Paranoia in African-American Men Receiving Inpatient Psychiatric Treatment

Arthur L. Whaley, PhD, DrPH

The present study tested a continuum model of paranoid symptom expression in a sample of African-American men receiving inpatient treatment in a state psychiatric hospital. The continuum measure comprised the scales of Distrust (DST), Perceived Hostility of Others (PHO), and False Beliefs and Perceptions (FBP) from the Psychiatric Epidemiology Research Interview (PERI), reflecting mild to severe paranoia, in the order listed. They were interviewer administered with other self-report symptom measures, within three weeks of hospital admission, by ethnically matched interviewers. A multivariate model with repeated measures for the continuum of paranoia revealed that scores on the PERI paranoia scales correlated similarly with scores on the Fenigstein measure of interpersonal paranoia, but correlated differentially with the Politic/Law subscale of the Cultural Mistrust Inventory, a measure of cultural paranoia. Diagnosis and treatment of African-American men for mental health problems in correctional and inpatient settings should be sensitive to the distinction between clinical and cultural aspects of their experiences.

J Am Acad Psychiatry Law 32:282–90, 2004

Epidemiological data on ethnic racial differences in inpatient psychiatric treatment consistently show, regardless of type of hospital, that African Americans are overrepresented among those with diagnoses of schizophrenia and underrepresented among those with diagnoses of affective disorder.[1] The prevalence of diagnoses of paranoid schizophrenia is particularly striking among African-American inpatients. Prevalence studies of inpatient samples revealed that paranoid schizophrenia is the most frequent diagnosis given to African Americans.[2–4]

The disproportionately high rates of schizophrenia, particularly paranoid schizophrenia, diagnosed in African Americans, have also been found in prison inmate populations.[5] Moreover, Toch *et al.*[5] argued that the high rate of diagnosis of paranoid schizophrenia among black prisoners, coupled with the fact that African Americans had a substantially greater number of infractions regardless of mental health status, may reflect interactions between cultural factors and pathology to predispose them to aggressive behavior. The cultural factor that they identified was distrust of authority, including those represented in the criminal justice system, because of African Americans' experience historically in this country. These researchers adopted the concept of "cultural paranoia" proposed by Grier and Cobbs,[6] and its extension of "confluent paranoia" introduced by Ridley,[7] to support their interpretation.

However, research indicates that attributions of violence or aggression to black individuals seeking mental health services often represent biases associated with racial stereotypes, especially those about African-American males.[8,9] The white American public tends to ascribe racial stereotypes of black violence more to males than to females.[10] The stereotype that African-American males are more prone to violence contributes to the diagnosis of paranoid schizophrenia by culturally biased clinicians.[8] Rosenfield[9] found that "nonwhite" males are more likely to be brought in by police and subsequently hospitalized involuntarily, despite the fact that they do not differ in their level of violence from their white counterparts. The pervasiveness of the racial stereotype of black violence in American culture can account for

Dr. Whaley is Associate Director for Mental Health Services Research at the Hogg Foundation of Mental Health, the University of Texas, Austin, TX. This research was supported by NIMH Grant 1 R01 MH55561-01A1 to the author, while he was a research scientist at the New York State Psychiatric Institute. Address correspondence to: Arthur L. Whaley, PhD, DrPH, Hogg Foundation of Mental Health, The University of Texas, PO Box 7998, Austin, Texas 78713-7998. E-mail: awhaley@mail.utexas.edu

the consistency of the perceptions across institutional settings, including psychiatric hospitals and correctional facilities.[11]

The tautology of the explanation that violence among prison inmates or psychiatric inpatients can be attributed to the interaction between cultural and clinical dimensions of paranoid symptomatology becomes apparent when one considers the fact that racial stereotypes about black violence may contribute to the initial diagnosis of paranoid schizophrenia. Moreover, Lawson *et al.*[12] found that independent ratings of violence in black inpatients on an acute psychiatric unit were significantly lower than in their white counterparts, and the findings could not be attributed to differences in serum neuroleptic level, severity of psychiatric symptoms, or admission status. Lindsey *et al.*[13] studied 12 treatment units in Chicago with trained observers using objective measures in a sample of 227 acute psychiatric inpatient admissions and found no statistically significant difference between black and white involuntary admissions in terms of dangerousness.[13] Thus, objective assessments of black psychiatric inpatients subsequent to hospital admission do not indicate higher levels of violence.

