a black experimenter (who conducted all experimental sessions) made the construct of black very salient for both black and white subjects. The presence of a black experimenter might have served as a prime to facilitate all subjects' responses to the prime black. In addition, the presence of a black experimenter may have caused subjects to be more cautious of racially stereotyped responses. However, a subsequent study conducted by Recker
and Allen (1991) tested this effect of race of experimenter and did not find a significant effect.

In comparison to the results of Devine (1989; Study 2), the results of this experiment were only partially consistent. She found that when her white subjects' ability to consciously monitor stereotype activation was precluded, both the high- and low-prejudice subjects produced stereotype-congruent responses. In this study, the black and white subjects overall showed a low level of racism (as indicated by the results of my subjects' Modern Racism Scale scores). If I compare both the black and white subjects to her low-prejudice category, I conclude that neither the black nor the white subjects associated stereotyped words more with one category of persons than the other. This would not indicate stereotyped responding regardless of prejudice levels as found by Devine. However, while both black and white subjects' levels of racism were low, the white subjects did display a significantly higher level of racism than the black subjects. Along with this, I did find differential responding to positive versus negative words, in my subjects. Black subjects (lowest prejudice) associated negative words more with the black and me primes and positive words more with the white prime, whereas white subjects (higher prejudice) associated negative words with the black prime and positive words more with white and me. Without considering racially stereotyped content, but instead using positive and negative evaluative traits, one can see how these results are partially consistent with those found in Devine's high and low prejudice subjects. Our black and white subjects displayed differential responding indicative of internalization of evaluative constructs once the ability to consciously monitor responses was minimized.
Error Data

The fast rate of presentation of stimuli may have resulted in higher error rates than those found in Dovidio et al. (1986). The significant patterns in the error data that resulted also suggest that perhaps the stereotypes used in this study are not sufficient to describe those held by black subjects. Overall, subjects responded with a higher error rate to words following the black prime than they did to the white or me prime. These stereotypes were prejudged by white subjects to be stereotypic of blacks or whites. These terms may not be seen or known by black subjects as representing stereotypes. While this might not be the case for our white subjects, I believe that perhaps stereotypes defined by Dovidio et al.’s (1986) white subjects are not representative of those held by white students in the current sampled population.

Self-Esteem Inventory

Analyses of the correlations between reaction times and scores on the Self-Esteem Inventory did not support my second hypothesis, that self-esteem scores would be correlated with differences in reaction times, and that internalization of stereotyped or evaluative traits might be linked to self-esteem. Overall, self-esteem scores were high for both black and white subjects regardless of whether they displayed differential responding to the primes. There are several explanations as to why this might be the case.

For black students, self-esteem and racial attitudes could be two separate and distinct concepts, in that the individual’s idea of self might not involve racial stereotypes. Perhaps black parents are not teaching black children that, “you are black and because of this you should feel positive
about yourself," but instead, may be teaching their children to feel good about themselves independent of their racial identity. This would suggest
that the development of a positive self-concept would not involve thoughts of one's racial identity but instead would involve thoughts of one's identity as an individual. In contrast, the literature reviewing racial identity development as related to self-esteem has concluded self-esteem is correlated with higher levels of achieved racial identity. I would argue that perhaps an individual cannot achieve racial identity according to the Social Cognitive Model unless they first feel positive about themselves as an individual. This would explain why higher levels of self-esteem would be related to higher levels of ethnic identity without self-esteem being a function of one's racial concepts about the self. When comparing my reaction time data to the pattern in self-esteem scores, black subjects responded more quickly to negative words following both the black and me prime than they did to positive words following these primes. This finding suggests that while their reaction times indicated a negative sense of self, their self-esteem scores showed a positive sense of self. As discussed earlier, if individuals analyze the me prime as representing "me as a black individual," and "me" as representing "me as an individual" on the self-esteem task, these two instruments may not tap into the same constructs. On the other hand, one also could argue that the self-esteem instrument used was a self report instrument. Therefore, subjects could have represented themselves in a more positive light, while the reaction time data is less open to impression management and may not represent beliefs about the self, but rather "knowledge" about the self in memory. In addition, because not all subjects were volunteers from an Introductory Psychology class, this may have resulted in a more select group of high achievers, displayed by their willingness to participate without the incentive of extra credit. Since
the sample population was drawn from a private university, these conditions could have resulted in a minimal or truncated range of differences in self-esteem among all subjects participating.

