

Perceived Racism as a Predictor of Paranoia Among African Americans

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Recent theoretical models suggest that perceived racism acts as a stressor for African Americans and may be associated with a variety of negative psychological consequences, notably paranoia. Paranoia among African Americans is believed to reflect the lower end of the paranoia continuum based on experiences with racism. Thus, it may be beneficial to measure paranoia on a continuum, but few studies have adopted this strategy. This study examined the relationship between perceived racism and paranoia across the continuum in 128 African American college students. Participants completed three measures of paranoia and measures of perceived racism, depression, anger, self-consciousness, and hostile perceptions. The continuum of paranoia included measures reflecting cultural, nonclinical, and clinical paranoia. Perceived racism predicted cultural mistrust and nonclinical paranoia (lower end of the paranoia continuum) but not clinical paranoia. The implications of perceived racism in the prediction of paranoia for African Americans are discussed.

Keywords: *perceived racism; cultural mistrust; nonclinical mistrust; continuum*

Historically, African Americans and other minority groups have struggled with unfair treatment, prejudice, and discrimination. Despite important legal decisions that have attempted to promote equality, many African Americans continue to deal with racism on a daily basis (Clark, 2000; Sigelman & Welch, 1991; Utsey, 1998). Racism is a multidimensional construct that includes prejudice toward minority groups and behavioral acts of discrimination (McNeilly et al., 1996). Recent theoretical conceptualizations of racism have suggested that perceived racism (the subjective experience of prejudice or discrimination) is an important factor in the health outcomes of African Americans (Clark, Anderson, Clark, & Williams, 1999). The appraisal of these events as stressful is associated with a variety of negative physical consequences (Lazarus & Folkman, 1984; Outlaw, 1993) such as hypertension and cardiovascular problems (Armstead, Lawler, Gorden, Cross, & Gibbons, 1989; Brondolo, Rieppi, Kelly, & Gerin, 2003; Clark et al., 1999; Steffen, McNeilly, Anderson, & Sherwood, 2003). In addition to research examining the physiological correlates of perceived racism, an equally important aspect of perceived racism is its proposed relationship to psychological functioning and mental health (Thompson, 1996, 2002; Williams, Yu, Jackson, & Anderson, 1997).

One area of increasing interest to researchers has been the study of paranoia among African Americans. Paranoia can be defined as a relatively stable mode of thinking that is characterized by suspiciousness, feelings of ill will or resentment, and beliefs in external control or influence (Fenigstein & Vanable, 1992). Paranoia levels have been found to be consistently elevated among African Americans (Combs, Penn, & Fenigstein, 2002; Whaley, 2001a), and many researchers have suggested that this may be a form of "cultural paranoia" that is based on the experience of being a minority in a hostile environment (Grier & Cobbs, 1968; Newhill, 1990; Ridley, 1984; Terrell & Terrell, 1981; Thompson, Neville, Weathers, Poston, & Atkinson, 1990). Several studies have concluded that cultural mistrust (i.e., paranoia related to cultural factors) represents the lower end of the paranoia continuum and is believed to develop from normal, everyday events, such as racism, that are perceived in a self-referential, threatening manner (Combs et al., 2002; Terrell & Terrell, 1996; Thompson et al., 1990; Whaley, 1998, 1999).

Continuum-based models of paranoia and other psychiatric symptoms have received increasing support from a number of studies that have found cognitive, emotional, and behavioral differences along this continuum

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(Bentall, Jackson, & Pilgrim, 1988; Combs, Michael, & Penn, in press; Combs & Penn, 2004; Combs, Penn, & Mathews, 2003; Mirowsky & Ross, 1983; Peters, Joseph, & Garety, 1999; van Os, Hanssen, Bijl, & Ravelli, 2000; Whaley, 1999, 2001a). The continuum of paranoia ranges from nonpathological characteristics that occur in normal, everyday behavior to more severe levels of paranoia commonly found in psychiatric disorders (e.g., persecutory delusions; Combs et al., in press; Fenigstein & Vanable, 1992; Whaley, 1998).

