

STIGMA BASED ON RACE AND MENTAL ILLNESS:
A DIAGNOSTIC DOUBLE WHAMMY

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STIGMA BASED ON RACE AND MENTAL ILLNESS:
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DISSERTATION ABSTRACT
STIGMA BASED ON RACE AND MENTAL ILLNESS:
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Negative stereotypes of African Americans and individuals with mental illness persist in our society. Discrimination and prejudice are not as overt as in the past, but they continue to exist in subtler forms. The covert nature of contemporary racism has shifted focus in the race bias literature from the explicit behaviors to implicit processes that may affect clinical diagnosis. The present study examined how unconscious priming of negative stereotypes of African Americans impacts a layperson’s perception of an individual of a minority group presenting with a mental illness. It was hypothesized that participants primed with negative stereotypes would rate the African American targets more negatively than White or No race targets compared to participants in the control

group. One hundred and two undergraduate students participated in this study. Participants completed a priming task and responded to six vignettes depicting high and low functioning targets of Black, White and undisclosed ethnicity. Results showed no main effect of priming on participant's severity rating, social distance rating, and attribution of mental illness rating on these vignettes. Subtle effect of priming was observed where the negatively primed participants inferred the low functioning No race vignette as that depicting a Black male while characterizing the high functioning No race vignette as a White male. Socially desirable responding consistent with other research findings on race bias was also observed. Furthermore, all participants consistently stigmatized low functioning targets more than their high functioning counterparts. Automatic and controlled processes of prejudice and its complex nature were discussed. The present study highlighted the need for more rigorous studies incorporating socio-cognitive, neuroscience, and socio-political systems to enhance our understanding of how implicit processes of prejudice and stereotyping impact individuals with multiple-stigmatized identities.

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INTRODUCTION

Clinical diagnosis is usually considered to be one of the first decisions that influence the type of treatment and referral a patient will receive. Diagnosis is used as a means to classify individuals based on their perceived thoughts, feelings, and behavior by the clinician (Baskin, Bluestone & Nelson, 1981). In the field of psychiatry and clinical psychology, diagnosing a mental disorder is not clear-cut. The process of diagnosis is viewed as a “blend of science and intuition, filled with ambiguity and skepticism” (p.1) (Burgess, 2004). A growing body of literature exploring how a clinician comes to a diagnostic decision suggests the influence of his or her values and other personal biases in the assessment of individuals who seek mental health services (Schwartz & Abramowitz, 1975; Garb, 1998).

With the implementation of a relatively structured diagnostic system such as the Diagnostic and Statistical Manual (DSM), the American Psychiatric Association has attempted to insure some degree of accuracy in making diagnostic assignments. Nonetheless, the findings from clinical judgment studies indicate interaction between demographic variables and biases of the clinician resulting in observable differences in the assessment and judgment of individuals seeking mental health care (Sohler & Bromet, 2003). Of the demographic variables, race and gender have garnered the most attention. For the purpose of this study, this review will explore the evidence of race bias in the diagnosis of mental illness.

Concern about psychiatric diagnoses for Black patients arose from early studies of hospitalized psychiatric patients. These studies reported that Blacks had higher rates of schizophrenia and lower rates of affective disorders, particularly depression, than their White counterparts (Adebimpe & Cohen, 1989). Similarly, statistical reports from the National Institute of Mental Health (NIMH) indicated that Whites had a proportionally higher incidence of depression, but a lower incidence of schizophrenia compared to “all other races” (Bell & Mehta, 1980). In a review of the racial bias literature dealing with psychodiagnoses, Garb (1998) stated, “African-Americans and Hispanic (Puerto Rican) patients are less likely than White patients to be diagnosed as having a psychotic affective disorder and more likely to be diagnosed as having schizophrenia, even when measures of psychopathology do not indicate that a diagnosis of schizophrenia is justified” (p. 101). These diagnostic differences were maintained even when clinicians made diagnostic judgments about minorities and Whites who presented with the same symptomatology.

Racial disparities in mental health care in the United States are well documented. On almost every indicator of health, education, and well-being racial minorities lag behind members of the majority group (Gaertner & Dovidio, 1986). In order to provide an equitable health care system, it is crucial to understand why these racial disparities exist. The challenge is to recognize how bias contributes to racial disparity in clinical decision-making.

Bias is statistically defined as deviation from an expected value (Widiger & Spitzer, 1991). Widiger and Spitzer (1991) viewed diagnostic bias as “a differential prevalence of either false-positive diagnoses... and/or false-negative diagnoses” (p.3).

Diagnostic bias can have serious consequences in terms of hindering treatment and managing illness. Moreover, diagnostic bias may influence medication decisions (Pavkov, Lewis, & Lyons, 1989). Not only can the patient suffer from medical consequences of misdiagnosis, he or she may also suffer from social consequences such as difficulty securing a stable job, inability to escape his or her diagnostic label, and the possibility of complete social isolation (Pavkov et al., 1989). Blake (1973) underscored the importance of an unbiased diagnosis by suggesting that another negative consequence of misdiagnosing is that the client may begin to assume the behaviors of the incorrect diagnosis.

Different explanations have been offered to explain the observed diagnostic disparity. Some studies have emphasized the reported differences in the symptomatic expression of disorders by minority groups (Adebimpe & Cohen, 1981; Jones & Gray, 1986). For example, African Americans are more often diagnosed with schizophrenia because they exhibit a higher frequency of hallucinations and/or delusions and paranoia than Whites and other minority groups (Bell & Mehta, 1980; Adebimpe & Cohen, 1981). Others have cited the social and cultural distance in vocabulary, modes of communication, value systems, and expression of distress by minority clients working with White clinicians (Adebimpe & Cohen, 1981) as factors influencing diagnostic disparity. Marcos, Ureuyo, & Kesselman (1973) and Gonzalez (1977) demonstrated the existence of linguistic effects on diagnosis. Schizophrenic patients whose native language was Spanish disclosed more psychopathology when they were interviewed in English. Yet another explanation for the racial disparity observed in psychiatric diagnosis is thought to be the result of prejudice (Littlewood, 1992). This explanation requires an

understanding of the process of stereotyping and how negative stereotypes can lead to prejudice.

Stereotypes and Race

Stereotypes can be broadly defined as qualities perceived to be associated with particular groups or categories of people (Schneider, 2004). Allport (1954) stated that, “it is a part of our basic cognitive nature to place things and people in categories, which are the cognitive buckets into which we pour various traits, physical features, expectations, and values.” (p. 11). In modern cognitive psychology, the “cognitive buckets” are referred to as “schemas”, which are frameworks we utilize as an efficient means of categorizing information about people, things, places, etc. Stereotypes can be positive or negative, but negative stereotypes have garnered more attention in both research and practice because negative stereotypes can support prejudice and lead to discrimination against members of stereotyped groups (Gaertner & Dovidio, 1986). Prejudice can be defined as a set of affective (mostly negative) reactions we have toward people as a function of their category memberships. Prejudice can lead to discrimination, which is our behavioral response that contributes to the disadvantage of those being stereotyped (Gaertner & Dovidio, 1986; Schneider, 2004).

Gender, race, and age are considered to be the three most salient social categories (Levin & Levin, 1982), which are relevant in all cultures. Sidanius, Pratto and Bobo (1996) suggest that all societies have power and status hierarchies based on age and gender, and in some societies, such hierarchies also exist based on categories such as race, ethnicity, religion, or caste. For example, in the U.S., race and ethnicity may present a power differential between groups whereas in India caste and religion may be thought

of as more important categories in creating such social hierarchies. A brief discussion about the stereotypes associated with a racial minority group (African American) in the U.S. is presented below.

According to the cultural theorists, the development of prejudice and stereotypes follows a historical and cultural process (Gaertner & Dovidio, 2000). Majority groups define minority groups' respective subordinate position in society by creating negative collective images of minority group members leading to majority group members' feelings of superiority. These mostly negative images of minorities become embedded in culture as stereotypes and are transmitted across generations through the process of socialization. Research findings confirm that racial categories are salient to children as early as when they are in preschool and they predominate as social categories by the early school years (Davey, 1983). Children first learn to categorize others by race, then learn evaluative responses or prejudice to these labels, and finally learn to discriminate against those they do not like (Schneider, 2004).

Davey (1983) explored the trajectory of the negative stereotypes of African Americans in the U.S. He suggested that Blacks' enslavement set into motion a process in which Whites and White-dominated political, economic, scientific and religious institutions defined Blacks as inferior, thus creating and perpetuating such negative stereotypes of Blacks as less intelligent, lazy and morally inept. Dating back to 1840, there is evidence suggesting that slavery was supported by fabricating data showing that freed Blacks in the North had higher incidences of mental illness than their enslaved southern counterparts (Kutchins & Kirk, 1997). Although there has been a decline in overt forms of racism since the Civil Rights Movement of the 1960s, the negative

stereotypes ascribed to African Americans continue to influence their place in contemporary American society. Historically, beliefs about the inferiority of Blacks have been actively translated into policies that restricted the access of African Americans to educational, employment, and residential opportunities. Studies have consistently revealed that Blacks experience discrimination in a broad range of contexts in society and that discrimination can induce considerable psychological distress (Williams & Williams-Morris, 2000).

Another significant psychological effect of racism is its impact on the self-identity of its victims. Beliefs about the biological and/or cultural inferiority of some racial groups can impact the self-worth of at least some members of those groups and undermine the importance of their very existence (Williams & Williams-Morris, 2000). Williams and Williams-Morris cite evidence in the literature that suggests the internalization of cultural stereotypes by stigmatized groups can create expectations, anxieties, and reactions that adversely affect their social and psychological functioning. The stigma of racial inferiority may also have an adverse affect on the diagnosis and treatment of Black patients in the mental health system.

Stigma and Mental Illness

Crocker, Major, and Steele (1998) contend that we reserve our strongest negative stereotypes for groups we do not like to provide a cognitive explanation for our negative affect. We can dislike almost any group, but we have a cultural warrant for selecting certain groups as more deserving of our contempt. These groups are referred to as “stigmatized” groups. Goffman (1963) characterized “stigma” as an attribute that is socially defined as deeply discrediting. Jones, Farina, Hastorf, Markus, Miller, & Scott,

(1984) revised Goffman's definition of stigma and called it a "mark" or a "deviation from a norm" that links the bearer to undesirable attributes that discredit him or her in the eyes of others. In order for a group or an individual condition to be stigmatized, negative reaction or devaluation must be shared by a large group of people or a culture (Jones et al., 1984). Examples of stigmatized groups in our society include individuals who have mental illness, AIDS, physical disabilities, etc.

Public attitudes toward mental illness are generally negative and have deleterious effects on the lives of people who are afflicted with these disorders. Corrigan and Watson (2002) suggested that the core of the mental illness stereotype is the perception of dangerousness and unpredictability. While less than 3% of mentally ill patients could be categorized as dangerous, 77% of mentally ill people depicted in the media (newspaper, television) are presented as dangerous (Corrigan & Watson, 2002). According to the authors, the pernicious myth of dangerousness and unpredictability is perpetuated by sensational headlines in the media about the crimes committed by individuals who may be suffering from a mental illness. Furthermore, several studies have found that people readily distinguish between mental and physical stigmas, and generally those stigmas that are seen to be mental in origin are viewed in more negative terms and lead to more discrimination (Bordieri & Drehmer, 1986). Esses and Beaufoy (1994) state that another reason for the greater rejection of mental illness compared to physical illness is its potential to disrupt normal social interactions and its representation of real threat to others. They contend that most physical disabilities and diseases actually inhibit physical threat, whereas people assume mental illness leads to unpredictable and even physically threatening behavior.

There is overwhelming evidence that suggests that stigma against mental illness remains a serious problem. Corrigan and Watson (2002) reviewed the relevant literature on the stigma of mental illness and suggested that individuals who are members of this marginalized group are aware of the stigma. As a consequence, stigmatized individuals may have lower self-esteem and internalize the devaluation expressed by others. Furthermore, Corrigan (1998) and Corrigan and Penn (1999) indicated that the negative stereotypes that underlie mental illness stigma have broad and damaging implications for the public's treatment of the mentally ill.