Modern Racism Scale

Results from the Modern Racism Scale supported the idea that blacks do not believe in or consciously endorse the racial stereotypes of the culture concerning blacks. Whereas Devine recently found that some white subjects did not endorse these racial stereotypes, mean scores of my white subjects indicated that, on average, they believe in and consciously endorse the black racial stereotypes of the culture at a level significantly higher than the black subjects; however, not at a level indicative of strong racial beliefs. Subjects displayed differential belief systems on the MRS, showing lower or very low prejudice by black subjects and higher prejudice by the white subjects. These scores do not correspond with the indications found in overall response times. Devine (1989) argued that, regardless of beliefs, all subjects will display stereotyped responding at an automatic level. These data only partially supported this assertion. Black subjects did not respond differentially to the racial nature of stereotypes in either their reaction times or beliefs. However, they did respond differentially to the evaluative nature of stereotypes. Subjects responded differently to positive versus negative words following the racial primes. Even though the white subjects scored at a higher level of prejudice on the MRS, their responses to racial stereotypes after the black versus white primes also were not indicative of internalization of stereotypes utilized in this study. I would argue that while these subjects possessed some stereotyped beliefs about the out-group the stereotypes used in this study were not indicative or representative of these beliefs. Thereby resulting in no differential
responding. Dovidio et. al. (1991) would suggest that this in-group facilitation is characteristic of aversive racism. Aversive racism is defined as a less direct form of racism whereby majority individuals do not necessarily derogate the minority; however, they view the majority as being more positive than the minority.

Although my results partially replicated those found by Dovidio et. al. (1986) with regard to differential responding to positive versus negative words after the “white” and “me” primes, I did not replicate the effect of stereotype as was found in their study. This failure to find stereotypes to be facilitated by black and white primes supports the review of Doll studies and racial identity. I argued that from the trends in these studies, it would appear that black individuals have changed not only their belief systems but at least partially changed the way in which they internalize the stereotyped information of the culture. And this change was felt to be towards an end of eliminating these constructs from one’s concept of blacks as a group in the society (Branch & Newcombe, 1986; Clark & Clark, 1939; Gaertner & McLaughlin, 1966; Goodman, 1952; Gregor & McPherson, 1966; Herrnstein, 1990; Hraba & Grant, 1970; Johnson, 1966; McAdoo, 1971; Rosenberg & Simmons, 1971; Stevenson & Stewart, 1958; Trager & Yarrow, 1952). The internalization that has been demonstrated in my black subjects is that they associate negative more than positive concepts with themselves. It would appear that black individuals are being socialized to develop more positive constructs about the category of blacks as a whole but not necessarily about themselves as a black individual. I suggest that these different methods of socialization may not develop the same constructs surrounding a black individual as it does blacks as a category.

This idea of blacks being capable of possessing a positive image of self in a society where stereotypes prevail was verbalized by the author
Zora Neale-Hurston examined as she writes:

"I am not tragically colored . . . . I do not belong to the sobbing school of negrohood who hold that nature has somehow given them a low-down dirty deal and whose feelings are all hurt about it. . . . I do not weep at the world - I am too busy sharpening my oyster knife."

The society seems to have been effective in working on weakening the effects of racial stereotypes. However, stereotypes are but one component of the overall concept of black individuals. This concept also involves whether to associate negative versus positive traits to this group of individuals. Our results indicate that while the stereotypes are not pervasive in the concept of blacks, negative aspects still remain. In this area there is much that needs to be done in improving the overall concept of blacks, and how they perceive themselves as a member of this group.

Another argument to explain the absence of stereotyped responding would be that blacks may not 'stereotype' themselves, as they see the diversity that is present in black individuals, which whites may fail to see (Linville & Jones, 1980). According to Linville and Jones (1980), this rationale for explaining why our black and white subjects did not display stereotyping of themselves has to do with the existence of a more complex schema concerning in-groups versus out-groups. They define cognitive schemas as prior knowledge structures that an individual develops through experience (Linville & Jones, 1980). They propose that people have a more complex schema regarding their own groups than other groups because they perceive a large collection of diverse experiences involving persons in their own group, whereas this is not the case for out-groups. With a complex schema, a large number of characteristics or dimensions will be used in defining a stimulus.
In addition, another explanation would be that blacks may have internalized different stereotypes than those measured in whites by Dovidio et. al. (1986). For the individuals in this study, perhaps all of the negative adjectives (imitative, lazy, conventional, and stubborn) are a part of the constructs they have associated with the category of black, but the two positive adjectives (sensitive and musical) are not. This would explain why black subjects might not respond to the black stereotypes in the manner hypothesized. The black subjects also might show a pattern of differential responding to negative versus positive adjectives as was the case in our subjects. This is not to assume that black subjects do not have any positive adjectives as a part of their stereotypes but instead it is possible that the stereotypes they possess do not include the particular positive adjectives used in this study.

An implication for future research would be in the area of race of experimenter. The presence of a black experimenter in the current research may have served as a prime, facilitating subjects' responses. Future research should look for any effects of having an experimenter of a particular race.