Taking a continuum approach, cultural mistrust is similar to the concept of nonclinical paranoia found in the experimental and social psychology literature. Both cultural mistrust and nonclinical paranoia fall at the lower or mild end of the paranoia continuum and are believed to be associated with perceived racism (Combs et al., 2002; Fenigstein & Vanable, 1992; Whaley, 2002). Cultural mistrust arises from cultural/societal factors, whereas nonclinical paranoia largely stems from social interactions, which makes the difference between the two constructs more qualitative than quantitative. In contrast, clinical paranoia is more severe, has fewer ties to reality, and theoretically has not been linked to perceived racism (Fenigstein, 1997, 1998; Fenigstein & Vanable, 1992). However, consistent with Ridley's (1984) notion of "confluent paranoia," there is evidence for the presence of clinical paranoia and higher rates of paranoid schizophrenia among African Americans (Butcher, Braswell, & Raney, 1983; Toch, Adams, & Greene, 1987; Whaley, 2002). Thus, it is possible that clinical paranoia and perceived racism are related, but this issue needs further examination (Gilvarry et al., 1999; Mirowsky, 1985; Whaley, 2001a). Thus, it is possible that perceived racism would be related to cultural mistrust and nonclinical paranoia due to their foundation in real-world experiences and perceptions, but not with clinical paranoia. Conceptualizing paranoia as existing on a continuum may prove especially valuable in proper description and interpretation of paranoia levels among African Americans (Whaley, 2001b). However, we could find no studies that have examined the relationship between perceived racism and paranoia as measured across the continuum.

Besides perceived racism, there are a number of other psychological constructs that are related to paranoia. There is evidence for a relationship between paranoia and higher levels of self-consciousness, especially in public situations, where the person feels scrutinized by others (Bodner & Mikulincer, 1998; Fenigstein & Vanable, 1992; Kramer, 1998). Persons with elevated levels of paranoia tend to blame others for negative events and perceive greater hostility in ambiguous situations due to the lack of contextual cues with regard to intention (Combs, Penn, Wiecher, & Waldheter, 2005; Freeman, Garety, Kuipers, Fowler, & Bebbington, 2002). This perception of

hostility may reflect the presence of a hostility or aggression bias (Graham, Hudley, & Williams, 1992; Turkat, Keane, & Thompson-Pope, 1990; Waldheter, Jones, Johnson, & Penn, 2005). For example, Combs and Penn (2004) found that persons with high levels of nonclinical paranoia perceived a neutral-behaving experimenter more negatively than persons with low levels of paranoia. Some studies have proposed that paranoia may be a form of covert depression that serves to defend the person against failure (as reviewed in Bentall, Corcoran, Howard, Blackwood, & Kinderman, 2001; Trower & Chadwick, 1995; Zigler & Glick, 1988). However, this argument has not been consistently supported in research (Garety & Freeman, 1999; Combs et al., 2002). Finally, some researchers have proposed that individuals from lower socioeconomic classes may show higher levels of paranoia (Mirowsky, 1985; Mirowsky & Ross, 1983; Newhill, 1990). Despite the number of related constructs, what is not known is if and how these variables are related to perceived racism and, more important, if they add incremental variance in the prediction of paranoia scores along with perceived racism.

The theoretical model proposed by Clark et al. (1999) suggested that perceived racism can act as a stressor for African Americans and may be associated with a number of negative psychological consequences, most notably paranoia. Research suggests a possible link between paranoia and perceived racism, but more data are needed to evaluate this relationship (Thompson et al., 1990). This study examined the relationship between perceived racism and paranoia across the continuum in a sample of African American college students. In this study, the paranoia continuum included measures of cultural, nonclinical, and clinical paranoia (Combs et al., in press; Whaley, 1998). We hypothesized that perceived racism would be positively correlated with measures of cultural mistrust and nonclinical paranoia, both of which reflect the lower end of the paranoia continuum, but not with clinical paranoia (Whaley, 1999). Because other constructs, such as self-consciousness, perception of hostility and blame, depression, socioeconomic status (SES), and anger, may also be related to paranoia, we felt it was important to examine the specific contribution of these variables along with perceived racism in the prediction of paranoia scores. Furthermore, we examined attributional perceptions for situations that differed in intentionality and included ambiguous, intentional, and accidental scenarios as part of the study. We hypothesized that the direction of the relationships between perceived racism and the three indices of paranoia would persist in the regression analyses, even when other theoretically related variables were examined as predictors.

