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Perceived Racism, Discrimination, and Acculturation in Suicidal Ideation and Suicide Attempts among Black Young Adults

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Abstract

During young adulthood the suicide rate among Blacks rises dramatically and approaches that of the U.S. general population, requiring that prevention efforts include a focus on Black young adults. Although most research on suicidality among Blacks has focused on risk factors observed in the dominant culture, in this study the authors examined associations between perceived discrimination, racism, and acculturation with lifetime suicidal ideation (SI) and suicide attempt (SA) among Black young adults. Two hundred fifty Black or African American individuals aged 18–24 residing in a midsize northeastern city were recruited to participate through advertisements. Participants filled out self-report questionnaires. Logistic regressions were used to examine the association of each predictor with SI and SA. Greater perceived acculturation was associated with SI in univariate and multivariate models. There were no other statistically significant results concerning the predictors of interest. The link between perceived acculturation and SI is consistent with limited available data, indicating the need for further study including the potential mechanism(s) for the association. Limitations include the cross-sectional design and reliance on subjective measures.

Suicide rates vary widely by age, race, and ethnicity (Garlow, Purselle, & Heninger, 2005). Although Blacks in the United States have a considerably lower overall suicide rate compared to the U.S. general population, this is not the case during young adulthood when the rate rises dramatically and reaches its peak, marking a unique period in the life course when the risk for suicide among Blacks approaches that of the general population. Indeed, suicide is the third leading cause of death among Blacks aged 15–24 years and accounts for 10% of all suicides in the United States in this age group (National Center for Injury Prevention and Control, 2006a, 2006b). Like the general population, suicide disproportionately affects Black males, who carry out 86% of suicides among Blacks aged 15–24 years (National Center for Injury Prevention and Control, 2006a). The extent of this problem is a fairly recent phenomenon, owing to a dramatic rise in the suicide rate among young Black men between 1980 and the mid-1990s (Centers for Disease Control and Prevention, 1998), a rate that has decreased somewhat since that time but remains elevated compared to pre-1980 levels. A study of these data indicates that suicide prevention efforts must include a focus on Black young adults, particularly men. Moreover, the anticipated

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shift in the racial and ethnic composition of the United States in coming decades suggests that Black young adults will comprise a growing percentage of the nation's suicides (National Adolescent Health Center Information Center, 2008).

Prevention and intervention efforts suitable for Black young adults will depend on an understanding of modifiable risk factors. Secondary analyses of large mortality databases have contributed data (Castle, Duberstein, Conner, Meldrum, & Conwell, 2004), although such reports have been limited by low participation rates and cursory measures. Psychological autopsy studies also provide data on suicide (Cavanagh, Carson, Sharpe, & Lawrie, 2003), but no such study in the United States has contained enough Black suicides for meaningful subanalysis. Overall, there are meager data on risk factors for suicide among Black young adults or indeed Blacks of any age. The examination of other suicide-related outcomes including suicidal ideation (SI) and suicide attempts (SA) are also important to inform prevention strategies appropriate for Black young adults. SI is critical to study because it is a common pathway to suicidal behavior that provides a signal for risk recognition (Joe, Baser, Breeden, Neighbors, & Jackson, 2006), leading to recommendations to target SI as a component of clinical risk management protocols (American Psychiatric Association, 2003) as well as population-based initiatives (Mann, Apter, Bertolote, et al., 2005). The study of SA is essential because data consistently show that an attempt confers high risk for eventual suicide (Conner, Langley, Tomaszewski, & Conwell, 2003; Kuo & Gallo, 2005).