Although the speculation of Toch *et al.*[5] about the role of paranoia in violent behavior among African-American prison inmates is dubious, the aspect of their argument suggesting interplay between culture and pathologic causes in paranoid symptom expression has some merit. The racial stereotyping of African-American males has now been publicly acknowledged in the media by different criminal justice and other governmental agencies. These racist experiences or cultural stereotypes in American society have been euphemistically labeled "racial profiling."[14–16] Such racial stereotypes and associated negative consequences contribute to the development of what has been referred to in the past as "healthy cultural paranoia," or the more contemporary term of "cultural mistrust," on the part of African-American males.[7,17–20] Paranoia can therefore be a symptom of a psychopathologic disorder or a type of cultural coping response in African-American men. As a manifestation of mental disorder, paranoia symptoms play a key role in diagnoses and treatment of psychiatric disorders.[21–24] Given the prominent role of paranoia in the diagnosis and treatment of severe mental illness, studies focusing on such symptoms are warranted.

The cultural perspective on expression of paranoia symptoms is an important consideration in forensic evaluations and mental health treatment of incarcerated African-American men. This became evident in the treatment of a person with paranoid schizophrenia in a maximum security prison.[20] This clinical experience was the author's impetus for research on the question of cultural paranoia or cultural mistrust.

The inmate was a black male between 30 and 40 years of age. He was convicted of murdering his young daughter whom he believed was possessed by the devil. The case was assigned for training purposes, and there was no expectation that the client would improve. Although unaware at the time, the clinician now realizes that the inmate suffered from confluent paranoia. The patient would often talk about racial injustice, citing as evidence that there were many inmates who were wrongly convicted or who were there simply because their presence generated revenue and jobs for the prison system. He would also quote from the bible and talk about Armageddon. He felt that he had to be released so that he could go on television and warn people about the impending doom. The sessions consisted of the clinician's validating many of the patient's complaints about racism in society and indicating that he could not relate to the patient's other comments. The other comments tended to be pathological delusions.

This brief case description illustrates the interaction between culture and pathology in schizophrenia discussed by Toch *et al.*[5] A recent study also demonstrated partial support for Ridley's notion of "confluent paranoia,"—that is, individuals who exhibit high levels of both cultural and pathological paranoia, in this psychiatric inpatient population.[25] The complexity of confluent paranoia requires that mental health service providers in the criminal justice system be able to distinguish between cultural and pathological aspects of black men's coping responses, to perform competent forensic evaluations and interventions. African-American men may exhibit a variety of coping responses to threats of racial discrimination and prejudice. Their response may be what Majors and Billson[26] refer to as a "cool pose" which could be misconstrued as lack of affect by culturally insensitive clinicians. They could also develop high levels of cultural mistrust, manifested as low self-disclosure, suspiciousness, and uncooperativeness, which could be misinterpreted during a clinical interview as pathological paranoia.[7,17–20]

There is also increasing theoretical and empirical support for the notion that paranoia symptoms fall along a continuum of severity from mild reality-based traits of lack of trust, suspiciousness, and self-consciousness to florid delusions found in schizophrenia.[7,18–20,27–31] Whaley[18,32,33] has demonstrated empirically that the continuum of paranoia is reflected in the scales of Distrust (DST), Perceived Hostility of Others (PHO), and False Beliefs and Perceptions (FBP) from the Psychiatric Epidemiology Research Interview (PERI).[34,35] The continuum of paranoia was reflected in the empirical finding of decreasing ethnic/racial or sociocultural differences and increasing psychopathology along with movement from the scales of DST to PHO to FBP in a case–control study of the association of ethnicity/race to diagnoses of schizophrenia and depression.[18] Mental health clinicians must acknowledge cultural variation in coping response styles to avoid biases in evaluation and treatment services for African Americans in correctional settings.

The present study attempts to replicate and extend Whaley's research on cultural versus pathological dimensions of paranoia in African-American psychiatric patients.[33] This replication and extension focused on the African-American male subsample, comparing the interpersonal and cultural aspects of paranoia in relation to the continuum of severity inherent in the aforementioned PERI scales. Paranoia at the interpersonal level can be differentiated from cultural aspects of paranoia.[19,33] The Fenigstein scale is a good candidate for the test of the hypothesized continuum of severity, because it is a measure of the interpersonal dimension of paranoia without the confounding effects of psychopathology.[28] Females were excluded from the present analyses, because there are gender differences in the attribution of the stereotype of black violence, with males being more likely to be viewed as threatening.[10] Being subjected most often to this type of stereotyping, African-American males are more likely to engage in the type of cultural coping mentioned earlier. A focus on males yields a better test of the hypothesis because of this gender difference.

The Cultural Mistrust Inventory (CMI) is a measure of cultural aspects of paranoia in African Americans. There is consensus among researchers that the construct of cultural mistrust captures the idea of "healthy cultural paranoia."[17,18,36,37] Reviews of the literature suggest that African-American patients with high levels of cultural mistrust are less likely to seek help for mental health problems, are more likely to have negative attitudes toward white mental health professionals, and are more likely to terminate mental health treatment prematurely.[20,38] For these reasons, the CMI can be used in this study to represent African-American patients' cultural coping in the mental health context. Past research has focused on the association between global cultural mistrust and the severity continuum of paranoia.[19,25,33] It is an empirical question whether mistrust of the criminal justice system correlates similarly to the paranoia continuum.