As stated earlier, stereotypes are embedded in our culture and have a strong link to our beliefs, attitudes and values. They can deeply resonate in our mental lives and have profound consequences for our social behavior (Schneider, 2004). Studies exploring the perceptions of mentally ill persons in the society have looked into whether mental illness labels are cultural creations or accurate summaries of behavior (Piner & Kahle, 1984). Some argue that the label of "mental illness" affects our reactions to people labeled as such, independent of their actual behaviors, while others argue that our reactions to these individuals are affected more by their behaviors. Piner and Kahle (1984) conducted a study to examine the stigma associated with mental illness. They arranged for 30 female undergraduate participants to wait for the performance of a task in a room with a person labeled either as mentally ill or as having a physical impairment. Results indicated that the mere label of mental illness, in the absence of bizarre behavior, affected ratings and task performance of the participants. The conclusion drawn was the label "mentally ill" affects social judgments of perceivers in ways that are detrimental to people with mental illness.

In another study, Link (1987) conducted a study that sought to incorporate a measure of the extent to which people believed that mental patients in general were “dangerous.” By conducting a vignette experiment, they tested the idea that labeling could make these beliefs relevant to a person’s acceptance. The experiment varied labeling (past mental hospitalization versus hospitalization for a back problem) and deviant behavior. A social distance scale was used as an outcome measure. The data analysis indicated that when the vignette described a subject without a mental illness label, beliefs about the dangerousness of mentally ill persons played no part in determining social-distancing responses to the person described in the vignette. However, when the vignette described a mentally ill subject, these beliefs became a potent determinant of responses. This pattern of results held regardless of the degree of deviant behavior. Based on the results of this study, Link (1987) was able to show that beliefs about dangerousness that were activated by labeling were just as strong predictors of social distance responses as were variations in behavior. Apparently, a mental illness label activates beliefs about the dangerousness of mental patients, making such beliefs important for determining how much social distance a person desires from a “former mental patient.”

Even with changes in social norms, which now discourage expressions of prejudice, and change in many people’s self reported attitudes, prejudice and discrimination towards racial minorities and the mentally ill is still a major factor in our society. Both empirical and anecdotal evidence exist indicating that African Americans do not receive the same mental health care as Whites in our society. For example, there is evidence indicating that African Americans tend to underutilize mental health services,

have higher dropout rates, and often do not receive culturally sensitive treatment (Sohler & Bromet, 2003). Discrimination and prejudice are not as overt as in the past, but they continue to exist in subtler forms. The covert nature of contemporary racism presents a new challenge to psychologists and researchers alike to find a refined methodology to assess for potential racial bias that may continue to affect clinical diagnosis.

Change in the nature and study of racial bias

As previously stated, the norms regarding the appropriateness of discrimination and prejudice against Blacks have changed since the civil rights movement and there are now laws prohibiting prejudice and discrimination. This change in norms appears to have altered the way in which prejudice operates (Plant & Devine, 1998). Because it has become unacceptable for high-prejudiced people to express their racist views publicly, people's prejudices are now expressed in more subtle, indirect, or covert ways. The changes in norms have also posed serious problems for the study and measurement of prejudice. Next, this review will highlight the difficulties faced by researchers interested in studying racial bias and the methodological complexities present in such studies.

The race bias literature that spans over three decades is plagued with inconsistent findings regarding the presence of diagnostic biases against African Americans when compared to their Caucasian counterparts. Some studies report the presence of bias against Blacks, while others report either no bias or a pro-Black bias. The inconsistencies observed are typically attributed to the methods used in the study.

Earlier race bias studies utilized archival data about patients from the charts and records maintained by psychiatric hospitals and clinics. In such studies clinicians were unaware that their clinical judgments would be used as part of a research study. The

clinical information (i.e., symptoms, diagnoses, treatment plans) obtained from these charts and records were simply recorded and evaluated, or compared to follow-up information generated by the researchers. These studies have consistently reported biases toward Black patients in terms of diagnosis and treatment assignment compared to their White counterparts (e.g., Pavkov, Lewis, & Lyons, 1989; Mukherjee, Shukla, Woodle, Rosen, & Olarte, 1983). However, in these studies researchers only compared the frequency of diagnoses among the different racial groups, which does not provide sufficient evidence for the presence of diagnostic bias. Also, factors such as socioeconomic status that may have contributed to race differences were not accounted for.

Another method that has contributed to research on racial bias in clinical diagnosis is the use of vignettes. In vignette studies, clinical symptoms of a hypothetical patient are presented in various formats such as case summaries, intake reports, videotaped sessions or audiotaped sessions. Participants are asked to make specific ratings based on the clinical picture presented where the patient is identified as either Black or White. Although vignette studies provide a control for confounding variables, which is not possible in clinical situation, they may also make the participants aware of the independent variable(s). In studies where clinicians were aware that race was being manipulated, they often responded in a socially desirable manner in order to not appear prejudiced. They assigned more pathological diagnoses to the Caucasian versions of the vignettes, thus presenting either no bias or a pro-Black bias (e.g., Merluzzi & Merluzzi, 1978; Strickland, Jenkins, Myers, & Adams, 1988; Lopez, 1989).

Current research studies on race bias have focused on motivational factors such as social desirability that may influence reported clinical judgments (Abreu, 1999). Furthermore, in an attempt to increase our understanding of when and how race may influence diagnostic impressions, researchers have now focused on interactions of social cognitive variables such as the influence of stereotypes and implicit prejudice that lead to negative evaluation of minority group members (Devine, 1989). The prevalence of egalitarian social norms in the U.S. has forced researchers to explain the effects of these norms on intergroup attitudes and behavior (Gaertner & Dovidio, 1986). Several new perspectives on the interplay of social norms, racial attitudes and behavior have emerged. One such perspective is the presence of a subtle form of racism termed “aversive racism” (Gaertner & Dovidio, 1986). This model of racism suggests the presence of an unintentional form of bias that characterizes many well-intentioned White Americans who possess strong egalitarian values and believe themselves to be nonprejudiced. Gaertner and Dovidio (2000) conducted a study, which showed that Whites practice discrimination when a situation is ambiguous, while simultaneously espousing egalitarian feelings.

Priming and stereotypes

The interpretation of ambiguous behavior can be affected by priming relevant categories. For example, in an early and influential experiment, Higgins, Rholes, and Jones (1977) exposed subjects to positive trait words (“adventurous” “self-confident” “independent” “persistent”) or similar words with negative connotations (“reckless” “conceited” “aloof” “stubborn”). Then in a seemingly unrelated study, subjects read a brief essay about Donald, depicting ambiguous behaviors related to the trait adjectives.

Subjects viewed Donald's behavior in much more positive terms if they were exposed to positive traits during the priming phase.

The effects of priming are often complex and in everyday life, categories central to stereotyping (such as race, age and gender) are frequently primed through the media and the process of normal socialization. These primes are likely to be subtle and, because they are relatively nonconscious, may give rise to assimilative processing (Cunningham, Nezlek, & Banaji, 2004). For example, Dovidio, Evans, and Tyler (1986) have shown that priming of race categories can facilitate the availability of race-related terms. This finding is particularly strong for prejudiced subjects (Wittenbrink, Judd, & Park, 1997) and for those who think egalitarian values is not especially important (Moskowitz, Salomon, & Taylor, 2000).

In another demonstration of priming, Wittenbrink and Henly (1996) primed racial stereotypes by asking subjects questions designed to elicit high or low estimates of Black stereotypic behaviors. Those subjects who were high in prejudice were more likely to see a Black defendant as guilty in a mock trial when their stereotypes had been so primed. Priming effects may also occur as a result of judging the behavior of a category member. So when Whites see a negative behavior by one Black male, or even hear about a crime committed by a Black person, this may lead to increased stereotyping of Blacks as well as increased ingroup favoritism for Whites (Henderson-King & Nisbett, 1996).

Implicit or unconscious prejudice

Prejudice has been studied extensively in the social cognitive literature to aid our understanding of how individuals process societal information. Research findings suggest that people make unconscious judgments about others based on known stereotypes even

if they consider themselves to be non-prejudiced or egalitarian (Devine, 1989, 2001). One explanation for the persistence of prejudice, even among those who renounce it may simply be that responding without prejudice is difficult (Devine, 1989). To respond without prejudice toward out-group members, an individual must overcome years of exposure to bias and stereotypical information that is likely to influence responses toward out-group members (Devine, 1989). Furthermore, in America, Whites have been more advantaged than African Americans and other minorities in numerous social, political, educational, and economic areas (Gaertner & Dovidio, 1986). Even if it is unintentional, Whites may expect these advantages. Therefore, Gaertner and Dovidio suggest that an egalitarian person's attempt to reject negative stereotypes might be extremely difficult and "the feelings of superiority may continue to keep the forces of oppression alive" (p.27).

As mentioned earlier, research findings indicate that subjects respond in a socially desirable manner when they are aware that variables such as race and gender are under study (Devine, 2001; Abreu, 1999). Participants may give socially desirable responses because responding in a negative manner is politically incorrect. Their socially desirable responses may also reflect the effort to be consistent with their egalitarian view of self in order to reduce the cognitive dissonance that may result from negative responses toward African Americans or the mentally ill. The possibility of presenting with socially desirable responses in studies conducted to explore topics such as mental illness stigma and race bias underscores the importance of understanding the nature of implicit prejudice and stereotyping that could lead to effective interventions to reduce or eliminate their pernicious effects (Devine, 2001).

Most people are aware of cultural stereotypes, but this information does not mean that their behavior will result in overt discrimination toward individuals in various ethnic groups (Cunningham, Nezlek, & Banaji, 2004; Devine, 1989). Devine (1989) argued that consciously held attitudes are only partly responsible for prejudiced behaviors. She proposed that race-related behaviors are governed by a combination of controlled, consciously held racial beliefs and by automatic, subconscious stereotyping processes and that these two processes may operate and be measured independently. According to her, during socialization, a culture's beliefs about various social groups, such as Blacks, become ingrained in the way in which social categories are formed. By virtue of simply knowing what the pervading stereotypes of a group are, social information is automatically interpreted through the race-biased filter of stereotypes (Devine, 1989).

Devine (1989) conducted a study which examined the role of automatic processes by priming both high and low prejudice subjects to known stereotypes and evaluating the effects of these primes in an ambiguous situation. She utilized the priming methodology commonly used in cognitive psychology and exposed subjects to a racial stereotype prime (e.g., Black, nigger, lazy, oppressed) for 80ms followed by a mask (a series of jumbled letters). Neutral words were also used (e.g., was, water, then) but at a lower frequency (16 prime words, 4 neutral words). Subjects in the experimental group (high prime words; low neutral words) reviewed 100 words (80/20) while the control group reviewed 100 words but 80 were neutral. Subjects were told that they were participating in a vigilance task based on speed and accuracy. After subjects completed this task, they were told that the researcher was also interested in how people form impressions of others and were subsequently given a vignette of a race-unspecified individual to

evaluate. Included in these evaluative judgments were six questions related to hostility. The results from this study suggested that subjects identified as high or low prejudice produced stereotype-congruent responses that resembled prejudice. Additionally, subjects who were primed using the stereotyped words were more likely to rate the person in the case as hostile and violent regardless of prejudice level. Overall, Devine's (1989) research supported the automatic processing of prejudice suggesting that for "subjects who honestly report having no negative prejudices against Blacks, activation of stereotypes can have automatic effects that if not consciously monitored produce effects that resemble prejudiced responses" (p.12). This finding suggests that biases in psychology may exist because unconscious processes influence decisions (e.g., psychiatric diagnoses) made in clinical practice.

Abreu (1999) followed Devine's (1989) methodology in a clinical setting to assess for the automatic and unconscious impact of African American stereotypes in diagnostic ratings by therapists. He utilized an experimental and control group comprised of clinicians and predoctoral interns. The experimental group was exposed to more prime words (80) than neutral words (20) shown at a rate of 80 ms across a screen located on the parafoveal visual field. The control group participated in the same task except that they were exposed to more neutral words than the experimental group. Subjects were told that they were participating in a vigilance task. Immediately after the priming task, subjects were given an excerpt of a therapy session of a client named Mr. X. with a mixed clinical picture. The mixed clinical picture was used to create ambiguity, which has been shown to elicit stereotypic judgments of African Americans. For the first part of the study, subjects rated Mr. X. on a hostility-related scale. After participants completed

the ratings, they were told that they would be participating in a second part of the study about the use of race and/or ethnicity when interpreting clinical information. Participants were given the same case of Mr. X whose race was now designated as African-American. The same hostility questionnaire from the first part of the study was used.