METHOD

PARTICIPANTS

Participants were 128 African American college students recruited from three university settings representing private ($n = 37$; 29%), historically African American ($n = 50$; 39%), and state-funded ($n = 41$; 32%) institutions of higher learning. There was no difference in the number of participants recruited from each location, $\chi^2(1, N = 128) = 2.0, p = .35$. The sample was made up of more females ($n = 96$; 75%) than males ($n = 32$; 25%), $\chi^2(1, N = 128) = 32.1, p = .001$. The mean age was 20.5 ($SD = 3.0$, range = 18-37). The mean educational level was 14.2 years ($SD = 1.0$, range = 13-18). SES was measured with the Hollingshead four-factor index, which was used to compute an overall SES score (range = 8-66) based on level of education, occupation, gender, and marital status (Cirino et al., 2002; Hollingshead, 1975). Because all of the participants were college students, SES values were computed based on parental data. The mean SES score was 41.7 ($SD = 10.3$; range = 20-64). By SES class, 24 participants (18.8%) were in the upper class/professional range, 84 (65.6%) were in the middle-class range, and 8 (6.3%) were in the lower class range ($n = 12$ did not provide data). Participants were excluded from the study if they were currently in or had a history of psychiatric treatment.

MEASURES

Perceived Racism Scale. The Perceived Racism Scale (PRS) served as the primary measure of racism for the study (McNeilly et al., 1996). The PRS asked participants about the frequency of perceived racism on the job, at school, in public, and how often they were exposed to racist statements over the past year and over their lifetime (e.g., "My academic achievement has suffered because of my race"). The PRS contained 43 items, which were rated on a Likert-type scale ranging from 0 (*not applicable*) to 5 (*several times a day*). PRS scores can range from 0 to 215, with higher PRS scores reflective of more frequent perceptions of exposures to racism. The PRS has demonstrated very good internal consistency (alphas ranged from .87 to .95) and 2-week test-retest stability levels ($r = .70-.80$; Utsey, 1998). Elevated PRS scores have been associated with higher subjective distress levels, greater changes in resting blood pressure, and greater levels of internalized anger (Clark, 2000; Steffen et al., 2003). For this study, the internal consis-

tency for the PRS was excellent ($\alpha = .96$). PRS 1-year scores were used in the study.

Cultural Mistrust Inventory-Revised. The Cultural Mistrust Inventory-Revised (CMI-R) was used to measure mistrust levels of African Americans toward White individuals in cultural settings (Terrell & Terrell, 1996; Whaley, 2002). The CMI-R contained 48 items (e.g., "Whites are usually fair to all people regardless of race"), which were rated on a Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). CMI-R scores can range from 48 to 336, with higher scores reflective of greater cultural mistrust. The CMI-R has good psychometric properties and is considered a reliable and valid measure (Whaley, 2001b). Elevated CMI-R scores have been linked to a variety of behavioral correlates of mistrust such as premature termination from counseling and lower levels of interpersonal trust (Terrell & Terrell, 1984; Thompson et al., 1990). In this study, the internal consistency of the CMI-R was excellent ($\alpha = .90$).

Paranoia Scale. The Paranoia Scale (PS) was used to measure nonclinical paranoia that occurs in interpersonal situations (Fenigstein & Venable, 1992). The PS contained 20 items (e.g., "Someone has it in for me"), which were rated on a Likert-type scale ranging from 1 (*not applicable*) to 5 (*extremely applicable*). PS scores can range from 20 to 100, with higher scores reflective of greater nonclinical paranoia. The PS was found to be a psychometrically reliable and valid measure of paranoia for African Americans (Combs et al., 2002). The scale has demonstrated good internal consistency ($\alpha = .84$) and stability ($r = .70$) and has been positively correlated with a variety of measures of paranoia and perceptions of others as untrustworthy (Combs & Penn, 2004; Fenigstein & Venable, 1992). In this study, the internal consistency of the PS was very good ($\alpha = .87$).