The Politics and Law subscale of the CMI was used in the present study, because it is most germane to the arguments espoused by Toch *et al.*[5] It was hypothesized that the interpersonal measure of paranoia shows a linear positive correlation with all levels of the severity continuum, but the measure of cultural paranoia is significantly associated with the mild end of the continuum. In other words, the expectation is that mistrust specific to the criminal justice system is also a cultural coping response and it does not necessarily reflect psychopathology. Confirmation of this hypothesis would have significant implications for clinicians who conduct forensic evaluations and treatment of mental health problems in the criminal justice system.

Method

Recruitment of Participants

The procedures for this study were approved by the Internal Review Board of the New York State Psychiatric Institute. Consecutive admissions of black inpatients ($n = 349$) to a New York state psychiatric hospital between June 16, 1998, and April 30, 1999, were used to ascertain the study sample. Of the black patients who came through the triage unit, 81.7 percent ($n = 285$) were considered for participation in the study. Potential participants had to meet the following eligibility criteria: (1) they had to be between the ages of 18 and 59; (2) they were self-identified persons of African descent who are U.S. citizens or who immigrated before the age of 14; (3) they were not experiencing a severe psychotic episode at the time of the interview; and (4) they did not require the permission of a legal guardian to participate.[19,33] The gender breakdown of the African-American patients given further consideration was

189 (66%) males, 91 (32%) females, and 5 (2%) unknown. Only the male subsample will be described.

Only 150 (79%) of the 189 male patients met the eligibility criteria; 12 percent ($n = 22$) were ineligible, and 9 percent ($n = 17$) were discharged before being interviewed. Based on the pool of eligible participants, the overall participation rate for the screening interview was 61 percent. The final sample consisted of 116 eligible male participants. Select background characteristics of the male subsample of participants are presented in Table 1. Statistical tests indicate no significant differences between participants and nonparticipants on these select sociodemographic or other background variables. Of the 116 eligible participants, 112 (96.6%) had complete data for the current study.

Measures

Continuum of Paranoia

Self-reports of mild, moderate, and severe types of paranoia were assessed, respectively, by using the scales of DST, PHO, and FBP of the PERI.[34,35] The scale of DST attempts to measure a lack of trust in others. A sample item is "You are the kind of person who feels that most people can be trusted." The scale of PHO measures individuals' suspicion that they are treated with hostility by others. A sample item is "During the past six months, how often have you felt that people were trying to cheat you?" The scale of FBP attempts to measure perceptions outside of the ordinary and beliefs considered abnormal by Western cultural standards. A sample item is "During the past six months, how often have you felt that your thoughts were taken away from you by some external source?" All of the PERI paranoia scales have five-point response formats.

The scale of DST has the response format "strongly agree" (0), "somewhat agree" (1), "neither agree nor disagree" (2), "somewhat disagree" (3), and "strongly disagree" (4). The scales of PHO and FBP both have the response format "never" (0), "almost never" (1), "sometimes" (2), "fairly often" (3), and "very often" (4). Some items are reverse scored so that all high scores on all scales represent more paranoia. Scale scores are derived by summing item scores and dividing by the number of items yielding a range of 0 to 4. Internal consistency reliability in past research has been satisfactory.[39] The internal consistency reliability of the continuum measures of DST, PHO, and FBP were $\alpha = 0.56$, 0.81, and 0.88, respectively, in the current male subsample.

Table 1 Comparison of Participants and Nonparticipants on Select Background Variables

Variable	Participant	Nonparticipant	Total
Mean age (SD)	38.09 (10.34)	40.61 (11.00)	39.35 (10.67)
Marital status			
Never married	104 (92%)	70 (94.6%)	174 (93.0%)
Married/other	9 (8.0%)	4 (5.4%)	13 (7.0%)
Military veteran			
Yes	12 (10.5%)	5 (6.7%)	17 (9.0%)
No	102 (89.5%)	70 (93.3%)	172 (91.0%)
Religious			
Yes	97 (85.8%)	60 (83.3%)	157 (84.9%)
No	16 (14.2%)	12 (16.7%)	28 (15.1%)
Referral source			
Bellevue Hospital	75 (65.8%)	55 (73.3%)	130 (68.8%)
Other hospital	39 (34.2%)	20 (26.7%)	59 (31.2%)
County of origin			
New York City	88 (77.2%)	60 (80.0%)	148 (78.3%)
Other county	26 (22.8%)	15 (20.0%)	41 (21.4%)
Admission status			
New	68 (59.6%)	39 (52.0%)	107 (56.6%)
Readmission	46 (40.4%)	36 (48.0%)	82 (43.4%)
Type of admission			
Voluntary	11 (9.6%)	5 (6.7%)	16 (8.5%)
Involuntary	103 (90.4%)	70 (93.3%)	173 (91.5%)
Police assistance			
Yes	40 (35.1%)	18 (24.0%)	58 (30.7%)
No	74 (64.9%)	57 (76.0%)	131 (69.3%)