The purpose of this design feature was to determine if subjects would monitor their ratings to promote a more socially desirable response when race was introduced as the factor under study. The results from this study indicate that subjects who were in the experimental group (high prime) rated Mr. X. more negatively and were more hostile toward him than individuals in the control (low prime) group. Also, when participants were made aware of Mr. X's race they responded in a socially desirable manner, i.e., both groups rated Mr. X as less hostile compared to their prior ratings on the same scale. Based on this finding, Abreu (1999) concluded that information related to racial group membership could activate stereotypes, making attributes associated with that stereotype or set of stereotypes more accessible, consistent with Devine's (1989) conclusion.

Recent studies of stereotypes and prejudice have shown that they exist at several levels of consciousness (Devine, 2001). More work needs to be done to understand how implicit processes are related to more explicit ones and how people may not be fully conscious of their stereotypes, their prejudices, and the ways they discriminate. Importantly, in the field of race bias literature, there is no study to date that has explored diagnostic bias as a consequence of membership in multiple stigmatized social groups (e.g., African American and mentally ill).

As discussed earlier, the negative stereotypes of African Americans and individuals with mental illness persists in our society. The over-diagnosis of severe

pathology such as paranoid schizophrenia and the under-diagnosis of affective disorders are the most frequent types of misdiagnoses for Blacks. It is assumed that the differential interpretation of similar symptoms due to conscious or unconscious acceptance of negative stereotypes of Blacks may contribute to the misdiagnosis. Diagnostic decision shapes treatment choices, and bias in assessment poses a potentially serious problem for effective clinical practice. Even with an improvement in the public's understanding of mental illness, stereotypes of dangerousness and the desire for social distance persists. For example, Stefan (2001) cited a Harris Poll that indicated only 19% of Americans surveyed would be comfortable encountering a person with mental illness.

The purpose of the current study is to explore whether the unconscious priming of African American stereotypes impact the level of clinical functioning rating and stigmatization by the majority group respondents. In other words, when novices are subliminally primed with African American stereotypes, will they rate Blacks presenting with mental illness as more severe? Will Blacks be more stigmatized than their White and No race counterparts presenting with similar symptomatology? The present study will contribute to the current research endeavor on race bias by closely examining clinical judgment process. This study adds to the rigor of a vignette study by first, integrating it with a social-cognitive methodology of priming and second, by manipulating race of the vignettes and the level of functioning.

This study will follow Devine's (1989) and Abreu's (1999) subliminal priming methodology to examine the automatic effects of racial stereotypes on how a layperson perceives an individual of a minority group presenting with a psychiatric disorder. First, it is predicted that participants who are exposed to negative racial stereotypes will

evaluate the racial target as more severely disturbed than the participants in the control group. Second, there will be a difference in the degree of social distance and attribution of mental illness between the racial groups presenting with a psychological disorder. Third, the participant's willingness to associate with the target and their attribution of mental illness will influence their severity rating for the target in the vignette.

METHOD

Participants

One hundred and two undergraduate students in the Department of Psychology at a large southeastern university participated voluntarily for extra course credit. An undergraduate student sample was used for this study for the following reasons: (a) it is a sample of convenience for an analogue study, and (b) novices are expected to be less aware of the race bias literature, therefore, the likelihood of them responding in a socially desirable manner is expected to be lower than in a sample of professionals.

Stereotype Priming

For this study, the E-prime computer software for psychology experiments was used to present the stereotype-priming conditions. The priming procedure was modeled after Devine (1989) and Abreu (1999) studies. The experimental group was presented with negative stereotypes ascribed to African Americans as a prime. Twelve words related to African Americans (e.g., blacks, lazy, blues, ghetto, welfare, Negroes, etc.) were used as primes, and 12 neutral words (e.g., water, difference, completely, things, about, would, etc.) were used as neutral words. Two 120-word lists were prepared, each arranged as six blocks of 20 words each, representing the two priming conditions. In the strong-prime (80:20) condition, each block contained 16 words or stereotypes ascribed to African Americans and 4 neutral words. A similar procedure was used to generate a weak-prime (20:80) condition. The words within each block were randomly ordered, and

words were presented, one at a time, for 80 ms each, on the computer screen. Prime words were presented within the parafoveal visual field- that is, between 2 to 6 degrees of visual angle. To keep the participants focused on the computer screen and on the task, they were asked to press an “arrow” key that corresponded with the location of each flash (e.g., a down arrow when the word appeared below the fixation point, left arrow when the word appeared on the left side of the fixation point, etc.). They were instructed to respond as accurately as possible. These flashes occurred on a random basis in one of four locations around the center of a computer screen, with the center of each word being approximately 2.30 inches (5.84 cm) from the central fixation point. A 100-ms mask (a string of 16 Xs) followed each flash to prevent the afterimage effects. This flashing procedure has been shown to have reliable priming effects (e.g., Bargh & Pietromonaco, 1982; Devine, 1989; Abreu, 1999).

Race Vignettes

Participants were presented with case histories depicting male patients with mental illnesses. Gender was kept constant in an effort to minimize the confounding effect of gender and race interaction. Godwin (2003) and Burgess (2004) used these same case histories in their research projects investigating race bias and level of functioning. The six case histories represented three race conditions (2 Black, 2 White, and 2 No race). In an analogue study of race bias it is important to maintain the delicate balance of manipulating the independent variable (race) such that it is a potent variable but not completely transparent. Unlike gender (where the gender specific pronoun is an indicator through out the vignette), the race of the person is typically mentioned once in the vignette as background information about a target, which may decrease its potency as an

authentic independent variable. The case histories selected for this study provided participants with other racially relevant information such as target names, college attended, membership to a fraternity/sorority when applicable to make the manipulation of race more effective. Each participant read 6 brief vignettes describing patients with high or low severity of mental illness (High/Low Black, High/Low White, and High/Low No race). GAF ratings of 40 and below were considered high severity and GAF ratings of 70 and above were considered low severity. For example, a case of an individual with a GAF rating of 10 is most likely to exhibit symptoms of schizophrenia or other psychotic phenomena that contributes to his or her poor level of functioning. On the other hand, GAF ratings above 70 represented mild symptom presentation of disorders such as depression and anxiety. Each case history was 300 words or less such that participants had sufficient information to make the GAF ratings without experiencing fatigue.

The first vignette out of the set of six cases for all participants was a case describing a patient with high psychological functioning whose racial identity was unknown. By presenting the no race case first we hoped to assess the priming effect following the stereotype priming condition between the two prime conditions as well as use the first vignette as a practice case. Five cases following the first vignette from the set of six were randomized among subjects to minimize order effects. After each vignette, participants were asked to fill out the dependent measures.

Dependent Measures

Target characterization (TC). Participants were asked to provide background information about the racial target. They were asked to select (from multiple options) ethnicity, age range, and socio-economic status of the target. This questionnaire served as

a manipulation check of the race presented in the vignettes as well as an assessment of participants' attention to the task. In the no race condition, this measure was used as an implicit measure of bias.

Global Assessment of Functioning (GAF) Rating. Participants were asked to provide a Global Assessment of Functioning (GAF) rating for each of the targets in the vignettes they read. The GAF is a quick and simple measure of overall psychological disturbance. The participants were provided with an outline of the full GAF rating scale divided in increments of ten (e.g., 0-10, 11-20, 21-30, etc.). Each increment contained brief phrases that described the level of functioning and the severity of the symptoms for each rating group. For example, the group 0-10 states: "Very dangerous. Persistent danger of severely hurting self or others, cannot maintain personal hygiene, cannot communicate." They were further instructed that GAF ratings of 70 and above are considered low severity and GAF ratings of 40 or below represent severe mental illness.

The GAF rating was incorporated in a Target Characterization Scale as a last item. Participants were asked to rate the severity of the mental illness on a scale of 1 to 10. To assure that participants were paying attention to the task and not responding randomly the scale was reversed such that 1 = Superior Functioning and 10 = Low Functioning. Participants had access to the GAF descriptors for all of the cases. For the purpose of data analysis the GAF scores were reverse scored such that high GAF ratings were consistent with high functioning cases.

Social Distance Scale (SDS). The Social Distance Scale developed by Bogardus (1925) was used to measure respondents' social distance or degree of intimacy they would allow with members of an out-group. This scale was modified to measure the

distancing of oneself from the target. The modified scale instructed participants to indicate on a scale of 1 to 9 (1 = definitely unwilling, 9 = definitely willing) the degree to which they would be open to (or closed to) five possible associations with the race targets. Higher the score on this scale, more willing the participants were to associate with the target was assumed. For the purpose of data analysis and simplicity of understanding the results, the total score was subtracted from the total possible score of 45 to give us the distance the participant endorsed for the target in each vignette. This value was considered the social distance value and higher the value greater distance from the target was intended. The associations or relationships were close kinship by marriage, close friendship, neighbor, coworker, and fellow citizen.

Attribution Questionnaire (AQ). To measure participants' stigmatizing attitudes about mental illness, Corrigan, Markowitz, Watson, Rowan, & Kubiaks' (2003) Attribution Questionnaire (AQ) was used to rate the targets in each vignette. The AQ consisted of 27 items measuring nine factors – responsibility, pity, anger, dangerousness, fear, help, coercion, segregation, and avoidance. The items were rated using a nine-point response scale (1 = not at all, 9 = very much). The higher the score the more that factor was endorsed by the participant for the target in the vignette, and thus, more stigmatized.

Demographic Questionnaire (DQ). The demographic questionnaire was used to gather information about the participant's age, gender, hometown (e.g., rural, suburban, urban), race, ethnicity, major area of study, approximate grade-point average, year in school, religious affiliation, and perceived level of religiosity. In order to keep participants' data anonymous, identifying information was not collected.

Design

The current study employed a 2 x 3 x 2 mixed factorial design, consisting of one between-subjects factor and two within-subjects factors. Participants were randomly assigned to either the strong prime (80:20) or the weak-prime (20:80) condition, representing the two levels of the between-subjects factor. The within-subjects factors were the patient's race (Black vs. White vs. No race) and the severity of the patient's symptom presentation (high vs. low GAF).

Procedure

Participants logged onto the Department of Psychology recruitment system (<https://auburn.sona-systems.com>), viewed the details of the experiment, and if they were interested in participating, selected a time slot to participate in the study. Up to four participants were run at a time. Upon arrival, a Caucasian undergraduate female research assistant greeted the participants and reviewed the informed consent form describing the study. Participants were told that they were participating in a study investigating an impact of visual task on the extraction of clinical information from case histories. They were randomly assigned to an individual computer station (cubicle), which was located in four different corners of a quiet lab room (with a significant distance from each other). Once the research participants were set to begin the study the research assistant left the room.

Each computer was randomly assigned to contain one of the two (strong vs. weak) prime conditions. Detailed instructions for the computer tasks were presented on the computer screen. Participants were presented with first block of words, which was then followed by the first vignette (No Race/ High functioning) followed by a series of

questionnaires. The order of the questionnaires was the same for both groups of participants. Immediately after reading the vignette participants were presented with the following sequence of questionnaire: the Target Characterization Scale, which included the GAF rating, the Social Distance Scale and the Attribution Questionnaire. Participants were instructed to make their responses according to how they felt “in the moment” and reminded that there was no “right or wrong answers.” For all questionnaires, items were presented one at a time on the computer screen. All participants were exposed to 6 blocks of prime words each followed by a vignette for a total of six vignettes. Following the first vignette (No race/High GAF) the rest of the vignettes were presented in a random order. Upon the completion of all vignettes, participants were asked to provide their demographic information. All experimental materials were presented and completed on the computer. All participants completed the study within one hour. The time allocated to read the vignettes, names of the targets as well as the clarity of the instructions for the study were pre-tested during a pilot study.

At the end of the experiment, participants had the opportunity to ask questions about the research study. Because all responses were anonymous, participants were not able to receive individual results; however, participants were given the opportunity to provide his or her e-mail address to receive information about the overall findings of the study once all data was collected and analyzed. All participants were thanked and extra course credit was granted.