It is observed that most studies of suicidal thoughts and behaviors among Black adolescents and young adults have focused on variables such as depression, substance abuse, and aggression that are known to confer risk in a variety of populations (Brezo, Paris, & Turecki, 2006; Cavanagh et al., 2003). The examination of these traditional risk factors has been undertaken in examinations of Black samples (Joe & Kaplan, 2001; Kaslow et al., 2004; O'Donnell, O'Donnell, Wardlaw, & Stueve, 2004), studies comparing ethnic subgroups of Blacks (Joe et al., 2006), and those comparing Blacks to Whites and other racial/ethnic groups (Castle et al., 2004). The results of these studies are complex and indicate the need for further study of the generalization of traditional risk factors for suicidal thoughts and behavior to Blacks including young adults, as well as an appreciation of heterogeneity of risk among Black communities. Although the study of traditional risk factors is warranted, suicide research must also consider stresses that are a function of being a part of a minority community within a traditionally oppressive dominant culture (Walker, 2007, 2008). In particular, experiences of discrimination, racism, or acculturation experienced by Blacks are seldom assessed in general population surveys or clinical research batteries, creating the need for research studies designed a priori to examine these issues.

Discrimination

Discrimination is defined as unfair action or negative treatment that is based on racial/ethnic bias or prejudice (Harrell, 2000). It is observed that studies of discrimination and health outcomes have most often examined perceived (rather than objectively observed) discrimination. Perceived discrimination is associated with significant negative effects on physical health, mental health, and psychological well-being in populations of color

(Gee, Spencer, Chen, Yip, & Takeuchi, 2007; Krieger, 1999; Moradi & Risco, 2006). It has been found to increase the risk for psychopathology including depression, anxiety, and psychological distress in Blacks (Fernando, 1983; Frable, 1997; Kessler, Mickelson, & Williams, 1999; Landrine, Klonoff, Gibbs, Manning, & Lund, 1995). Perceived discrimination (and the related variable, racism) has also been associated with increased risk for development of physical symptoms in Blacks including headaches (Landrine et al., 1995) and high blood pressure (Krieger, 1990). In addition, research suggests that perceptions of discrimination affect well-being and influence identification with one's ethnic or minority group (Branscombe, Schmitt, & Harvey, 1999). We are aware of no studies of perceived discrimination and SI, SA, or suicide among Black young adults.

Racism

Racism is defined as perceptions, policies, and behaviors that tend to demean individual groups because of ethnicity or phenotypic characteristics (Clark, Anderson, Clark, & Williams, 1999). Most data on health outcomes concern perceived racism. One review concluded that racism is associated with cardiovascular disease among Blacks in the United States (Wyatt et al., 2003), with related data showing associations with high blood pressure and impaired cardiovascular activity (Brondolo et al., 2008). Several studies have shown associations of perceived racism with a variety of deleterious physical health outcomes (Collins, David, Handler, Wall, & Andes, 2004; Gee, 2002; Karlsen & Nazroo, 2002; Krieger, 1999). For example, the experiences of racism are associated with acute and chronic stress (Fernando, 1983; Jones, Harrell, Morris-Prather, Thomas, & Omowale, 1996) and lower quality of life (Utsey, 2002) among Blacks. Data pertaining to stress and well-being suggest an association of racism and mental health outcomes. However, we are aware of no studies on racism and SI, SA, or suicide among Black young adults.

Acculturation

In the United States, *acculturation* is the degree to which ethnic-cultural minorities engage in the customs, tenets, principles, and behaviors of their own culture versus the dominant White society (Landrine & Klonoff, 1996). The growing database of research on acculturation and suicide-related outcomes generally shows that new (or first generation) immigrants are at similar risk to individuals from their home country but over time (and generations) the risk among immigrants becomes more similar to that of their new country, a pattern that has been shown among Blacks (Walker, 2008), Latinos (Fortuna, Perez, Canino, Sribney, & Alegria, 2007), and individuals from Central America (Hovey, 2000; Pena et al., 2008). Furthermore, a recent study found Mexicans with a family member in the United States and Mexican Americans living in the United States reported higher rates of SAs when compared to members of the population living in Mexico (Borges, Breslau, Su, Miller, & Medina-Mora, 2009). In such studies, immigration and location of family are conceptualized as markers for the more abstract construct of acculturation, a process that does not require the crossing of borders. One explanation for the increased rates of suicide among adolescent and young adult Black males observed in the 1980s and 1990s was that it was reflective of an increased acceptability among Blacks of suicide that was more consistent with White

attitudes toward (and greater propensity for) such behavior, suggesting an acculturative process (Gibbs, 1997).