Fenigstein Paranoia Scale

This is a 20-item scale derived from the MMPI paranoia scale with all items reflecting psychopathology removed for use with nonclinical populations. Interpersonal sensitivity is the predominant dimension underlying perceptions of external threat on the MMPI paranoia scale.[40,41] A sample item is "I have often felt strangers looking at me critically." Each item has a five-point range from 1 "not at all" to 5 "extremely." Total scores (1 to 5) were derived by summing the item scores and dividing by the number of items. High scores are indicative of more paranoia. This measure has been used reliably with both college students[28] and a psychiatric population.[42] The internal consistency reliability for the current male subsample was $\alpha = 0.88$.

Mistrust of Politics/Law

This 12-item subscale of the CMI taps African Americans' level of mistrust of whites in the areas of politics and law (MPL).[17] A sample item is "White policemen will slant a story to make blacks appear guilty." Each item is rated on a seven-point scale from 1 "strongly disagree" to 7 "strongly agree."

Some of the items are reverse scored so that high scores indicate high levels of cultural mistrust. Total scores (1 to 7) are obtained by summing ratings across the 12 items and dividing by the number of items. The total CMI has been shown to have adequate reliability with college students[17] and psychiatric patients.[19] Internal consistency reliability of the MPL for the male subsample in the current study is $\alpha = 0.50$.[33]

Rosenberg Self-Esteem Scale

This 10-item scale is a measure of global self-esteem with both negative and positive self-statements. Each item is scored on a five-point scale from 1 "strongly disagree" to 5 "strongly agree." Negative statements are reverse scored so that high total scores reflect high self-esteem. Total scores range from 1 to 5 computed by summing item scores and dividing by 10. It is a widely used measure of global self-esteem with very good internal consistency reliability.[43] Cronbach's α for internal consistency is 0.67 in the current male subsample.

Need for Approval Scale

This scale is a measure of social desirability adapted from the Social Desirability Scale by Crowne and Marlowe.[44] It is included in the PERI as a scale of 15 items that can be responded to as "true" (2), "false" (0), or "don't know." (1). Half of the statements describe desirable traits and the other half undesirable traits. "True" for desirable traits and "false" for undesirable traits are scored in the same direction. Higher total scores, based on the sum of the item scores divided by total number of items, range from 0 to 2 and reflect greater social desirability. Cronbach's α for internal consistency in the current male subsample was 0.47.

Chart Diagnosis of Schizophrenia

Participants' intake diagnoses during hospital admission were abstracted from their charts. Diagnoses were classified as nonschizophrenia (0) or schizophrenia (1).

Global Assessment of Functioning

Structured Clinical Interviews for DSM (SCID) were performed and interviewers rated patients' global level of functioning (GAF) as a part of the SCID protocol.[45] The GAF scores range from 0 to 100 with higher scores reflecting better functioning.

Comorbid Substance Abuse

The presence of comorbid substance abuse (0, no; 1, yes) was also derived from the SCID interview, because it is more reliable than chart reviews or unstructured clinical interviews.[46] Also, the SCID measures of lifetime use are more reliable than measures of current use, as well as being comparable with other self-report and observer measures of substance abuse as a single index of point prevalence, in research on mentally ill patients.[47]

Procedure

All measures were administered by clinical interviewers who were blind to the intake diagnoses of participants and were not members of the treatment facility staff. Interviewers at different stages of the project were also unaware of the information collected at the previous stages.

Screening Interview

After verbally consenting to be interviewed, participants received a mental status examination to assess their capacity to give written informed consent. Those participants who passed and gave written informed consent underwent the screening interview. The screening interviews were conducted by two African-American clinical psychologists, each with more than five years of clinical experience. The screening interview consisted of self-reported demographic background, psychiatric history, and inventory measures. All items were interviewer administered to ensure uniformity in reading comprehension and to minimize missing data. Participants were debriefed at the end of the screening interview and, if eligible, were invited to participate in the structured clinical interview. They were paid $5.00 for their participation or paid for the time spent in the case of incomplete interviews at a rate of $5.00 per hour.

Structured Clinical Interview

Participants varied considerably in the length of time between the SCID interview and the screening interview (0–20 days) with the median being 4 days. They had to sign a separate consent form to participate in this stage of the project. Research associates, one black and the other white, with a master's degree in psychology administered the structured clinical interviews. There was no statistically significant race difference in interviewers' perceptions of level of cultural mistrust exhibited by patients.[25] All clinical impressions and diagnostic outcomes were based on the

information obtained during the interview. Participants were paid $15.00 for completing the SCID interview or for the time spent at a rate of $5.00 per hour in the case of incomplete interviews.