RESULTS

Demographic Characteristics

One hundred and two participants completed the study during summer and fall semesters of the same calendar year at a Southeastern university. Analyses were conducted using data from participants with valid responses, i.e., match the manipulation check. Ten of the original 102 participants were excluded for not meeting the manipulation check suggesting potential random responding. These 10 participants identified more than 2 out of four of the race vignettes inaccurately (no race vignettes were not examined). The participants who were excluded were all White females and did not differ significantly from the participants who met the inclusion criteria.

Analyses were conducted on the data from the remaining 92 participants. The mean age of the participants was 20.10 (SD = 4.30, ranging from 18 to 52). The majority of the participants were female (78.3%). The self-reported race included White (83.7%), Black (10.9%), Hispanic (3.3%), Asian American (1.1%), and other (1.1%). Most of the participants were freshmen in college (47.6%) majoring in Health Sciences (33.7%) with an overall grade point average of B (53.8%). Approximately 67.4% of the participants characterized their hometown as suburban (urban 20.7%, rural 12.0%). Fifty-nine point seven percent of the participants identified themselves as moderately to mostly religious, and Baptist was the primary religious orientation (28.3%) followed by Methodist (27.2%) and Catholic (12.0%).

Participants were randomly assigned to a strong or weak prime group. Chi-square and one-way ANOVA procedures were used to assess differences in demographic variables across prime groups. Chi-squares revealed no differences with regard to gender, $\chi^2(1) = 0.048, p = 0.826$ and race $\chi^2(4) = 4.40, p = 0.354$ across the prime groups. Likewise, ANOVA revealed that the prime groups did not differ with regard to age, $F(1, 90) = 0.007, p = 0.936$. The main demographic characteristics of interest (gender, race and age) divided by the two prime groups are reported in Table 1.

The control vignette

As discussed in the method section, Vignette 1 (High GAF, No race) was used as a control case and presented to all participants first. To examine the main effect of priming, the group differences (weak vs. strong prime) on the dependent measures (Target Characterization, GAF Rating, Social Distance Scale and Attribution Scale), chi-square analyses and independent samples t-test procedures were run. The two groups (weak, $n = 44$; strong, $n = 48$) did not vary significantly on the target characterization variables that the participants inferred as being associated with this vignette: race, $\chi^2(6) = 3.37, p = 0.761$, age, $\chi^2(13) = 8.83, p = 0.785$, education level, $\chi^2(6) = 7.14, p = 0.308$, hometown, $\chi^2(2) = 3.45, p = 0.178$, and SES, $\chi^2(2) = 1.48, p = 0.477$. The majority of the participants in both prime conditions (weak and strong) characterized the target in this vignette as a White male (weak 84%, strong 85.4%) between the age of 20-25 years old (weak 72%, strong 77%) with a college degree (weak 61.3%, strong 70.8%) from a suburban household (weak 54.5%, strong 43.7%) and with a middle SES (weak 84%, strong 87.5%).

An independent samples t-test procedure conducted on the GAF rating, $t(90) = 0.463, p = 0.645$, Social Distance Total, $t(90) = -0.376, p = 0.708$, and Attribution Total $t(90) = -1.95, p = 0.054$ revealed no significant differences between the two prime conditions. As the Attribution Total was close to the significance level of $p < 0.05$, a factor-level analysis was run to examine whether the two groups endorsed the nine attribution factors differently. Interestingly, the two factors on which the weak and strong prime groups differed significantly were Help, $t(90) = -2.345, p = 0.021$ and Coercion, $t(90) = -2.078, p = 0.041$. The participants in the strong prime group reported being more willing to help the target presented in this vignette and more willing to coerce the target to participate in treatment if needed than the participants in the weak prime group. The two prime groups did not differ significantly on the other attribution factors. The means and the standard deviations for the GAF, Social Distance Total, and Attribution Total for the two prime groups are presented in Table 2.

To examine whether the participants' Social Distance Score and Attribution Score influenced the GAF rating for the target in this vignette, a regression analysis was run. Results indicated that the Social Distance and Attribution scores were not significantly related to the GAF rating, $F(1, 89) = 1.943, p = 0.149$ for this vignette.

Effect of priming and vignette ratings

To examine the primary hypothesis that the participants in the two prime conditions would rate the vignettes differently on the dependent measures, namely; the GAF rating, the Social Distance Scale and the Attribution Scale, data were analyzed separately for each of these measures.

GAF rating. Participants' GAF ratings of the six vignettes between the two prime conditions were examined for evidence of race bias. GAF ratings were submitted to a 2 (prime condition: strong vs. weak) x 3 (race: no race, white, black) x 2 (vignette GAF: high vs. low) mixed factorial analysis of variance (ANOVA) with repeated measures on race and vignette GAF. The main effect of the prime was not significant, $F(1, 90) = 0.213, p = 0.646$. The analysis produced a significant effect of vignette race, $F(2, 89) = 76.67, p < 0.00, \eta^2 = 0.633$. Similarly, the effect of the vignette GAF, $F(1, 90) = 3079.29, p < 0.00, \eta^2 = 0.972$ was significant. A significant interaction effect between vignette GAF and vignette race, $F(2, 89) = 20.24, p < 0.00, \eta^2 = 0.313$ was observed. These results suggest that the GAF of the vignette (high vs. low) had an overwhelming influence on how participants assigned the GAF ratings. The priming condition had no apparent influence on GAF ratings. Of note is that participants in both prime conditions rated the White cases as more impaired than the Black or No race cases suggesting potential reverse bias against Whites. The mean and standard deviations of GAF ratings by prime conditions are shown in Table 3.

Social Distance Scale. The participants' total social distance ratings of the six vignettes between the two prime conditions were examined for evidence of race bias. Social distance ratings were submitted to a 2 (prime condition: strong vs. weak) x 3 (race: no race, white, black) x 2 (vignette GAF: high vs. low) mixed factorial analysis of variance (ANOVA) with repeated measures on race and vignette GAF. The main effect of prime was not significant, $F(1, 90) = 0.635, p = 0.42$. The analysis produced a significant effect of vignette race, $F(2, 89) = 4.325, p = .016, \eta^2 = 0.089$. Similarly, effect of vignette GAF, $F(1, 90) = 431.44, p < 0.00, \eta^2 = 0.827$ was also significant. This

analysis produced a significant vignette GAF x vignette race interaction, $F(2, 89) = 3.85$, $p < 0.03$, $\eta^2 = 0.08$. Participants in both prime conditions expressed a desire to have a greater distance from targets depicting low GAF or low functioning. In both prime conditions, participants showed the most distance from a target representing a low functioning White male once again suggesting potential reverse bias. The mean and standard deviations of Social Distance Total scores by prime conditions are shown in Table 4.

Attribution Scale. Participants' total attribution ratings of the six vignettes between the two prime conditions were examined for evidence of race bias. Attribution ratings were submitted to a 2 (prime condition: strong vs. weak) x 3 (race: no race, White, Black) x 2 (vignette GAF: high vs. low) mixed factorial analysis of variance (ANOVA) with repeated measures on race and vignette GAF. The main effect of prime was not significant, $F(1, 90) = 0.207$, $p = 0.65$. The analysis produced a significant effect of vignette race, $F(2, 89) = 15.96$, $p < 0.00$, $\eta^2 = 0.269$. Similarly, effect of vignette GAF, $F(1, 90) = 1366.49$, $p < 0.00$, $\eta^2 = 0.93$ was significant. Also, this analysis produced a significant vignette GAF x vignette race interaction, $F(2, 89) = 6.09$, $p < 0.00$, $\eta^2 = 0.12$. These results suggest that the GAF of the vignette (high vs. low) had the most significant influence on how participants attributed mental illness to the targets in the vignettes. In both prime conditions, participants endorsed higher attributions of mental illness to the low functioning cases. Interestingly, participants in the weak prime condition stigmatized the White high functioning case more than the high functioning No race or Black cases. The mean and standard deviations of Attribution Scale Total by prime conditions are shown in Table 5.

Effect of priming on race attribution

To examine if priming had any influence on how participants in the two prime conditions that characterized the race of the vignettes, especially the No race cases, chi-square analysis was run. Although the analyses were not significant, the results for the No race cases showed an interesting pattern. For the high-functioning No race vignette, participants in both prime conditions characterized the target as a White male. For the low functioning No race vignette, majority of the participants in the strong prime condition characterized the target as a Black male whereas, the participants in the weak prime condition were variable in their inference about race. The exposure to negative stereotypes of the Blacks in the strong prime condition may have influenced the responses of the participants in this condition. The percentage of race characterization for each vignette is presented in Table 6.

To examine whether participant's race interacted with how they attributed race to the two No race cases, responses of White, Black and Other race participants in the two prime conditions were tabulated. A frequency count showed that 50% of White participants in the strong prime condition inferred the No race low GAF case as that of a Black male compared to 20% of White participants in the weak prime condition. Furthermore, the majority of the White participants characterized the high GAF No race case as that of a White male. The frequency counts are reported in Table 7

Data Reduction

Given that only 10 of the 92 participants in the sample were Black and 5 participants were of another race, any meaningful analyses to determine whether Blacks and other race are equally susceptible to the kind of unconscious processing of racial

information that could lead to biased perceptions were precluded. The majority of the participants in this study were Whites; therefore, the data were reduced to maintain homogeneity of the sample to evaluate how the White participants in the two prime conditions responded to the vignettes depicting males of different races with different levels of functioning. The White participants $N = 77$ (strong prime, $n = 42$ and weak prime, $n = 35$) did not differ significantly on any of the demographic variables: gender, $\chi^2(1) = 0.224, p = 0.636$ and age, $F(1, 76) = 0.323, p = 0.571$

Chi-square analyses were conducted on the target characterization variables such as race, education level, and socioeconomic status for the No race vignettes. Education level and socioeconomic status did not differ significantly between the two prime conditions. However, Chi-square analysis of White participants' inference of race for the low functioning case revealed a significant difference between the two prime conditions, $\chi^2(2) = 9.38, p = 0.009$. This showed that the White participants who were implicitly exposed to negative stereotypes of African Americans inferred the low-functioning No race case as that of a Black male compared to the White participants in the control condition.

Analyses of GAF total, Social Distance total, and Attribution Scale total for White participants

To examine if the race bias exists in the White participants' responses on the GAF rating, social distance and attribution ratings of the six vignettes data were analyzed using a mixed factorial analysis of variance. A 2 (prime condition: strong vs. weak) x 3 (race: no race, white, black) x 2 (vignette GAF: high vs. low) mixed factorial analysis of variance (ANOVA) with repeated measures on race and vignette GAF was conducted for

the GAF rating, Social Distance scale and Attribution scale. The main effect of prime were not significant for the GAF rating, $F(1, 75) = 1.116, p = 0.29$, for the Social Distance Scale total, $F(1, 75) = 0.183, p = 0.67$ and the Attribution Scale total, $F(1, 75) = 2.278, p = 0.135$. Interestingly, a significant interaction effect was observed in the repeated measures analyses between the prime conditions and vignette race for the attribution scale total, $F(2, 74) = 5.33, p = 0.07, \eta^2 = 0.126$, suggesting that 12.6% of the variability is accounted for by the interaction of priming and vignette race. Although, the effect size is in the low range, the results showed that in a weak prime condition, the respondents rated the White High GAF vignette higher than the No race or Black vignette. Similarly, the weak prime condition participants rated the White Low GAF vignette higher than the Low No race or Black vignette once again suggesting potential reverse race bias.

In order to understand what specific attributes were associated with the vignettes by the participants in the two prime conditions, repeated measures mixed factorial analysis of variance for the nine attribution factors were run. There was no main effect of priming on any of the factor scores. However, significant three way interactions between vignette race, vignette GAF and prime for the attribution score were observed for attribution factor representing anger $F(2,74) = 4.027, p = 0.022, \eta^2 = 0.098$, fear, $F(2,74) = 4.031, p = 0.022, \eta^2 = 0.098$, and segregation, $F(2, 74) = 4.851, p = 0.010, \eta^2 = 0.116$. Once again these effect sizes are in the low range; however, results suggest a subtle difference in how the participants in the two prime conditions endorsed the attribution factors for the vignettes. Participants in both prime conditions reported feeling more angry towards Low functioning White target than the Black or No race targets.