Personality Assessment Inventory persecutory ideation subscale. The Personality Assessment Inventory (PAI) persecutory ideation subscale was used to measure clinical levels of paranoia. The PAI contained items related to persecutory ideation and malevolent intention (Combs & Penn, 2004; Freeman & Garety, 2000; Garety & Freeman, 1999). The PAI persecutory ideation subscale contained 8 items (e.g., target of conspiracy or plot), which were rated on a Likert-type scale ranging from 0 (*false*) to 3 (*very true*). Scores can range from 0 to 24, with higher scores reflective of greater clinical paranoia. The PAI has demonstrated very good internal consistency levels (α s = .85-.88; Combs et al., in press; Morey, 1991). The PAI persecutory ideation subscale was correlated with the presence of persecutory delusions

in clinical samples and distinguished clinical from nonclinical levels of paranoia (Combs et al., in press; see Whaley, 1997, for similar methods). In this study, the internal consistency of the PAI persecutory ideation subscale was very good ($\alpha = .86$).

Self-Consciousness Scale. The Self-Consciousness Scale (SCS) was used to measure the level of self-focused attention (Fenigstein, Scheier, & Buss, 1975). The SCS contained 23 items (e.g., "I'm concerned about the way I present myself"), which were rated on a Likert-type scale ranging from 0 (*extremely uncharacteristic*) to 4 (*extremely characteristic*). SCS scores can range from 0 to 92, with higher scores reflective of greater perceived self-consciousness. Validity data showed that the SCS was positively correlated with measures of nonclinical paranoia (Combs & Penn, 2004; Fenigstein & Venable, 1992; Kramer, 1998). In this study, the internal consistency for SCS was acceptable ($\alpha = .75$).

Aggression Questionnaire. The Aggression Questionnaire (AQ) was used to measure level of anger, aggression, and self-reported hostility (Buss & Perry, 1992). The AQ contained 29 items (e.g., "I have trouble controlling my temper"), which were rated on a Likert-type scale ranging from 1 (*extremely uncharacteristic of me*) to 5 (*extremely characteristic of me*). AQ scores can range from 29 to 145, with higher AQ scores reflective of greater levels of aggression/anger. In addition to the total score, the AQ hostility subscale (resentment; feelings of ill will) was also included due to its relationship with paranoia. The psychometric properties of the AQ have been good (alphas range from .72 to .89; test-retest $r = .80$; Buss & Perry, 1992). Validity data found positive correlations with personality traits associated with anger (impulsivity, emotionality, and assertiveness) and were sensitive to peer nomination procedures for persons perceived as being aggressive (Buss & Perry, 1992). In this study, the internal consistency of the AQ total score ($\alpha = .90$) and hostility subscale ($\alpha = .81$) were good.

Zung Self-Rating Depression Scale. The Zung Self-Rating Depression Scale (Zung) was used to measure self-reported depressive symptoms (Zung, 1965). The Zung contained 20 items (e.g., "I feel down-hearted and blue"), which were rated on a Likert-type scale ranging from 0 (*a little of the time*) to 4 (*most of the time*). Zung scores can range from 0 to 80, with higher scores reflective of greater depressive symptoms. The Zung correlated highly ($r = .76$) with other established measures of depression and is considered a highly valid measure of depression (Thurber, Snow, & Honts, 2002). In this study, the internal consistency of the Zung was acceptable ($\alpha = .76$).