Statistical Analyses

Two sets of statistical analyses were conducted. The first set of analyses attempted to demonstrate the continuum of severity reflected in the PERI paranoia scales. Multiple *t*-tests of means differences between the scales of DST, PHO, and FBP were conducted. Lower mean scores reflect a lower frequency of symptoms, indicating greater severity. This analysis was followed by intercorrelations among the scales. The scales adjacent to each other on the continuum should correlate more highly than those that are farther apart. Second, a multivariate generalized linear model (GLM) was tested with repeated measures for the set of paranoia scales (i.e., DST, PHO, and FBP) as the dependent measure with level of severity as the within-subjects variable, and the Fenigstein and MPL scales as between-subjects variable, controlling for self-esteem, social desirability, intake diagnosis of schizophrenia, GAF score, and lifetime comorbid substance abuse. In other words, the PERI scales were treated as a set of repeated measures reflecting the continuum of severity of paranoia symptoms within each participant. The interaction effects for level of severity and independent measures of interpersonal versus cultural measures of paranoia tested the study hypotheses regarding their relationship to the continuum of paranoia symptoms. Specifically, two-way interactions between the severity level and the independent measures of paranoia were done to test the hypothesis of a positive linear association limited to the interpersonal domain. The parameter estimates across dependent variables from the repeated-measures GLM model were examined for each independent variable with a significant effect.

Results

Continuum of Paranoia Severity

There were decreasing mean scores with movement from the scale of DST to PHO to FBP. The intercorrelations, means, and standard deviations for the dependent variables are presented in Table 2. Dependent *t*-tests showed a statistically significant higher mean score on the scale of DST than on that of PHO, $t_{(110)} = 2.19$, $p = .031$; and of FBP, $t_{(110)} = 3.91$, $p = .000$. Also, the mean score on the scale of PHO is significantly lower than on the scale of FBP, $t_{(110)} = 2.22$, $p = .028$. This pattern of mean scores on these PERI scales are consistent with the continuum model of paranoia. Additional support for the severity continuum of paranoia is evident in the correlations among the PERI scales. The DST does not correlate significantly with the scales of PHO or FBP. The correlation between the scales of PHO and FBP is highly significant. That is, variables closer together on the severe end of the continuum correlate significantly.[30]

Cultural Versus Clinical Aspects of Paranoia

The unstandardized coefficients (B), standard errors (SE), and standardized coefficients (beta) for each independent variable across the continuum of paranoia severity in the repeated measures GLM model are presented in Table 3. Significant multivariate tests were obtained for two-way interactions of severity of paranoia by Fenigstein score: Wilk's $\lambda = 0.871$, $F_{(2,103)} = 7.61$, $p = .001$; severity of paranoia

Table 2 Intercorrelations, Means, and Standard Deviations for Dependent and Independent Variables from Regression Models

Variable	1	2	3	4	5	6	7	8	9	10	Mean	SD
1. Distrust	—										1.90	0.82
2. Perceived hostility of others	0.18	—									1.64	1.07
3. False beliefs and perceptions	0.18	0.68***	—								1.47	0.97
4. Fenigstein paranoia scale	0.35***	0.62***	0.60***	—							2.64	0.71
5. Mistrust of politics/law	0.35***	0.05	0.05	0.22*	—						4.17	0.81
6. Rosenberg self-esteem scale	−0.15	−0.17	−0.30**	−0.30**	−0.10	—					3.57	0.62
7. Need for approval scale	−0.16	−0.14	−0.23*	−0.32***	−0.02	0.44***	—				1.20	0.32
8. Chart diagnosis of schizophrenia	0.06	0.08	0.15	0.05	−0.11	−0.14	0.22*	—			0.56	0.50
9. Global assessment of functioning	0.00	−0.12	−0.21*	−0.10	0.09	−0.09	−0.05	−0.07	—		41.27	8.34
10. Comorbid substance abuse	−0.02	0.24*	0.20*	0.13	0.18	−0.12	0.05	−0.06	0.01	—	0.58	0.50

*$p < .05$; **$p < .01$; ***$p < .001$.

Table 3 Parameter Estimates from Repeated-Measures GLM Analysis of the Paranoia Continuum

Variable	DST			PHO			FBP		
	B	SE	Beta	B	SE	Beta	B	SE	Beta
Fenigstein paranoia scale	0.30*	0.11	0.26	0.95**	0.12	0.64	0.71**	0.11	0.52
Mistrust of politics/law	0.32**	0.09	0.32	−0.15	0.10	−0.11	−0.09	0.09	−0.08
Rosenberg self-esteem scale	0.00	0.14	0.00	0.05	0.15	0.03	−0.17	0.14	−0.11
Need for approval scale	−0.23	0.28	−0.09	0.08	0.30	0.02	−0.16	0.28	−0.05
Chart diagnosis of schizophrenia	0.15	0.16	0.09	0.10	0.17	0.05	0.20	0.16	0.11
Global assessment of functioning	0.00	0.01	0.00	−0.00	0.01	−0.03	−0.02	0.01	−0.15
Comorbid substance abuse	−0.16	0.15	−0.10	0.40*	0.16	0.19	0.29	0.15	0.15
Constant	0.00	0.82		−0.66	0.91		1.19	0.83	