Similarly, they endorsed more anger towards High functioning White target than the Black or No race targets. As for the fear factor, participants in the Weak prime condition reported being fearful of Low functioning White target whereas, the High prime condition participants reported being more fearful of Low functioning Black target. For the segregation factor, a similar pattern was observed. The mean ratings for these three attribution factors by race vignette and prime conditions are presented in Figure 1, Figure 2 and Figure 3, respectively.

Regression Analyses. A secondary hypothesis of this study was that the social distance score and the attribution score would influence the GAF rating participants assigned to the vignettes. To examine this hypothesis data were analyzed using a linear regression for the six vignettes. Since no *a priori* hypotheses had been made to determine the order of entry of the predictor variables, a direct method was used for the multiple linear regression analyses. Results indicated that the Social Distance and Attribution score was not significantly related to the GAF rating for No race high GAF vignette. However, for the vignettes depicting High GAF White, High GAF Black, Low GAF No race and Low GAF Black the Attribution Scale was a significant contributor to the GAF rating for these vignettes. Higher attribution scores predicted lower GAF ratings on the vignettes. The Social Distance score did not influence the GAF rating for these vignettes. In contrast, for the Low GAF White vignette, Social Distance Scale was related to the GAF rating and not the Attribution Score. The greater the social distance assumed from the target in this vignette, the lower the GAF rating for the vignette. The significant predictors of the GAF ratings for the five vignettes are presented in Table 8.

Summary

In sum, first, the results suggest that the priming had weak, if any, influence on data. Second, when vignette race had an effect, generally the White low functioning case was seen as “worse” suggesting an evidence for reverse bias. Third, manipulation of GAF (high vs. low) was successful as it differed on all dependent measures. Finally, the attribution score appeared to be more related to GAF rating than the social distance score.

DISCUSSION

Psychologists have long been interested in the ways in which the human mind is tuned to differences between groups and how attitudes toward other people may be based solely on whether or not they are part of one's group. More importantly, researchers are interested in understanding how inter-group differences translate into prejudice and discrimination towards out-group members. This study focused on understanding how perceived inferiority of a group based on prevalent negative stereotypes in the society can lead to diagnostic disparity for the underrepresented groups (African Americans) in the mental health system. Research evidence suggests that mental illness stigma combines with demographic stereotypes and prejudice to affect the quality of life of individuals with multiple stigmatized identities (Corrigan & Watson, 2002).

Changing nature of prejudice

Allport (1954) defined racial prejudice as a negative attitude that puts the object of prejudice at a disadvantage. Despite this seemingly simplistic understanding of prejudice, researchers in the field agree that it is an extremely complex concept that does not lend itself to easy examination and understanding.

After the Civil Rights Movement of the 1960s, the society's standards for the level of race bias that is acceptable changed (Crosby, Bromley & Saxe, 1980; Devine, 1989; Gaertner & Dovidio, 1986). It has become unacceptable for high-prejudiced people

to express their racist views publicly, leading people to express their negative racial attitudes in covert ways. For example, self-report surveys of Americans have indicated a steady decline in negative race based stereotypes over the past several decades. In 1933, 84% of respondents in one survey characterized African Americans as superstitious (Katz & Braly, 1933). In 1951, only 41% characterized African Americans as superstitious (Gilbert, 1951), and by 1993 this number had fallen to 1% (Dovidio, Brigham, Johnson & Gaertner, 1996). However, research based on more indirect methods of assessing racial attitudes has repeatedly demonstrated that strong racism still exists (Gaertner & Dovidio, 1986; Devine & Elliot, 1995). Much of contemporary research on racial prejudice and discrimination is plagued with a paradoxical finding of a consistent decline in the expression of anti-Black racial attitudes and a similarly robust maintenance of Black-White racial inequality (Dovidio, Brigham, Johnson & Gaertner, 1996).

The evolution of racism in America to an indirect form makes its study in scientific endeavors problematic (Plant & Devine, 1998). Racial issues have been studied in the area of psychiatric classification and diagnosis with mixed findings. The notion that African Americans are at higher risk for misdiagnosis than whites gained eminence with the publication of a series of papers in the early 1980s. However, over the last 25 years, there has been a dearth of empirical research on race bias and diagnosis due to the sensitive nature of this topic and the belief by some that racism toward minority groups no longer exists (Dion, 2003).

In the absence of such research, there have been several review articles that have concluded that racism in contemporary America is subtler than in years past. The focus of this aspect of the literature has been to understand modern day racism, which is described

as centering on the ambivalent attitudes and behaviors by Whites towards African Americans (Gaertner & Dovidio, 1986; Plant & Devine, 1998). Theorists and researchers have acknowledged the challenges associated with regulating one's interracial responses and their attentions have recently shifted from explicit racism to implicit or covert racism.

Racism and diagnostic bias

Previous research has found that when African Americans and Whites present with similar symptomatology that African Americans were more likely to be assigned a diagnosis of paranoid schizophrenia while Whites were more likely to be given a mood disorder (Bell & Mehta, 1980; Adebimpe & Cohen, 1981). In the literature there have been several arguments for why there is a diagnostic disparity between these racial groups but these findings have not been consistent across studies. Furthermore, research findings in diagnostic bias have also shown pro-Black and anti-White biases (e.g., Merluzzi & Merluzzi, 1978; Strickland, Jenkins, Myers, & Adams, 1988; Lopez, 1989). These findings in clinical judgments have been attributed to motivational factors such as social desirability.

Empirical research conducted in the area of race bias and clinical judgment has suggested the possibility that many people report overly positive attitudes toward Blacks because they fear social disapproval. For example, in a study conducted by Jones and Sigall (1971), participants gave ratings of Black people in two conditions. In the first condition, participants simply reported their attitudes toward Black people to the experimenter. In a second condition, participants were hooked up to the "attitudes pipeline," a bogus apparatus designed to make participants believe that the experimenters

could detect their true attitudes. Compared with the control group, participants in the bogus pipeline condition reported greater agreement with stereotypes of Black people, suggesting that people typically conceal true, personally held prejudices from others (Jones & Sigall, 1971).

Explicit versus implicit racism

Patricia Devine, one of the leaders in contemporary studies of modern racism, proposed that race-related behaviors are governed by a combination of controlled, consciously held racial beliefs and by automatic, subconscious stereotyping processes and that these two processes may operate and be measured independently (Devine, 1989; Devine, 2001). For example, when a white person encounters a Black individual the stereotypes that were designed to ease information processing are automatically activated, without conscious intention, which may influence behavior. However, although the majorities of the people knows the stereotypes of Black Americans and are affected by them at the automatic level, many are opposed to these stereotypes and consciously reject racial discrimination. Devine (1989) proposed that the influence of automatic stereotype activation can be diminished through controlled processing, that is, the conscious and intentional inhibition of stereotypes.

There is a consensus in the recent literature that race-biased behavior is best conceptualized as the result of independent implicit processes and explicit processes. Whereas self-report measures of prejudice are typically designed to tap into explicit race biases, assessing the degree of a person's implicit race bias has posed a new challenge for prejudice researchers (Devine, 1989; Devine, 2001). Past work was limited to the race biases that people were able and willing to report, however, it is equally important to

focus on behavioral responses that can reflect people's automatic race biases. For example, a study conducted by Fazio and colleagues (1995) showed participants' general tendency to associate black faces more strongly with negative words and less strongly with positive words in comparison with white faces, suggesting an implicit evaluative race bias against Black people. Moreover, participants' levels of implicit bias were not correlated with their self-reported prejudicial beliefs.

Abreu (1999) similarly observed that when therapists were unconsciously primed with African American stereotypes, they performed in a biased manner. Therapists who were implicitly exposed to the negative stereotypes of African Americans rated Mr. X as more hostile compared to therapists in the control group. Both groups rated Mr. X in a more favorable light when they were made aware of his race (Black). This suggested to Abreu that when participants knew race was the variable of interest participants responded in a socially desirable manner. Abreu's (1999) findings were consistent with Devine's (1989) assertion that African American stereotypes can be activated without the conscious control of the perceiver and this automatic activation impacts the impression formation and social evaluation of African Americans (Devine, 1989; Abreu, 1999).

In line with these findings, the current study hypothesized that unconscious priming of negative stereotypes of African Americans would lead participants to rate the vignettes depicting African Americans as more severe and highly stigmatized when compared to vignettes depicting Whites or No race. Interestingly, the results from the present study showed that priming had little if any effect on data when the race was made apparent. However, when participants were asked to infer race for the two No race vignettes, participants in the strong prime condition characterized the low functioning

case as that of a Black male whereas their weak primed counterparts' race inference for this case was variable. Participants in both prime conditions labeled the high-functioning No race case as White. These findings suggest a presence of subtle race bias, which is consistent with other race bias findings when the situation is ambivalent (e.g., Higgins, Rholes, & Jones, 1977; Wittenbrink & Henly, 1996).

The present research findings also corroborated previous research showing anti-White bias in the examination of race (e.g., Merluzzi & Merluzzi, 1978; Strickland, Jenkins, Myers, & Adams, 1988; Lopez, 1989). When case race had an effect in the present study, the majority of the participants generally saw the low functioning White case as being the "worst." There are three possible explanations for this finding. First, participants may be responding in a socially desirable manner. Although an undergraduate sample was used in this study to overcome the participants' familiarity with the race bias literature, an anti-White bias was observed. In this study, to make the independent variable more potent other racially relevant information was included in the vignette when race was explicitly mentioned (White and Black cases) such as common names, school attended, fraternity, etc. An attempt to make the race variable potent may have compromised the manipulation of race exposing the participants to the variable of interest. Thus, participants in this study may be responding in a socially desirable manner by portraying the Black cases in a more positive light than the White cases in order to appear unbiased.

A second explanation for this finding is based on a *shifting standards model* (Biernat & Manis, 1994). According to this model, social judgment is dependent on social identity of the target of evaluation and that people use different reference points

anchored in different schemas while making subjective judgments. The shifting standards model suggests that if the participant has relatively low expectations for the mental health of a person of color, he or she might under diagnose that individual. The target might be considered “healthy” relative to the perceiver’s low expectations. However, the favorable rating of health might paradoxically be based on the evaluator’s implicit racially biased schema about the average level of psychological functioning for a person of color (Biernat & Manis, 1994).

A third explanation for the anti-White bias observed in this study is based on Tajfel’s social identity theory which posits that the need to hold a positive view of one’s own group causes people to enhance views of their own group while derogating other groups (Tajfel, 1982; Tajfel & Turner, 1986; Turner, 1987). In the present study, the majority of the participants who were White females evaluated White males presenting with symptoms of mental illness. Their responses to the vignettes may be viewed as their desire to see one’s own group (White “normal” females) in a favorable light affecting the subtle cognitive processes that underlie the judgments and behaviors directed toward out-group, in this case White males with “mental illness.”

The present study added a unique layer to the study of diagnostic bias by manipulating level of functioning. High and low functioning cases in all three conditions (White, Black, No race) were presented to all participants. Participants rated low functioning (severe mental illness) cases high on stigma and maintained greater distance from targets depicted in these cases. This finding is consistent with several other studies demonstrating a relationship between stereotypes about people with mental illness as dangerous and a desire for greater social distance (Link et al. 1999). Furthermore, research evidence exists to

suggest that public stigmatize people with psychotic disorders more harshly than people with depression or anxiety disorders (Pescosolido, Monahan, Link, Stueve, & Kikuzawa, 1999). Individuals with psychotic disorders (e.g., schizophrenia) are thought to be more severely impaired in their functioning than individuals suffering from affective disorders (e.g., depression, anxiety). Moreover, despite noted improvements in public's understanding of mental illness they continue to focus on stigma-related associations about diagnostic labels and perceive severely mentally ill as more socially deviant and violent (Angermeyer & Matschinger, 1997).

In sum, the current results are consistent with previous investigations of implicit race bias as subtle effect of priming was observed when strongly primed participants inferred the race in the No race low functioning case as that of a Black male. There was no effect of priming when race in the vignettes were disclosed. Furthermore, consistent with other contemporary investigations of race bias, anti-White bias was observed where low functioning White case was rated as more impaired. Lastly, the current study also showed that the majority of the participants reported higher stigma and expressed greater distance towards targets in low functioning cases than high functioning cases. This suggests that stigma towards mental illness persist and the intensity of stigmatization varies by the severity of the illness, which is consistent with other reports (Link et al., 1999).