Ambiguous Intentions Hostility Questionnaire. The Ambiguous Intentions Hostility Questionnaire (AIHQ; Combs et al., 2005) was used to measure perceptions of blame and hostility for situations that differ in intentionality. The AIHQ contained 15 hypothetical negative situations; 5 negative situations were intentional (e.g., "Someone jumps in front of you on the grocery line and says, 'I'm in a rush.'"), 5 negative situations were accidental (e.g., "A friend of yours slips on the ice, knocking you to the ground."), and 5 negative situations were ambiguous (e.g., "You have an important appointment with an important person. When you arrive at your appointment, the secretary informs you that the person is not in; they took the day off."). The AIHQ is scored by computing a composite score for ambiguous, intentional, and accidental situations reflecting the amount of blame assigned to others for the negative outcome. In addition, two rater-derived scores reflecting perceived hostility and aggression are computed (more information about the AIHQ can be obtained from the authors). The AIHQ demonstrated good internal consistency ($\alpha = .83-.86$) and interrater agreement ($ICC = .90+$). AIHQ scores correlated with the presence of hostility and aggression among inpatient psychiatric participants and were better predictors of paranoia levels among college students (Combs et al., 2005; Waldheter et al., 2005).

PROCEDURE

Participants were recruited for a study entitled, "Beliefs About Others." Only persons of African American background were eligible for the study. Participants were recruited by the use of a sign-up board in the Department of Psychology or through in-class presentations in psychology or African American studies classes. Participation was voluntary, and all participants received extra credit toward coursework for completing the study. After providing informed consent, participants completed a demographic questionnaire (age, gender, education, and parental data on SES) along with the study measures. Completion time averaged about 1.5 hours. All participants were debriefed about the purpose of the study after completion.

DATA ANALYTIC PLAN AND POWER ANALYSES

Data analyses were conducted in the following manner. First, means, standard deviations, and ranges for all of the study measures were computed. Because there were more female participants in the sample, comparison *t* tests were computed to examine for gender differences on the perceived racism and paranoia measures. Second, correlations were computed to examine

TABLE 1
Summary of Measures

<i>Measure</i>	<i>Mean (SD)</i>	<i>Sample Range</i>
Perceived Racism Scale	49.9 (30.2)	3–145
Cultural Mistrust Inventory-Revised	178.9 (31.2)	85–244
Paranoia Scale	43.7 (12.3)	20–78
PAI Paranoia	7.4 (4.3)	0–21
Self-Consciousness Scale	53.7 (11.4)	19–86
Zung Depression Scale	40.9 (7.2)	28–58
Aggression Questionnaire	71.6 (18.2)	43–127
Aggression Questionnaire-hostility	18.8 (6.4)	8–36
AIHQ		
Blame ambiguous	44.7 (11.3)	19–72
Blame intentional	65.4 (12.4)	31–118
Blame accidental	33.4 (9.6)	15–58
Hostility ambiguous	9.4 (2.8)	5–21
Hostility intentional	15.5 (3.5)	7–22
Hostility accidental	6.1 (1.6)	5–13
Aggression ambiguous	9.1 (2.4)	5–16
Aggression intentional	12.5 (3.3)	5–20
Aggression accidental	7.9 (2.6)	5–17

NOTE: PAI = Personality Assessment Inventory; AIHQ = Ambiguous Intentions Hostility Questionnaire.

the relationships between the PRS and the demographic, psychological, and paranoia measures. Multiple regression methods were used to determine if perceived racism was predictive of cultural, nonclinical, and clinical levels of paranoia even after controlling for other relevant variables. Predictor variables were selected based on theoretical and empirical grounds. A power analysis revealed that the study had sufficient power (power = .80+) to detect correlation coefficients greater than .24 (alpha = .05, two-tailed, $N = 128$) and cumulative R^2 values greater than .14 (multiple regression).

RESULTS

Summary scores for the measures are presented in Table 1. In terms of gender, there were no differences between males and females on level of perceived racism [$t(124) = .94, p = .34$], cultural mistrust [$t(126) = .29, p = .77$], and nonclinical paranoia [$t(126) = .37, p = .70$], but males did show higher levels of clinical paranoia [$t(124) = 2.7, p = .007$; $M = 9.6$ (males), $M = 6.7$

TABLE 2
Summary of Correlations Between
Perceived Racism, Paranoia, and Demographics