*$p < .01$; **$p < .001$.

by MPL score: Wilk's $\lambda = 0.891$, $F_{(2,103)} = 6.33$, $p = .003$; and severity of paranoia by lifetime comorbid substance abuse: Wilk's $\lambda = 0.941$, $F_{(2,103)} = 3.22$, $p = .044$. Parameter estimates indicated that the Fenigstein scale was a significant correlate of the scales of DST: $t = 2.71$, $p = .008$; PHO: $t = 7.67$, $p = .000$; and FBP: $t = 6.33$, $p = .000$. Parameter estimates also revealed that the MPL subscale correlated significantly with the scale of DST: $t = 3.51$, $p = .001$; but not with the scale of PHO: $t = -1.45$, $p = .150$; and not with the scale of FBP: $t = -0.98$, $p = .328$. Figure 1 depicts the standardized coefficients (beta), adjusted for covariates, comparing the Fenigstein and MPL scales related to the continuum of paranoia. Cultural mistrust was associated with the mild end of the paranoia continuum, which reflects nonpathological psychosocial functioning. Finally, the measure of lifetime comorbid substance abuse did not correlate significantly with the scale of DST: $t = -1.06$, $p = .291$; or FBP: $t = 1.86$, $p = .065$; but its correlation with the scale of PHO was highly significant: $t = 2.43$, $p = .017$.

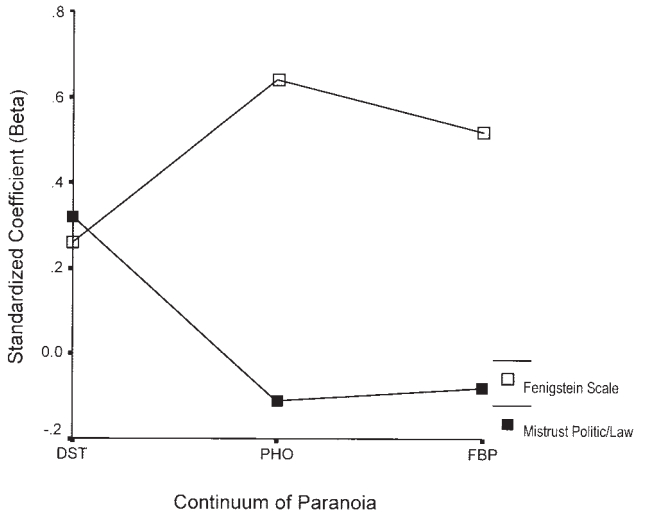

Figure 1. Standardized coefficients (beta) from repeated-measures generalized linear model (GLM) analysis of the independent variables of Mistrust of Politics/Law subscale and Fenigstein scale scores on the outcome of the severity of the paranoia continuum reflected by the scales of Distrust (DST), Perceived Hostility of Others (PHO), and False Beliefs and Perceptions (FBP).

Discussion

The results of this study support the hypothesis that the interpersonal dimension is relevant at all levels of the continuum of severity inherent in the expression of paranoia symptoms, while the cultural dimension is only relevant to the mild end of the continuum in the diagnosis and treatment of African-American men with serious mental illness. The continuum of paranoia was operationalized as scores on the PERI scales of DST, PHO, and FBP. The Fenigstein scale, the measure of interpersonal paranoia, was significantly correlated with scores on all three PERI scales. The MPL subscale of the CMI, a measure of cultural paranoia, was a significant correlate only for the scale of DST. Whaley[20,38] found in past research that the Interpersonal Relations subscale of the CMI has poor reliability in this sample of patients. He argued that mistrust or paranoia at the interpersonal level is distinct from cultural mistrust or cultural paranoia.[20,38] Another example is that cultural mistrust had a significant negative relationship with the severity continuum of paranoia, while the measure of interpersonal paranoia had a positive relationship. The current findings cross-validate previous ones with a different approach to analyses focusing specifically on mistrust of the criminal justice system.

The distinction between interpersonal and cultural dimensions of paranoia has implications for the forensic evaluation and treatment of African Ameri-

can men with mental health problems. White mental health clinicians need to understand that black men with high levels of mistrust should not be approached as if the issues are interpersonal in nature. They must understand that African-American men seeking help for mental health problems may see them first as representatives of the larger European-American culture.[48] They should also not interpret mistrust of authority in the criminal justice system as an indication of mental disorder without adequate data to support such a conclusion.[5] Mental health clinicians and black male patients may work together better if they share the same cultural views. These clinicians should be prepared to accept complaints about racism in the criminal justice system as a part of many African-American male patients' cultural perspective.[20] Such concerns should be explored to determine their validity rather than discounted *a priori* as delusional. Along the same lines, high levels of cultural mistrust should not be interpreted as reflecting a greater risk for violence among African-American patients with mental health problems.