Purpose

The authors of this study examined the associations between perceived discrimination, racism, and acculturation with SI and SA in Black young adults. We hypothesized a positive association between each of these variables and SI and SA. Perceptions of discrimination and racism may increase risk for SI and SA because these events increase feelings of stress, anger, and depression, which are known risk factors for SI and SA. Acculturation may confer risk for SA and SI for a number of reasons, including that it represents movement toward White culture where there is a greater prevalence of suicidal thoughts and behaviors.

METHODS

Procedure

Research participants were recruited in a mid-size northeastern metropolitan area through radio and print advertisements in outlets popular with Black youth along with posting flyers in predominantly Black neighborhoods. The ads described a study of health behaviors among Black young adults aged 18–24 years. Interested individuals were instructed to call a central number where the study was explained and individuals were screened for eligibility.

Criteria for participation were age 18–24, self-identification as Black or African American, ability to read English, and residence in the county. After obtaining informed written consent, participants completed a self-report assessment battery. One of the authors or a research assistant under his/her supervision monitored the session, answered any questions, and ensured the participant's safety if there were indications of active suicidality. Participants were paid $30 for participation. The study was approved by the IRB of the university where the data were collected.

Measures

The outcomes were lifetime SI and lifetime SA. "Lifetime SI" was assessed with the question: "Have you ever thought about killing yourself?" The item is taken from a validated research interview (Bucholz et al., 1994) and has served as an outcome in prior research (Conner et al., 2007). Individuals endorsing the item were asked follow-up questions about intensive manifestations of SI including the experience of "serious" SI and suicide "planning" using National Comorbidity Survey (NCS) items (Kessler, Borges, & Walters, 1999). "Lifetime SA" was assessed with the question: "Have you ever tried to kill yourself or attempt suicide?" The question is a modification of the SA item used in the NCS and has served as an outcome in prior research (Conner, Houston, & Swogger, 2009). The question showed high test–retest reliability in a prior study (kappa = .82; Conner, Britton, Sworts, & Joiner, 2007).

The Racism and Life Experiences Scale (RaLeS; (American Psychological Association, 1997) and the Multidimensional Inventory of Black Identity (MIBI; Sellers, Smith, Shelton, Rowley, & Chavous, 1998) were used to assess the primary predictors that consisted of

perceived racism, discrimination, and acculturation. Perceived racism was assessed with the 17-item Stress scale of the RaLeS. This measure assesses how stressful individuals perceived a list of experiences of racism occurring in the past year, with each experience rated on a 5-point scale from 0 (*no stress*) to 4 (*extremely*). Sample items include "Others expecting you to be like stereotypes of your racial/ethnic group" and "Significant racial tensions in your community, city, or town." In the current sample, the mean score = 24.4 ± 17.3, range = 0–85, α = .93. Perceived discrimination was assessed with the Bother scale of the RaLeS. This measure lists 20 discriminatory experiences occurring in the past year and asks "How much does it bother you?" on a 6-point scale from 0 (*has never happened to me*) to 5 (*bothers me extremely*). Sample items include "Being accused of something or treated suspiciously" and "Hearing (or being told) an offensive or insensitive comment or joke" (mean score = 41.4 ± 23.7, range = 0–100, α = .93). Acculturation was assessed with the 9-item Assimilation Ideology scale of the MIBI. This scale is "characterized by an emphasis on the similarities between African Americans and the rest of American society" and denotes an individual who "acknowledges his or her status as an American and attempts to enter into the mainstream" (Sellers et al., 1998, p. 28). Items are rated on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Sample items include "Blacks should strive to integrate all institutions which are segregated" and "Blacks should feel free to interact socially with White people" (mean score = 46.8 ± 7.2, range = 17–63, α = .63).

There were four covariates in multivariate analyses: gender, depressive symptoms, substance use, and aggression. These covariates were chosen because of their consistent correlations with suicidal thoughts and behavior among young adults (Gould & Kramer, 2001). Depressive symptoms were assessed with Beck Depression Inventory-2 (Beck, Steer, & Brown, 1996) with the SI item removed to form a 20-item measure (α = .94, current sample). Substance use was assessed by summing a 24-item scale developed for the study that assesses the presence and frequency of use of various substances of abuse (e.g., cannabis, cocaine, etc.) in the past year (α = .94). Aggression was assessed by summing the 29-item Aggression Questionnaire (Buss & Perry, 1992; α = .82). Age was not used as a covariate due to the restricted age range of the sample.