In addition, future research looking at internalization in black students should redefine the stereotypes that are being measured to be ones defined by a sample of black subjects, as opposed to the ones developed by Dovidio et al.'s sample of white students. This should improve the recognition of the words as stereotypes by black subjects and therefore generate a better indication of the extent of internalization that may exist in regards to stereotypes. Along with this, one could also look at whether internalization of stereotyped constructs varies for white versus black individuals. That is, whether black and white subjects encounter differing stereotypes, and thereby develop constructs that are similar in evaluative
nature, but not in the stereotyped content.

Finally, future research may wish to consider the effects of internalization of positive versus negative characteristics. This would look at whether students associate negative characteristics versus positive characteristics more with a particular group, and whether this is consistent for black and white students.
Table 1

Percentage of Error Responses ("No" responses to Correct Prime-Adjective Pairs) to Positive and Negative Adjectives as a function of Racial Category and Self Primes.

<table>
<thead>
<tr>
<th>Adjectives</th>
<th>Primes</th>
<th>Black</th>
<th>White</th>
<th>Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td></td>
<td>.314</td>
<td>.181</td>
<td>.184</td>
</tr>
<tr>
<td>Negative</td>
<td></td>
<td>.347</td>
<td>.146</td>
<td>.260</td>
</tr>
</tbody>
</table>

Total Number of Presentations = 160
Table 2

Percentage of Error Responses to White and Black Stereotyped Adjectives as a function of Racial Category and Self Primes.

<table>
<thead>
<tr>
<th>Primes</th>
<th>Black</th>
<th>White</th>
<th>Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stereotyped Adjectives</td>
<td>Black</td>
<td>.2975</td>
<td>.2005</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>.3635</td>
<td>.1265</td>
</tr>
</tbody>
</table>

Total Number of Presentations = 160
Table 3

Percentage of Error Responses to Positive and Negative White and Black Stereotyped Adjectives as a function of Racial Category and Self Primes.

<table>
<thead>
<tr>
<th>Adjectives</th>
<th>Black</th>
<th>White</th>
<th>Me</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>.289</td>
<td>.260</td>
<td>.197</td>
<td>.249</td>
</tr>
<tr>
<td>SD</td>
<td>.311</td>
<td>.290</td>
<td>.304</td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td></td>
<td></td>
<td></td>
<td>---------</td>
</tr>
<tr>
<td>White</td>
<td>Mean</td>
<td>.339</td>
<td>.102</td>
<td>.204</td>
</tr>
<tr>
<td>SD</td>
<td>.307</td>
<td>.169</td>
<td>.256</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>Mean</td>
<td>.306</td>
<td>.141</td>
<td>.262</td>
</tr>
<tr>
<td>SD</td>
<td>.296</td>
<td>.217</td>
<td>.336</td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td></td>
<td></td>
<td></td>
<td>---------</td>
</tr>
<tr>
<td>White</td>
<td>Mean</td>
<td>.388</td>
<td>.151</td>
<td>.240</td>
</tr>
<tr>
<td>SD</td>
<td>.304</td>
<td>.224</td>
<td>.266</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>.330</td>
<td>.164</td>
<td>.222</td>
<td></td>
</tr>
</tbody>
</table>

Total Number of Presentations = 160
Table 4

Mean Reaction Times (in milliseconds) to Racial and Self Primes.

<table>
<thead>
<tr>
<th>Primes</th>
<th>Black</th>
<th>White</th>
<th>Me</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>529.05</td>
<td>706.80</td>
<td>632.30</td>
</tr>
</tbody>
</table>
Table 5

Mean Reaction Times (in milliseconds) to Positive and Negative Evaluative Adjectives as a function of Racial Category and Self Primes.

<table>
<thead>
<tr>
<th>Primed Category</th>
<th>Black</th>
<th>White</th>
<th>Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>526.63</td>
<td>653.42</td>
<td>681.43</td>
</tr>
<tr>
<td>Negative</td>
<td>531.47</td>
<td>760.17</td>
<td>583.17</td>
</tr>
</tbody>
</table>
Table 6

Mean Reaction Times (in milliseconds) to Racial Category and Self Primes as a function of Race of Subject and Evaluative Nature of the Adjective.

<table>
<thead>
<tr>
<th>Race of Subject</th>
<th>Black Students</th>
<th>White Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td>Evaluative Traits</td>
<td>545.74</td>
<td>506.94</td>
</tr>
<tr>
<td>Black Primes</td>
<td>676.50</td>
<td>816.34</td>
</tr>
<tr>
<td>White Primes</td>
<td>755.26</td>
<td>559.22</td>
</tr>
<tr>
<td>Me</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
References


Morland, J. (1958). Racial recognition by nursery school children in
Stereotypes, Beliefs, and Self-esteem

Lynchburg, Virginia. Social Forces, 37, 132-137.