<i>Measure</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
1. PRS	—	.45**	.40**	.24*	-.02	.05	-.08	-.08
2. CMI-R	—	—	.34**	.42**	-.08	.03	-.10	-.02
3. PS	—	—	—	.57**	-.01	-.09	-.04	-.03
4. PAI	—	—	—	—	-.06	-.01	-.03	-.29**
5. Age	—	—	—	—	—	.47**	-.17	.02
6. Educ.	—	—	—	—	—	—	.06	-.03
7. SES	—	—	—	—	—	—	—	.18*
8. Gender	—	—	—	—	—	—	—	—

NOTE: PRS = Perceived Racism Scale; CMI-R = Cultural Mistrust Inventory-Revised; PS = Paranoia Scale; PAI = Personality Assessment Inventory persecutory ideation subscale; Educ. = educational level in years; SES = socioeconomic status.

* $p < .05$. ** $p < .005$.

(females)]. An examination of the correlations between age, education, gender, and SES level did not reveal any significant relationships with perceived racism, cultural mistrust, or nonclinical paranoia (see Table 2; all $ps > .10$). However, gender did negatively correlate with PAI scores ($p = .001$; males showed higher scores). Correlations between perceived racism and selected predictors are presented in Table 3 (the full correlation matrix can be obtained from the authors). Perceived racism scores were significantly correlated with greater levels of anger ($p = .01$) and hostility ($p = .003$), as measured by the AQ, and a greater tendency to blame others for negative outcomes in ambiguous situations ($p = .005$), as measured by the AIHQ.

As predicted, the PRS was significantly correlated with both the CMI-R ($p = .0001$) and the PS ($p = .0001$), such that higher levels of perceived racism were related to greater cultural and nonclinical paranoia (see Table 2). The relationship between the PRS and PAI persecutory ideation subscale was also significant ($p = .008$), but was weaker in magnitude.

For the multiple regression analyses, predictor variables were the PRS, SCS, Zung, AQ, AIHQ self-rated Blame, Hostility index, and Aggression index for ambiguous, intentional, and accidental situations, and SES. Gender was included based on differences between males and females on the PAI persecutory ideation subscale. From the total sample of 128 participants, 32 had missing data and were removed from the regression analyses. There was no difference between the participants who had complete data and those with

TABLE 3
Summary of Correlations Between
Perceived Racism and Selected Predictor Variables

<i>Measure</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
1. PRS	—	.11	.04	.21*	.26**	.25**	.01	.01
2. SCS	—	—	.25	.13	.31	.15	.17	.16
3. Zung	—	—	—	.28**	.42**	.16	.24*	.09
4. AQ total	—	—	—	—	.77**	.37**	.30**	.27**
5. AQ hostility	—	—	—	—	—	.33**	.35**	.29**
6. AIHQ blame ambiguous	—	—	—	—	—	—	.50	.38**
7. AIHQ hostility ambiguous	—	—	—	—	—	—	—	.44**
8. AIHQ aggres- sion ambiguous	—	—	—	—	—	—	—	—

NOTE: PRS = Perceived Racism Scale; SCS = Self-Consciousness Scale; Zung = Zung Self-Rating Depression Scale; AQ total = Aggression Questionnaire total score; AQ hostility = Aggression Questionnaire hostility subscale score; AIHQ = Ambiguous Intentions Hostility Questionnaire.

* $p < .05$. ** $p < .005$.

missing data on age [$t(126) = .15, p = .88$], educational level [$t(126) = .33, p = .74$], or SES score [$t(126) = .34, p = .73$].

In the prediction of cultural mistrust scores, the overall regression model was found to be significant [$R = .53, \text{Adj. } R^2 = .14, F(15, 81) = 2.1, p = .01$]. As presented in Table 4, the PRS ($p = .008$) and the AIHQ Hostility index for ambiguous ($p = .02$) and accidental situations ($p = .04$) were found to be significant individual predictors of cultural mistrust scores. In the prediction of nonclinical paranoia scores, the overall model was found to be significant [$R = .69, \text{Adj. } R^2 = .38, F(15, 81) = 5.0, p = .0001$]. Significant predictors were the PRS ($p = .04$), Zung ($p = .02$), AQ ($p = .001$), and gender ($p = .009$). In the prediction of clinical paranoia scores, the overall model was found to be significant [$R = .64, \text{Adj. } R^2 = .30, F(15, 81) = 3.8, p = .0001$]. Significant predictors were the AQ ($p = .004$), gender ($p = .001$), and the AIHQ self-rated Blame scores for accidental ($p = .04$) and intentional ($p = .03$) situations (see Table 4). More important, the PRS was not a significant predictor ($p = .67$) of clinical paranoia scores. Across the analyses, male gender was associated with greater paranoia scores.