The significant positive association between scores on the scale of PHO and the presence of comorbid substance abuse is an interesting finding. This finding suggests that African-American men with severe mental illness who perceive the social environment as threatening are more likely to abuse substances. It may be that these patients use drugs and alcohol to cope with perceived threat. Alternatively, it may be that use of illicit substances increases feelings of being threatened in African-American male psychiatric patients. The correct interpretation cannot be determined without a longitudinal design. The presence of comorbid substance abuse in patients with moderate levels of paranoia may also contribute to the underdiagnosis of schizophrenia in African-American males.[49,50] Based on the current findings, one explanation is that mental health clinicians may believe that the psychotic condition is drug induced. Thus, a careful assessment of substance abuse should be conducted to establish its role in African-American detainees with mental health problems.

A number of methodological improvements should be included in future replications of this study. First, a longitudinal design should be used to be able to establish causal links between different measures of paranoia and the severity continuum. Second, a larger sample size should be ascertained to ensure that there is adequate power to examine correlations among variables. Third, African-American males who are involved with the criminal justice system should be studied to validate these findings externally. Finally, objective indicators of risk for violence should be included in studies of cultural mistrust in African American men, to examine the relationship more directly. Until the time that such research is conducted, the present study should be seen as suggestive rather than definitive of the role of paranoia in the mental health treatment of African American men with severe mental illness who are suspicious of criminal justice authority.

Acknowledgments

The author thanks Drs. Pamela Geller and Dawn Smyer for their substantial contributions to the project.

References

1. Snowden LR, Cheung FK: Use of inpatient mental health services by members of ethnic minority groups. Am Psychol 45:347–55, 1990
2. Collins JL, Rickman LE, Mathura CB: Frequency of schizophrenia and depression in a black inpatient population. J Natl Med Assoc 72:851–6, 1980
3. Mukherjee S, Shukla S, Woodle J, *et al*: Misdiagnosis of schizophrenia in bipolar patients: a multiethnic comparison. Am J Psychiatry 140:1571–4, 1983
4. Strakowski SM, Shelton RC, Kolbrener ML: The effects of race and comorbidity on clinical diagnosis in patients with psychosis. J Clin Psychiatry 54:96–102, 1993
5. Toch H, Adams K, Greene R: Ethnicity, disruptiveness, and emotional disorder among prison inmates. Crim Just Behav 14:93–109, 1987
6. Grier WH, Cobbs PM: Black Rage. New York: Basic Books, 1968
7. Ridley CR: Clinical treatment of the nondisclosing black client: a therapeutic paradox. Am Psychol 39:1234–44, 1984
8. Loring M, Powell B: Gender, race, and DSM-III: a study of the objectivity of psychiatric diagnostic behavior. J Health Soc Behav 29:1–22, 1988
9. Rosenfield S: Race differences in hospitalization: psychiatric versus labeling perspectives. J Health Soc Behav 25:14–23, 1984
10. Whaley AL, Link BG: Racial categorization and stereotype-based judgments about homeless people. J Appl Soc Psychol 28:189–205, 1998
11. Whaley AL: Racism in the provision of mental health services: a social-cognitive analysis. Am J Orthopsychiatry 68:47–57, 1998
12. Lawson WB, Yesavage JA, Werner PD: Race, violence, and psychopathology. J Clin Psychiatry 45:294–7, 1984
13. Lindsey KP, Paul GL, Mariotto MJ: Urban psychiatric commitments: disability and dangerous behavior of black and white recent admissions. Hosp Community Psychiatry 40:286–94, 1989
14. Baker FM: Some reflections on racial profiling. J Am Acad Psychiatry Law 27:626–9, 1999
15. Garyali V: "The color of suspicion": race profiling or racism? J Am Acad Psychiatry Law 27:630–2, 1999
16. Butts HF: Psychoanalytic perspectives on racial profiling. J Am Acad Psychiatry Law 27:633–5, 1999
17. Terrell F, Terrell SL: An inventory to measure cultural mistrust among blacks. West J Black Stud 5:180–1, 1981
18. Whaley AL: Ethnicity/race, paranoia, and psychiatric diagnoses:

clinician bias versus sociocultural differences. J Psychopathol Behav Assess 19:1–20, 1997
19. Whaley AL: Cross-cultural perspective on paranoia: a focus on the black American experience. Psychiatr Q 69:325–43, 1998
20. Whaley AL: Cultural mistrust: an important psychological construct for diagnosis and treatment of African Americans. Prof Psychol 32:555–62, 2001
21. Nicholson IR, Neufeld RWJ: Classification of schizophrenia according to symptomatology: a two-factor model. J Abnorm Psychol 102:259–70, 1993
22. American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders (ed 3). Washington, DC: American Psychiatric Association, 1980
23. Tateyama M, Kudo I, Hashimoto M, *et al*: Is paranoid schizophrenia the most common subtype? Psychopathology 32:98–106, 1999
24. Cabeza IG, Amador MS, Lopez CA, *et al*: Subjective response to antipsychotics in schizophrenia: clinical implications and related factors. Schizophr Res 41:349–55, 2000
25. Whaley AL: Confluent paranoia in African American psychiatric patients: an empirical study of Ridley's typology. J Abnorm Psychol 111:568–77, 2002
26. Majors R, Billson JM: Cool Pose: The Dilemmas of Black Manhood in America. New York: Touchstone Books/Simon & Schuster, 1993
27. Zigler E, Glick M: Is paranoid schizophrenia really camouflaged depression? Am Psychol 43:284–90, 1988
28. Fenigstein A, Vanable PA: Paranoia and self-consciousness. J Pers Soc Psychol 62:129–38, 1992
29. Vinogradov S, King RJ, Huberman BA: An associationist model of the paranoid process: application of phase transition in spreading activation networks. Psychiatry 55:79–94, 1992
30. Mirowsky J, Ross CE: Paranoia and the structure of powerlessness. Am Sociol Rev 48:228–39, 1983
31. Strauss JS: Hallucinations and delusions as points on continua function. Arch Gen Psychiatry 21:581–6, 1969
32. Whaley AL: Multidimensional scaling analysis of paranoid symptoms in the context of depressive and psychotic disorders. Br J Med Psychol 72:33–49, 1999
33. Whaley AL: Psychometric analysis of the Cultural Mistrust Inventory with a black psychiatric inpatient sample. J Clin Psychol 58:383–96, 2002
34. Dohrenwend BP, Levav I, Shrout P: Screening scales from the Psychiatric Epidemiology Research Interview (PERI), in Community Surveys of Psychiatric Disorders. Edited by Weissman MM, Myers JK, Ross CE. New Brunswick, NJ: Rutgers University Press; 1986, pp 349–75
35. Dohrenwend BP, Shrout P, Egri G, *et al*: Measures of nonspecific psychological distress and other dimensions of psychopathology in the general population. Arch Gen Psychiatry 37:1229–36, 1980
36. Ashby HU: Mislabeling the black client: a reply to Ridley. Am Psychol 41:224–5, 1986
37. Bronstein P: Self-disclosure, paranoia, and unaware racism: another look at the black client and the white therapist. Am Psychol 41:225–6, 1986
38. Whaley AL: Cultural mistrust and mental health services for African Americans: a review and meta-analysis. Couns Psychol 29: 513–31, 2001
39. Shrout PE, Lyons M, Dohrenwend BP, *et al*: Changing time frames on symptom inventories: effects on the Psychiatric Epidemiology Research Interview. J Consult Clin Psychol 56:267–72, 1988
40. Dahlstrom WG, Welsh GS, Dahlstrom LE: An MMPI Handbook (vol 1). Clinical Interpretation (revised ed). Minneapolis: University of Minnesota, 1972
41. Greene RL: The MMPI-2/MMPI: An Interpretive Manual. Boston: Allyn and Bacon, 1991
42. Smari J, Stefansson S, Thorgilsson H: Paranoia, self-consciousness, and social cognition in schizophrenics. Cog Ther Res 18: 387–99, 1994
43. Rosenberg M: Society and the Adolescent Self-Image (rev. ed). Middletown, CT: Wesleyan University, 1989
44. Crowne DP, Marlowe D: A new scale of social desirability independent of psychopathology. J Consult Clin Psychol 24:349–54, 1960
45. First MB, Spitzer RL, Gibbon M, *et al*: Structured Clinical Interview for DSM -IV Axis I Disorders, Patient Edition (SCID-I/P, version 2.0). New York: Biometrics Research Department, New York State Psychiatric Institute, 1996
46. Blanchard JJ, Brown SA, Horan WP, *et al*: Substance use disorder in schizophrenia: review, integration, and a proposed model. Clin Psychol Rev 20:207–34, 2000
47. Goldfinger SM, Schutt RK, Seidman LJ, *et al*: Self-report and observer measures of substance abuse among homeless mentally ill persons in the cross-section and over time. J Nerv Ment Dis 184: 667–72, 1996
48. Cohen AI: Treating the black patient: transference questions. Am J Psychother 28:137–43, 1974
49. Trierweiler SJ, Neighbors HW, Munday C, *et al*: Clinician attributions associated with the diagnosis of schizophrenia in African American and non-African American patients. J Consult Clin Psychol. 68:171–5, 2000
50. Whaley AL: Cultural mistrust and the clinical diagnosis of paranoid schizophrenia in African American patients. J Psychopathol Behav Assess 23:93–100, 2001