Limitations

This study has a number of limitations; therefore, the findings reported must be interpreted with caution.

Sample characteristic. This study used undergraduates instead of psychologist/psychiatrists who are involved in clinical diagnosis, intervention and treatment of mentally ill in the society. It is unclear how generalizable data from this study would be if a sample of clinicians were used instead of novices with regards to assessing the impact of race and mental illness stigma on clinical judgment. Furthermore, the participants in this study were majority White females enrolled in psychology courses. Therefore, their attitudes towards mental illness and race may be flavored by their humanitarian and professional interests as well as by their training and experience. It is plausible to expect students enrolled in different programs for example, business or engineering, to respond differently to this study.

Similarly, limited representation of Blacks and other races as participants in this study precludes any meaningful analysis to determine whether African Americans and members of other races are equally susceptible to the kind of unconscious processing of racial information that could lead to biased perceptions as Whites. Future research should include adequate numbers of participants from different minority groups to explore the impact of unconscious process of racial information and how it impacts behaviors.

Majority of the participants in this study were females and the vignettes depicted were that of males, which brings to question the gender interaction. Females may rate vignettes depicting females differently. Future research should take into account how the gender of the participant interacts with the gender of the target depicted in the vignette.

Lastly, this study was conducted at a southeastern university located in Auburn, Alabama. Given the history of racism in the south the findings from the study conducted in this geographic region may not be representative of other geographic locations. It is

very likely that the participants in this region are sensitive to race issues and if they were aware of the race manipulation they might be more motivated to respond in a socially desirable manner to appear nonprejudiced. In the absence of a post hoc questionnaire assessing participants' awareness of the manipulation of independent variable it is difficult to know if race as an independent variable was exposed. Future research should replicate this study by using samples from different regions of the country as well as assess for participant's awareness of race as a variable of interest.

Vignettes. This study used an analogue task, where participants were asked to form an impression and rate their willingness to associate by reading a brief description of a fictitious client whose race varied, which may not be similar in many important ways to the actual situation of making a face-to-face clinical assessment. The issues of bias in clinical judgment and diagnosis originate in the interpersonal interaction between clinician and patient. Race is thought to be a moderator for clinical interactions with potentially deleterious consequences for African Americans such as misdiagnosis; therefore, it is important to study it in a naturalistic setting to understand how clinicians of various backgrounds interpret observations and self-reports about distress and dysfunction of patients.

Another limitation of vignette methodology in studying race bias is the delicate balance needed to maintain the potency of the independent variable yet not make it transparent. This study attempted to make race a more potent variable by manipulating names of the fictitious patients and other race specific information (e.g., fraternity, college name, etc) when applicable. Participants' responses on the dependent measures

may be either indicative of their awareness of race manipulation or a lack of powerful independent variable or both.

Another variable that was manipulated in the vignettes was the level of functioning. Although an attempt was made to make all the high functioning and low functioning cases for all three conditions comparable, it is very likely that participants' idiosyncratic interpretations of the vignettes might have impacted how the participants rated different vignettes. Furthermore, since participants responded most strongly to low functioning White case, the content of this vignette was examined and compared with Black low functioning and No race low functioning vignettes for potential triggers for the strong reaction. It is possible that the White low functioning case was rated more impaired as this vignette depicted a patient who had threatened to kill his mother on numerous occasions and displayed more severe psychotic features compared to symptoms of major depression with psychotic features in the Black low functioning case and symptoms of paranoia in the No race low functioning case. It is plausible that participants who were majority White females identified with the mother of the patient in the low functioning White case. Their empathy for the mother may have lead to more severe rating for the target in the vignette and more social distance from him. Future studies should control for such symptomatic variability in the vignettes used by creating vignettes with the same diagnosis and by pre-testing what the participants are responding to in the vignette.

Priming. This study used a priming methodology commonly used in cognitive psychology (Bargh & Pietromonaco, 1982) and although the methodology may be sound the content of the prime or the stimulus words may be a limitation. Dovidio and Gaertner

(1986) have found that many of the stereotypes that were applied to Black people in the past have faded from use and changed in their content. Therefore, the lack of priming effect in this study is likely due to the use of outdated negative African American stereotypes. Perhaps the negative valence of the stereotypes primed was not salient for the undergraduate students who participated in this study.

Furthermore, the goal of this study was to examine how race related negative stereotypes impact participants' willingness to associate with the target. It is plausible that the participants reacted equally or simultaneously to the race of the target and to the fact that they are presented as mentally ill. A similar pattern may be observed if participants were primed exclusively with negative stereotypes of persons with mental illness. Future research should address not only the stigma of race and mental illness but also how other stereotypes and prejudices combine to affect recovery and quality of life for individuals with multiple stigmatized identities.

Dependent measures. In this study, GAF was used as a severity rating scale. Participants rated each vignette on a 0-10 scale with extremes representing lowest to highest level of functioning, respectively. Research has shown that although GAF is a reliable measure of functioning and severity, it is not the most sophisticated instrument to be used to measure diagnostic bias (Fernando, Mellsop, Nelson, Peace, & Wilson, 1986). The GAF scores in this study adequately and accurately distinguished between high functioning and low functioning cases but it did not provide us with any further information than this dichotomy. Future studies should incorporate other measures of diagnostic bias such as DSM-IV-TR Axis I and Axis II categories, which may provide us with more information about the participants' rating of functioning.

The lack of diagnostic labels for the vignettes may be an inadequate stimulus to make subsequent social judgments as measured by the Social Distance Scale and Attribution Scale in this study. For instance, a person may react to the label of “Major Depression” and “Schizophrenia” differently than the functioning level of 3 versus 7 and this difference may be observed strongly in their willingness to associate with the target as well as their attribution of mental illness to that target. Future research on clinical bias should use more valid measures of diagnostic impressions such as open-ended participant’s comments, DSM diagnostic categories, etc.

Future directions

As noted previously, there is a relative paucity of empirical research on diagnostic bias. Methodological constraints have contributed to the lack of consistent findings in studies exploring race bias and diagnostic disparity. In the past decade, researchers in the field of racism and prejudice have acknowledged that the construct of racism is different now than 40 years ago and they have shifted their attention from explicit measure of bias to implicit expression of contemporary racism.

Implicit processes in prejudice and stereotyping have recently dominated the field of social and cognitive psychology yet little is known about what implicit race biases represent and how they function (Plant & Devine, 2001). Recently, researchers have begun to apply brain-based models of implicit and explicit processes in an effort to better understand how implicit race biases are formed and expressed. One promising direction comes from cognitive neuroscience research, which has associated implicit forms of emotion and memory with the amygdala, a neural structure located in the temporal lobes of the brain (Phelps et al., 2000). The amygdala is linked with detecting threat in the

environment and for deploying swift responses in situations that call for immediate action. Neuroscientists believe that amygdala rely on category properties learned over time through repeated experiences to make these quick judgments (Phelps et al., 2000). For example, a snake is linked with danger in our mind and therefore, amygdala is likely responsible for our startled response when we see a snake-like shape. Similarly, the repeated association of Black people with violence could create a negative emotional association and produce a threat-like reaction when encountering a Black person (Amodio, Harmon-Jones, & Devine, 2003).

Amodio, Harmon-Jones, and Devine (2003) used physiological measures to show that amygdala-related activity is increased when participants view the faces of Black people in comparison with those of white people. Other researchers, using functional magnetic resonance imaging to measure neural activity, have also found that amygdala activity in response to seeing a Black face is correlated with levels of implicit race bias measured using the IAT (Phelps et al., 2000).

Furthermore, research on amygdala-related learning suggests that amygdala-based responses function differently than do the thoughtful reflective types of responses associated with frontal cortical processes (Rolls, 1999). Information processing linked to the prefrontal cortex is more flexible and easily changed but the information-processing style of the amygdala is comparatively more rigid and resistant to change and is particularly sensitive to learning and responding to negative information (Phelps et al., 2000). Finally, evidence from the animal literature suggests that amygdala-related responses are best changed through repeated exposure to information that goes against what is already learned (Amodio, Harmon-Jones, & Devine, 2003). Thus, if implicit race

bias is the product of the repeated coupling of Black people with negative attributes and pairing of mentally ill with danger, it follows that one way of reducing implicit bias would be to counteract the negative associations with Black and mentally ill with positive pairings (Corrigan & Watson, 2002; Phelps et al., 2000).

Conclusion

The results of the present study join a body of research focused on the impact of unconscious priming on race bias. This research is a first of its kind in the race bias literature to manipulate priming condition, race, and the level of functioning to examine how stereotypes and stigma of race and mental illness affect individuals who belong to multiple stigmatized groups.

Although most people agree that derogating members of stigmatized social groups is contemptible, members of the stigmatized groups continue to experience prejudice and discrimination. The conceptualization of prejudice as a combination of automatic and controlled processes has provided a new understanding of prejudice with important implications for attitude change. Furthermore, the recent findings from cognitive neuroscience research have highlighted possible neural mechanisms of behaviors influenced by implicit bias. It is clear that prejudice and biases are embedded in a complex system of cognitive, motivational, emotional, social, cultural, and political processes. Further research should investigate the interplay between these systems to understand how prejudiced beliefs are created, how it impacts the target of prejudice, and how we can begin to work towards changing/reducing prejudiced attitudes in different venues of our society such as the mental health system, public health, work force, and the criminal justice system.

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APPENDICES

APPENDIX A

DEMOGRAPHIC QUESTIONNAIRE

1. Age: _____
2. Gender: Male Female
3. Which area best describes where you grew up?
 - Rural (Country)
 - Suburban/Small Town (Outside a large city or in a small town)
 - Urban (City)
4. Which of the following best describes your primary race/ethnicity? (Please check only one choice.)
 - Asian-American Black/African American
 - Native American Hispanic
 - White/Caucasian Multiracial (specify: _____)
 - Other (specify: _____)
5. Which category does your major fall into?
 - Arts (Art, Dance, Design, Language, Music, Theatre)
 - Business (Accounting, Computer Science, Economics, Finance, Marketing)
 - Health Professions (Athletic Training, Physical Therapy, Physician's Assistant, Premed)
 - Humanities (Education, English, History, Philosophy, Journalism, Religion)
 - Math/Engineering
 - Natural Science (Biology, Chemistry, Physics, Geography)
 - Social Science (Anthropology, Communication Disorders, Human/Child Development, Political Science, Psychology, Sociology, Social Work)
 - Undeclared
 - Other (specify: _____)
6. What is your average grade? (Please circle only one choice.)
 - A C F
 - B D
7. What is your current year in school? (Please circle only one choice.)
 - First year (Freshman) Junior Graduate
 - Sophomore Senior

8. What is your religious affiliation?

- | | | |
|---|------------------------------------|------------------------------------|
| <input type="radio"/> Agnostic | <input type="radio"/> Episcopalian | <input type="radio"/> Mormon (LDS) |
| <input type="radio"/> Atheist | <input type="radio"/> Hindu | <input type="radio"/> Pentecostal |
| <input type="radio"/> Baptist | <input type="radio"/> Jewish | <input type="radio"/> Presbyterian |
| <input type="radio"/> Buddhist | <input type="radio"/> Lutheran | <input type="radio"/> Protestant |
| <input type="radio"/> Catholic | <input type="radio"/> Methodist | |
| <input type="radio"/> Disciples of Christ | <input type="radio"/> Muslim | <input type="radio"/> Other |

9. Please rate your level of religious identification.

- | | | |
|--|--|--------------------------------------|
| <input type="radio"/> not at all religious | <input type="radio"/> moderately religious | <input type="radio"/> very religious |
| <input type="radio"/> slightly religious | <input type="radio"/> mostly religious | |

APPENDIX B

ATTRIBUTION QUESTIONNAIRE

Answer each of the following questions about Mr. X (Name of the client presented in each vignette).