TABLE 4
Summary of Regression Analyses for Paranoia Measures

Measure	Model 1: Cultural Mistrust			Model 2: Paranoia Scale			Model 3: PAI Paranoia		
	B	SE B	β	B	SE B	β	B	SE B	β
PRS	.29	.10	.28**	.07	.03	.18*	-.01	.01	-.04
SCS	-.32	.26	-.13	.12	.09	.13	.01	.03	.01
Zung	.19	.43	.04	.32	.14	.20*	.10	.05	.17
AQ	.18	.17	.12	.22	.06	.35**	.07	.02	.30*
AIHQ host-amb.	3.1	1.3	.32*	.47	.45	.12	.01	.18	.01
AIHQ host-int.	.13	.97	.01	-.32	.32	-.10	-.01	.13	-.01
AIHQ host-acc.	-4.0	1.9	-.22*	.15	.66	.02	.02	.27	.01
AIHQ blame-amb.	-.23	.49	-.09	-.18	.16	-.18	-.01	.06	-.01
AIHQ blame-int.	.05	.36	.02	.18	.12	.19	-.10	.05	-.30*
AIHQ blame-acc.	-.01	.49	-.01	.16	.16	.14	.13	.06	.30*
AIHQ agg-amb.	-1.1	1.5	-.09	.42	.53	.09	-.12	.21	-.06
AIHQ agg-int.	.44	1.2	.05	-.06	.40	-.01	.20	.16	.15
AIHQ agg-acc.	2.6	1.4	.25	-.59	.49	-.14	-.05	.20	-.03
Gender	-3.5	7.5	-.05	-6.8	2.5	-.24*	-4.6	1.0	-.43**
SES	-.14	.28	-.05	.05	.09	.04	-.02	.04	-.05

NOTE: PAI = Personality Assessment Inventory; PRS = Perceived Racism Scale; SCS = Self-Consciousness Scale; Zung = Zung Self-Rating Depression Scale; AQ = Aggression Questionnaire; AIHQ = Ambiguous Intentions Hostility Questionnaire; host = hostility; int. = intentional; acc. = accidental; amb. = ambiguous; agg = aggression; SES = socioeconomic status.
* $p < .05$. ** $p < .005$.

DISCUSSION

Recent theoretical models have proposed that perceived racism can act as a stressor for African Americans and may be associated with a variety of negative psychological consequences such as paranoia (Clark et al., 1999; Thompson, 2002). In this study, a moderately sized sample of African American college students recruited from three different university settings found a clear relationship between perceived racism and measures reflecting the lower end of the paranoia continuum (cultural mistrust and nonclinical paranoia). Perceived racism was also related to greater levels of anger and hostility and a tendency to blame others for negative outcomes in ambiguous situations.

To our knowledge, this is the first study to empirically examine the relationship between perceived racism and paranoia as measured across the continuum (cultural, nonclinical, and clinical). Consistent with our hypotheses, perceived racism was significantly correlated with both cultural mistrust and nonclinical paranoia and reflects the importance of these perceptions for African Americans. Furthermore, the finding that perceived racism was predictive of cultural mistrust and nonclinical paranoia in the regression analyses, even in the presence of other theoretically related variables, provides strong support for the unique role of perceived racism in paranoia (Clark et al., 1999). In contrast, perceived racism was not predictive of clinical levels of paranoia, which involves more pervasive beliefs of persecution and harm that have fewer ties to real experiences (Combs et al., 2002; Freeman & Garety, 2000). In addition to perceived racism, perceptions of blame and perceived hostility, depression, and anger also served as predictors of paranoia scores across the different regression analyses, and these findings are consistent with previous research on paranoia (Combs & Penn, 2004; Combs et al., 2005; Waldheter et al., 2005). Taken as a whole, paranoia among African Americans seems to be largely made up of constructs (perceived racism, hostility) that are based on the subjective perceptions of others' behaviors and motives (Bentall et al., 2001).