Vaughan, G. (1964). Ethnic awareness in relation to minority group


Instructions:
If a statement describes how you usually feel, put an X in the column "Like Me." If a statement does not describe how you usually feel, put an X in the column "Unlike Me." There are no right or wrong answers. Begin at question number 1 and mark all 25 statements.

<table>
<thead>
<tr>
<th>Like Me</th>
<th>Unlike Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Things usually don't bother me.</td>
<td></td>
</tr>
<tr>
<td>2. I find it very hard to talk in front of a group</td>
<td></td>
</tr>
<tr>
<td>3. There are lots of things about myself I'd change if I could</td>
<td></td>
</tr>
<tr>
<td>4. I can make up my mind without too much trouble</td>
<td></td>
</tr>
<tr>
<td>5. I'm a lot of fun to be with</td>
<td></td>
</tr>
<tr>
<td>6. I get upset easily at home</td>
<td></td>
</tr>
<tr>
<td>7. It takes me a long time to get used to anything new</td>
<td></td>
</tr>
<tr>
<td>8. I'm popular with persons my own age</td>
<td></td>
</tr>
<tr>
<td>9. My family usually considers my feelings</td>
<td></td>
</tr>
<tr>
<td>10. I give in very easily</td>
<td></td>
</tr>
<tr>
<td>11. My family expects too much of me</td>
<td></td>
</tr>
<tr>
<td>12. It's pretty tough to be me</td>
<td></td>
</tr>
<tr>
<td>13. Things are all mixed up in my life</td>
<td></td>
</tr>
<tr>
<td>14. People usually follow my ideas</td>
<td></td>
</tr>
<tr>
<td>15. I have a low opinion of myself</td>
<td></td>
</tr>
<tr>
<td>16. There are many times when I would like to leave home</td>
<td></td>
</tr>
<tr>
<td>17. I often feel upset with my work</td>
<td></td>
</tr>
<tr>
<td>18. I'm not as nice looking as most people</td>
<td></td>
</tr>
<tr>
<td>19. If I have something to say, I usually say it</td>
<td></td>
</tr>
<tr>
<td>20. My family understands me</td>
<td></td>
</tr>
<tr>
<td>21. Most people are better liked than I am</td>
<td></td>
</tr>
<tr>
<td>22. I usually feel as if my family is pushing me</td>
<td></td>
</tr>
<tr>
<td>23. I often get discouraged with what I am doing</td>
<td></td>
</tr>
<tr>
<td>24. I often wish I were someone else</td>
<td></td>
</tr>
<tr>
<td>25. I can't be depended on</td>
<td></td>
</tr>
</tbody>
</table>
Questionnaire:
Check the point on the graph which applies for you. Your answers will not be connected with your identity, therefore you may provide honest replies. It is also okay if you have previously completed this questionnaire.

1. Over the past few years, the government and news media have shown more respect to blacks than they deserve.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

2. It is easy to understand the anger of black people in America.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

3. Discrimination against blacks is no longer a problem in the United States.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

4. Over the past few years, blacks have gotten more economically than they deserve.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

5. Blacks have more influence upon school desegregation plans than they ought to have.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

6. Blacks are getting too demanding in their push for equal rights.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

7. Blacks should not push themselves where they are not wanted.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>
INFORMED CONSENT

This study is investigating how people perceive the relations between words. If you decide to participate, you will be one of about 130 students participating in this study. For this study, about an hour of your time will be needed.

In this study, you will see a series of words appear on a computer screen. You will be asked to respond yes or no to whether the second word can ever be true of the first word.

You may withdraw from this study at any time without penalty or prejudice. Your participation or lack of participation will in no way affect your grade in Introductory Psychology. If you have any questions that can not be answered by the experimenter, please feel free to contact Dr. Judi Allen, 271-2861, Olin 317, Drake University.

Upon completion of this study, the results and full nature of this research will be sent to you upon request; by providing your address at the bottom of the page, you are indicating that you wish to receive such information. If you wish to participate, read and then sign and date the following:

I. ___________________ understand that I have the right

Print Name

 to withdraw from this experiment at any time without penalty. I freely choose to give my consent to participate in this experiment.

Signature ___________________________ Date ____________

* Fill in your address only if you would like to receive a copy of the results and a full explanation of the nature of this experiment.

Local Address
INSTRUCTIONS

This is a computer task in which you will be asked to make yes or no responses. You will see adjectives that describe people and adjectives that describe houses. Each adjective will be followed by one of the three words: Black, White, or Me. You are asked to respond yes or no to whether the adjective could ever be descriptive of the word that follows.

I will have you first go through some practice trials in order to become familiar with the procedure.

Are there any questions before we begin?