1. I would feel aggravated by Mr. X.
0 1 2 3 4 5 6 7 8 9
Not at all Very much

2. I would feel unsafe around Mr. X.
0 1 2 3 4 5 6 7 8 9
Not at all Very much

3. Mr. X would terrify me.
0 1 2 3 4 5 6 7 8 9
Not at all Very much

4. How angry you would feel at Mr. X?
0 1 2 3 4 5 6 7 8 9
Not at all Very much

5. If I were in charge of Mr. X's treatment, I would require him to take his medication.
0 1 2 3 4 5 6 7 8 9
Not at all Very much

6. I think Mr. X poses a risk to his neighbors unless he is hospitalized.
0 1 2 3 4 5 6 7 8 9
Not at all Very much

7. If I were an employer, I would interview Mr. X for a job.
- 0 1 2 3 4 5 6 7 8 9
Not at all Very much
8. I would be willing to talk to Mr. X about his problems.
- 0 1 2 3 4 5 6 7 8 9
Not at all Very much
9. I would feel pity for Mr. X.
- 0 1 2 3 4 5 6 7 8 9
Not at all Very much
10. I would think that it was Mr. X's own fault that he is in the present condition.
- 0 1 2 3 4 5 6 7 8 9
Not at all Very much
11. How controllable, do you think, is the cause of Mr. X's present condition?
- 0 1 2 3 4 5 6 7 8 9
Not at all Very much
12. How irritated would you feel by Mr. X.?
- 0 1 2 3 4 5 6 7 8 9
Not at all Very much
13. How dangerous would you feel Mr. X is?
- 0 1 2 3 4 5 6 7 8 9
Not at all Very much
14. How much do you agree that Mr. X should be forced into treatment with his doctor if he does not want to?
- 0 1 2 3 4 5 6 7 8 9
Not at all Very much

15. I think it would be best for Mr. X's community if he were put away in a psychiatric hospital.

0 1 2 3 4 5 6 7 8 9
Not at all Very much

16. I would share a car pool with Mr. X. every day.

0 1 2 3 4 5 6 7 8 9
Not at all Very much

17. How much do you think an asylum, where Mr. X can be kept away from his neighbors, is the best place for him?

0 1 2 3 4 5 6 7 8 9
Not at all Very much

18. I would feel threatened by Mr. X.

0 1 2 3 4 5 6 7 8 9
Not at all Very much

19. How scared of Mr. X would you feel?

0 1 2 3 4 5 6 7 8 9
Not at all Very much

20. How likely is it that you would help Mr. X?

0 1 2 3 4 5 6 7 8 9
Not at all Very much

21. How certain would you feel that you would help Mr. X?

0 1 2 3 4 5 6 7 8 9
Not at all Very much

22. How much sympathy would you feel for Mr. X?

0 1 2 3 4 5 6 7 8 9
Not at all Very much

23. How responsible, do you think, is Mr. X. for his present condition?
- 0 1 2 3 4 5 6 7 8 9
Not at all Very much
24. How frightened of Mr. X would you feel?
- 0 1 2 3 4 5 6 7 8 9
Not at all Very much
25. If I were in charge of Mr. X's treatment, I would force him to live in a group home.
- 0 1 2 3 4 5 6 7 8 9
Not at all Very much
26. If I were a landlord, I probably would rent an apartment to Mr. X.
- 0 1 2 3 4 5 6 7 8 9
Not at all Very much
27. How much concern would you feel for Mr. X?
- 0 1 2 3 4 5 6 7 8 9
Not at all Very much

APPENDIX C

TARGET CHARACTERIZATION QUESTIONNAIRE

1. AGE
2. Gender
 1. Male
 2. Female
3. Which area best describes where he grew up?
 1. Rural (Country)
 2. Suburban/Small Town (Outside a large city or in a small town)
 3. Urban (City)
4. Which of the following best describes his primary race/ethnicity?
 1. Asian-American
 2. Native American
 3. White/Caucasian
 4. Black/ African American
 5. Hispanic
 6. Multiracial
 7. Other
5. What is the highest level of education he has completed?
 1. Grammar school
 2. High school or equivalent
 3. Vocational/ technical College (2 year)
 4. Some college
 5. Bachelor's degree
 6. Master's degree
 7. Doctoral degree
 8. Professional degree (MD, JD, etc.)
 9. Other
6. What is his socioeconomic status (SES) or family income level?
 1. Low
 2. Middle
 3. High
7. What is the severity of his mental illness?
 1. Superior Functioning (91-100)
 2. Minimal Symptoms (81-90)
 3. Transient Symptoms (71-80)
 4. Mild Symptoms (61-70)
 5. Moderate Symptoms (51-60)
 6. Serious Symptoms (41-50)
 7. Very Serious (31-40)
 8. Psychotic (21-30)
 9. Dangerous (11-20)
 10. Very Dangerous (0-10)

APPENDIX D

SOCIAL DISTANCE SCALE

Please indicate your willingness to associate or have relationship with Mr. X using the following scale. Remember to give your first feeling reactions in every case.

1. As a family member through marriage.

0 1 2 3 4 5 6 7 8 9

Definitely willing

Definitely unwilling

2. As a close personal friend.

0 1 2 3 4 5 6 7 8 9

Definitely willing

Definitely unwilling

3. As a close neighbor in your neighborhood or apartment building.

0 1 2 3 4 5 6 7 8 9

Definitely willing

Definitely unwilling

4. As a fellow coworker.

0 1 2 3 4 5 6 7 8 9

Definitely willing

Definitely unwilling

5. As a citizen of the United States of America.

0 1 2 3 4 5 6 7 8 9

Definitely willing

Definitely unwilling

APPENDIX E

STIMULUS WORDS FOR THE PRIMING TASK

Prime words

Blacks
Lazy
Blues
Rhythm
Africa
Negroes
Stereotype
Ghetto
Welfare
Basketball
Unemployed
Plantation

Neutral Words

Water
Then
Would
About
Things
Completely
People
Difference
Television
Experience
Something
Thought

APPENDIX F

VIGNETTES

No race –High GAF

Client graduated from college last year and is presently applying for a job at Bellsouth in Atlanta, Georgia. For the past year, he had been employed in a regional office for Chick-Fil-A and was given accolades after an idea impressed a regional manager. Client became interested in Bellsouth after he learned that there were good possibilities for advancement within this organization. The idea of a new job with good future possibilities was an exciting possibility for the client. As part of the interviewing process, he was asked to complete a psychological evaluation, which required him to fill out a personality questionnaire and to provide details about personal background.

The client reported growing up in Dayton, Ohio, the eldest of four children. The biological parents divorced when he was 10. Although the client described this to be a difficult time for the family, he and his siblings have managed to remain close to both parents despite a few tumultuous interactions. He described having a close relationship with the siblings, who live in various parts of the United States. He has recently become engaged and is planning to marry within the next 6 months. The desire to change jobs coincided with a move by the future spouse to Atlanta two months prior to this interview. His references described him as being confident, dependable, and hard working, an individual with whom working and interacting has been a pleasure. The references also commented that he is able to make tough decisions and to stick with the consequences of those decisions. (word count 257)

White –High GAF

Mark Jacobs works as professional teacher of ballroom dancing as well as having a part-time job as a clerk in a local furniture store. He has been to a number of major competitions and has been on television as part of shows about ballroom dancing. Mark is self-described as aggressive and demanding on the dance floor, but warm and loving in personal life. His goal is to become a national champion in the ballroom competitions.

Six months ago, Mark's maternal grandmother passed away of complications related to diabetes. Although his grandmother's health had been deteriorating for months, the patient took her death hard. Mark had a large support system comprised of family, friends, and a sexual partner of three years. Nonetheless, he has had a hard time discussing the grandmother's death with them. Mark feels that not talking about her death may be contributing to the current problems. At the start of a new dance season with a new partner, he began to have difficulty. The grandmother had attended many of his dance competitions and Mark was saddened that she was not there to cheer him on. The feelings of grief were beginning to affect his performance in practice as well as to interfere with work. He became concerned when he forgot appointments for dance lessons and his clients started becoming frustrated with his neglect of them. Finally, Mark talked to one of his students who worked as a psychiatric social worker. The social worker referred Mark to a therapist to work through his feelings of loss.

(word count 257)

African American – High GAF

Marcellus, a 27 year-old African American male, is a recent graduate with a degree in industrial engineering from Morehouse College in Atlanta, Georgia. He entered Morehouse after spending time as a sergeant in the Army. Despite having poor grades in high school, the military experience helped Marcellus mature, and he graduated from Morehouse with high honors. Additionally, he was active in a number of on-campus activities including being the president of his fraternity, Omega Psi Phi, as well as volunteering at a local church outreach program for disadvantaged children. Marcellus has been dating since leaving Morehouse but the couple has experienced some problems, mostly associated with their quite different religious backgrounds. Last month, Marcellus read an advertisement in a newspaper and decided to participate in a research study about a family history of mental illness.

During this interview, Marcellus reported that a paternal grandfather was currently a resident in an assisted living facility with the symptoms of dementia. His grandfather used to live with the family. When his grandfather stayed on medications, he would exhibit fewer symptoms. However, he would often forget his medication and off of his medication, his grandfather was aggressive towards the family and would wander off from the house. Marcellus described his grandfather as a very precise and demanding person who is sometimes difficult to deal with. During the interview, Marcellus had some concern about the heritability of dementia, but indicated that this concern will not interfere with his current lifestyle or with his future goals. (word count 250)

No race. Low GAF

The police brought the client to a local hospital for striking an elderly woman in the apartment building. He had been ill for the last 8 years when he was in law school and was convinced that the other law students were being disrespectful. He noticed that the other students would snort and sneeze whenever he entered the classroom. When a girl he was dating broke off the relationship, he believed that this individual had been “replaced” by a look alike. He called the police and asked for their help to solve the “kidnapping” of the friend. His academic performance in school declined dramatically. Finally, he was asked to leave law school and seek psychiatric care. He is currently unemployed and lives alone in an apartment building.

During the interview, the client maintained that the apartment is the center of a large communication system that involves three major television networks, an informal chat room of neighbors, and apparently hundreds of “actors” in the neighborhood. He explains that there are secret cameras in the apartment that carefully monitor his activities. He is afraid to go outside, especially during the day, because he believes strangers on the street follow him around and are able to control his thoughts and actions. He believes that these strangers then report to his neighbors about him. He also reported hearing voices many times each day, generated by this machine, which he sometimes thinks is directly run by the neighbor whom he attacked. He realizes that it takes great effort and “millions of dollars” to keep this level of surveillance operative. Sometimes he thinks that it is all a part of a large experiment to discover the secret of his superior intelligence.

(word count- 285)

White – Low GAF

Sam is a Caucasian male who looks considerably younger than his stated age of 42. His mother brought him to the hospital because she reported being fearful of his recent expressions of aggression towards her. She reported that Sam had threatened to kill her on multiple occasions with the most recent involving the use of a weapon. In addition to these threats, the patient also made suicidal threats and gestures that appear to have a clear expectation of death (e.g., cutting the wrist with a knife). Sam was hospitalized several months ago due to the same types of behavior but these behaviors had become regulated via the assistance of medications. However, his mother indicated that Sam had decompensated since stopping all medications. Since that time, she indicated that he has begun to hear voices and acts bizarrely. When Sam is asked questions, he responds by saying that “eating wires and lighting fires” are the only things that have been fun lately. His spontaneous speech is often incoherent and marked by frequent rhyming and the use of words that sound similar but have different meanings.

His first hospitalization occurred after dropping out of school at age 16, and since that time, Sam has never been able to attend school or hold a job. He had been treated with medication for the mental illness during hospitalizations. However, medications were often stopped once he was released from the hospital and his behavior quickly became disorganized again. Sam lives with his elderly mother but sometimes disappears for several months at a time and is usually picked up by the police when found wondering the streets. When the patient is in this mental state, physical hygiene is minimally acceptable. There is no history of drug or alcohol abuse.
(word count -293)

African American -Low GAF

While in his social worker's office, Tyrone, a 40 year-old male, reached into a large shopping bag he had carried into the office and pulled out a six-inch knife. First, he grasped it with his hand, with his thumb along the blade. Then he tried clutching it in his fist. His therapist had to summon help in order to get Tyrone to a hospital.