The relationship between perceived racism, attributions of blame, and self-rated hostility has some interesting implications that should be examined. Consistent with previous research, there was a relationship between perceived racism and a greater tendency to blame others for negative outcomes, especially in ambiguous situations (Johnson & Lecci, 2003; Johnson, Simmons, Trawlater, Ferguson, & Reed, 2003). Thus, perceived racism might influence or even bias the processing and interpretation of situations where interpretative cues concerning intention are less salient (Burks, Laird, Dodge, Pettit, & Bates, 1999; Dodge & Tomlin, 1987; McNeilly et al., 1996).

There was also a relationship between perceived racism and self-reported hostility on the AQ. Hostility has been conceptualized as a form of internalized anger, and some researchers consider hostility to be the emotional component of paranoia, which may explain the relationship with perceived racism (Buss & Perry, 1992; Morey, 1991). Several laboratory studies support a link between hostility, perceived racism, and changes in blood pressure levels among African Americans (see Clark et al., 1999; Steffen et al., 2003). Based on this study, it is possible that paranoia and hostility following perceptions of racism lead to physiological symptoms such as increased blood pressure.

There are several limitations that need to be discussed. First, the data are correlational and should be considered preliminary evidence for the relationship between perceived racism and paranoia (Clark et al., 1999). Even though it has been proposed that perceived racism may lead to milder forms of paranoia, this study, due to its limited internal validity, cannot support such a statement. This type of causal inference requires experimental or longitudinal data that are currently not available. For example, it is possible that persons with high levels of paranoia are more likely to perceive racism where none exists, which suggests that the direction of this relationship needs to be explored (Combs & Penn, 2004; Taylor, Wright, & Ruggiero, 1991). Second, we did not examine whether cultural mistrust was adaptive, as some have proposed, and data are needed to examine the possible benefits (e.g., less stress; reduce self-discrepancies; enhance self-esteem) of cultural mistrust in dealing with racism (Bentall, Kinderman, & Kaney, 1994; Whaley, 2001a). Third, in terms of the sample, the generalization of the results may be limited because the participants were all college students who were predominately female. The inclusion of community adults who may respond differently to perceived racism may have produced different results (Clark et al., 1999). Fourth, we did not include a measure of racial identity in the study. It is possible that those who have a stronger racial identification may show different levels of perceived racism (Jefferson & Caldwell, 2002; Thompson, 1996).

The data from this study are important for several reasons. First, the results add to the existing body of research that perceived racism is associated with significant personal and psychological costs (Clark et al., 1999; Williams et al., 1997). Cultural mistrust may be adaptive, but as paranoia increases in severity, it becomes linked to problems in interpersonal and adaptive functioning (Combs & Penn, 2004; Haynes, 1986). Second, the data emphasize that paranoia among African Americans may arise from several sources (cultural and social interactions) rather than always indicating a psychiatric disturbance (Whaley, 1997). Thus, a careful assessment of cultural factors should be undertaken when assessing paranoia among African

Americans (see Whaley, 2001a, for similar recommendations). Finally, researchers should begin to examine the role of race/ethnicity in paranoia, as the prediction of paranoia scores does vary with ethnicity. It appears that the meaning and origins of paranoia are different for African Americans compared with Whites due to its foundation in culture and social interactions. The influence of context, learning, and modeling appears to be highly relevant to the study of paranoia among African Americans (Haynes, 1986).

In closing, further research should attempt to directly examine the causal relationships between actual events, perceptions of these events, and paranoia. It would be interesting to see if perceptions of racism agree with actual events that African Americans experience on a daily basis, as many measures of perceived racism rely heavily on memory processes. It is hoped that as our knowledge about perceived racism and its consequences increases, attention can be turned to improving the mental and physical health and well-being of this population.

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