His problems began shortly after he joined the Army. He was sent to the infirmary for what seemed like bronchitis, but as the penicillin took effect and his fever came down, the voices began. The voices often gave him advice on how to behave. But at times, he said the voices "nearly drove me crazy" by constantly commenting on what he was doing. He was hospitalized at that time and given medication, which reduced his symptoms, but the voices never disappeared. The Army retired him as medically unfit, 100% disabled and he moved back home.

After he returned home, he began to have profound symptoms of depression in addition to his psychosis. These included low self-esteem, hopelessness, loss of appetite, insomnia that caused him to awaken early most mornings, and the guilty conviction that he disgraced his family by being discharged from the army. He reported that on most days, he had suicidal thoughts with a definite plan. He sought treatment from the local hospital, which prescribed him medication for his depressive symptoms, but his hallucinations continued. Given that he disliked his medications, Tyrone decided to discontinue their use. The following week, Tyrone returned to the office, hallucinating and wondering whether to hold his knife in his hand or in his fist. (word count 276)

Table 1

Demographic characteristics of the sample by prime groups

	n	Gender		Race			Age		
		Male	Female	White	Black	Hispanic	Other	Mean	SD
Prime Group									
Strong	48	10	38	42	3	2	1	20.06	5.14
Weak	44	10	34	35	7	1	1	20.14	3.33

Table 2
 Mean (SD) for the GAF, Social Distance Total, and Attribution Total for the two prime groups for Vignette 1

Prime Group	n	GAF Mean (SD)	SDTOT Mean (SD)	ATTOT Mean (SD)
Strong	48	8.27 (0.84)	9.87 (8.36)	67.22 (27.36)
Weak	44	8.34 (0.56)	9.20 (8.73)	56.63 (24.46)

Table 3

Mean and standard deviation of GAF ratings by prime conditions

PRIME	Vignette Race	Vignette GAF	Mean	SD
Weak	No Race	High	8.34	0.56
		Low	2.34	1.5
	White	High	7.22	1.17
		Low	1.47	1.32
	Black	High	8.54	0.69
		Low	1.65	1.34
Strong	No Race	High	8.27	0.84
		Low	2.2	1.25
	White	High	7.33	1.15
		Low	1.25	0.97
	Black	High	8.6	0.64
		Low	1.58	1.06

Table 4

Mean and standard deviations of Social Distance Total by prime conditions

PRIME	Vignette Race	Vignette GAF	Mean	SD
Weak	No Race	High	9.2	8.73
		Low	30.59	10.76
	White	High	7.9	8.72
		Low	33.29	9.4
	Black	High	5.57	8.15
		Low	29	10.28
Strong	No Race	High	9.87	8.36
		Low	31.08	8.79
	White	High	8.35	8.38
		Low	32.18	9.17
	Black	High	8.41	9.5
		Low	31.29	9.57

Table 5

Mean and standard deviations of Attribution Scale Total by prime conditions

PRIME	Vignette Race	Vignette GAF	Mean	SD
Weak	No Race	High	56.63	24.46
		Low	154.182	32.69
	White	High	74.52	26.57
		Low	169.36	22.85
	Black	High	52.5	28.54
		Low	155.25	28.16
Strong	No Race	High	67.23	27.36
		Low	156.86	32.63
	White	High	65.54	21.8
		Low	162.25	32.84
	Black	High	52.56	24.44
		Low	167.52	30.03

Table 6

Racial characterization of each vignette for the two prime conditions

Vignette	Prime	White	Black	Other
High GAF NO RACE	Weak	84%	2.27%	13.63%
	Strong	85.40%	2.08%	12.50%
Low GAF NO RACE	Weak	31.80%	29.50%	38.60%
	Strong	29.16%	47.90%	22.91%
High GAF White	Weak	93.10%	0.00%	6.80%
	Strong	97.90%	0.00%	2.08%
Low GAF White	Weak	100%	0.00%	0.00%
	Strong	95.83%	0.00%	4.18%
Hig GAF Black	Weak	0.00%	100%	0.00%
	Strong	0.00%	100%	0.00%
Low GAF Black	Weak	0.00%	93.18%	6.81%
	Strong	0.00%	89.58%	10.40%

Table 7

Frequency counts of inferred race for the two No race cases

Race of the participant		Vignette race inferred				Total
		Prime	White	Black	Other	
White	Weak	13	7	15	35	
	Strong	14	21	7	42	
Black	Weak	1	5	1	7	
	Strong	0	1	2	3	
Other	Weak	1	1	0	2	
	Strong	0	1	2	3	

Race of the participant		Vignette race inferred				Total
		Prime	White	Black	Other	
White	Weak	29	1	5	35	
	Strong	37	1	4	42	
Black	Weak	6	0	1	7	
	Strong	2	0	1	3	
Other	Weak	2	0	0	2	
	Strong	2	0	1	3	

Table 8

The significant predictors of the GAF ratings for the five vignettes

Vignettes	Constant	B	SEB	Beta	R2
High GAF White	Constant ATT	8.77 _0.022	0.394 0.005	_.412**	0.177
Low GAF Black	Constant ATT	4.142 _0.013	0.825 0.005	_.299*	0.108
High GAF Black	Constant ATT	9.04 _0.009	0.169 0.003	_.332*	0.111
Low GAF White	Constant SD	3.108 -0.039	0.847 0.013	_.326*	0.114
Low GAF No Race	Constant ATT	5.788 _0.018	0.794 0.005	_.0385.**	0.206

* p < 0.05, ** p < 0.001

Figure 1

Anger factor ratings by vignette race and vignette GAF for the two prime conditions

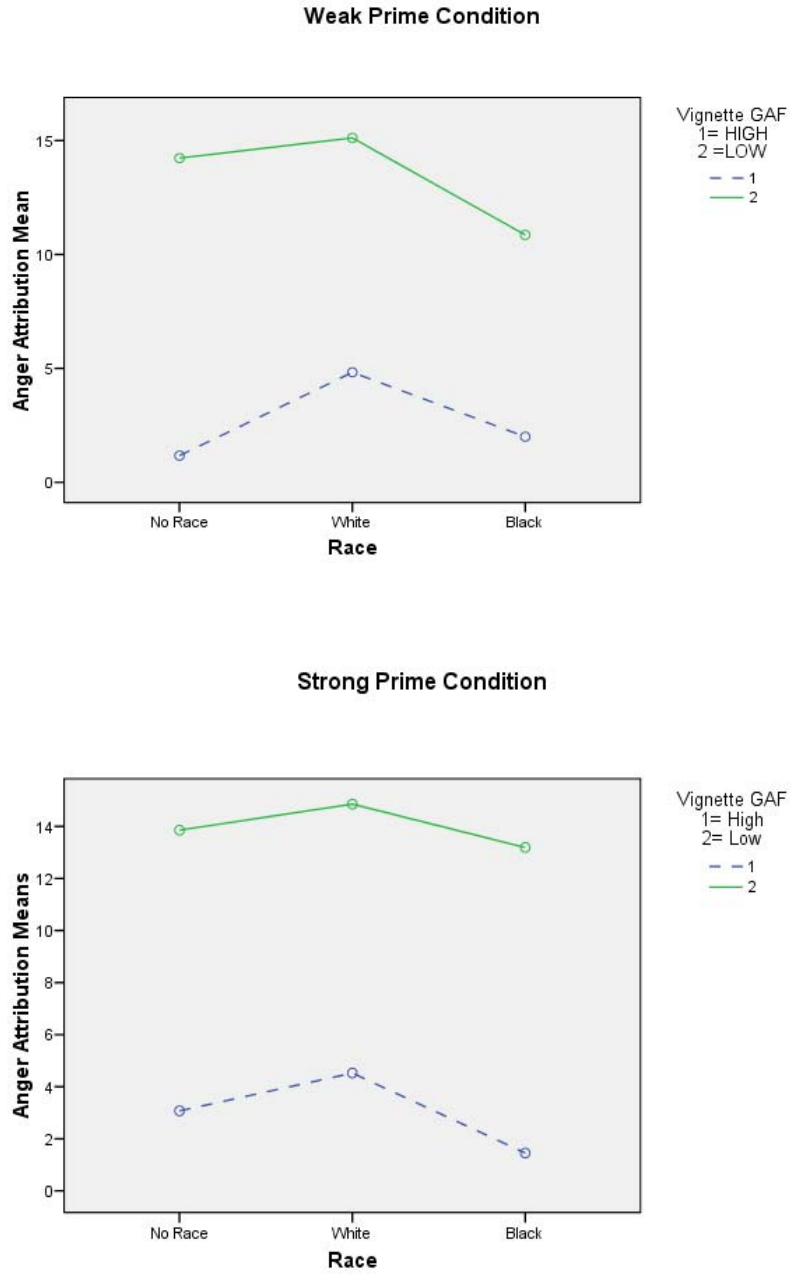


Figure 2

Fear factor ratings by vignette race and vignette GAF for the two prime conditions

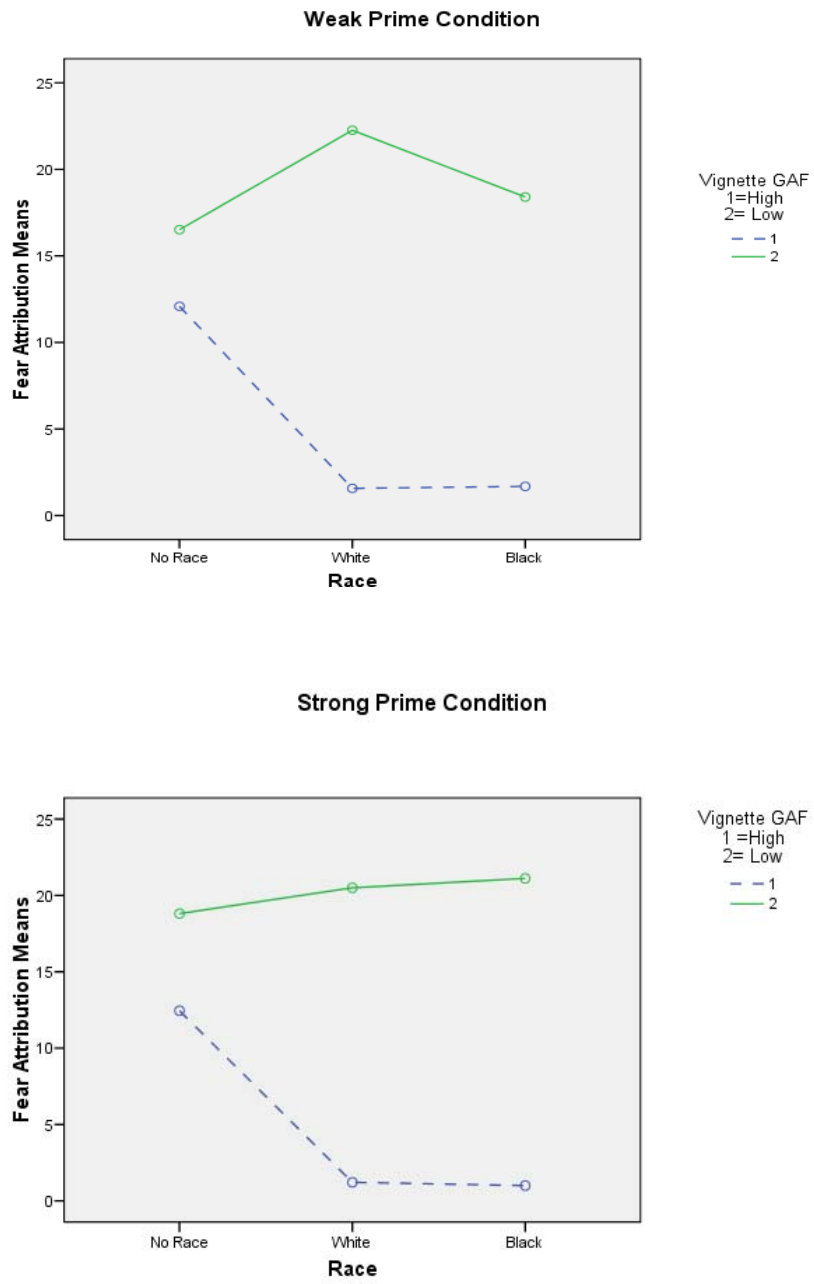


Figure 3

Segregation factor rating by vignette race and vignette GAF for the two prime conditions