Analyses

Univariate and multivariate logistic regression analyses were used to test the associations of each predictor of interest with SI and SA. Separate models were run for perceived discrimination, racism, and acculturation. Each multivariate result was adjusted for the four covariates. Odds ratios (OR) and 95% confidence intervals (CI) were derived using the asymptotic joint distribution of the estimates of the logistic model (Hosmer & Lemeshow, 2000). Model fit of the multivariate analyses were assessed with the Hosmer–Lemeshow goodness of fit test (Hosmer & Lemeshow, 2000). Subjects with missing data on the outcome variable were dropped from the analysis. Those missing more than one third of items of an instrument or a subscale from which a predictor or covariate was derived were also dropped, otherwise the missing scores were imputed by the mean instrument or subscale scores. As missing items scores are generally caused by reasons unrelated to the distribution of the outcomes of interest, they follow the missing completely at random model and thus such an approach does not induce bias in the estimates of model parameters (Little

& Rubin, 1987). The data analysis for this paper was generated using SAS software (version 9.2; SAS Institute, Inc.).

RESULTS

Sixteen subjects (6.4%) were dropped from the SI analyses due to missing data, yielding 234 subjects for the analyses. Of these individuals, 80 (33.3%) reported a history of SI, among whom 38 (47.5%) endorsed the NCS item denoting serious SI and 20 (25.0%) endorsed the NCS suicidal planning item. Twenty-four subjects (9.6%) were excluded from the SA analyses, providing a sample of 226, among whom 29 (12.8%) reported a history of SA. Subjects deleted from the SI and SA analyses did not differ on gender or age from those that were included.

The univariate and multivariate results for the predictors of interest are presented in Table 1. In the analyses of SI, perceived racism, and perceived discrimination are not associated with SI at a statistically significant level. Acculturation is associated with SI in univariate (OR, 95%CI = 1.06, 1.02–1.11, $p < .01$) and multivariate models (OR, 95%CI = 1.07, 1.03–1.12, $p < .01$). The multivariate result suggests that after accounting for covariates, each 1-point increase on the measure of acculturation is associated with a 7% (3%–12%) increased likelihood of experiencing SI. In each multivariate SI model, greater substance use is associated with SI ($p < .05$) whereas the other covariates are not associated with SI. Each multivariate SI model fits reasonably well as indicated by larger than .05 p values from the Hosmer–Lemeshow goodness of fit tests.

In the analyses of SA, there are no statistically significant results regarding the predictors of interest in the univariate or multivariate models. In each of the multivariate models of SA, greater substance use ($p < .01$) and depressive symptoms ($p < .05$) are associated with SA and the other covariates are statistically nonsignificant. Each multivariate SA model fits reasonably well per the Hosmer–Lemeshow test.

DISCUSSION

The finding pertaining to acculturation and SI is noteworthy because it suggests increased risk for SI among Black young adults after adjusting for several known risk factors for suicidal thoughts and behavior. Moreover, along with being statistically significant, a 7% (3%–12%) increased likelihood in SI associated with a 1-point increase on the measure of acculturation may be of practical significance to prevention of SI and/or treatment of SI given the wide range of scores that may be obtained on the acculturation scale (range 9–63). Although the analysis is the first of which we are aware to show that SI is associated with acculturation among Black young adults, it seems consistent with limited available data pertaining to suicidality and acculturation and related constructs such as assimilation (Walker, 2007). Some caution in interpretation is needed as the analyses did not show that acculturation is associated with SA at a statistically significant level.

There are several potential mechanism(s) for the association between acculturation and SI. Acculturation may signal a movement toward White society where there is a greater propensity for suicidal thoughts and behavior (Gibbs, 1997). Acculturation may also

bring about conflict or stress that may confer risk for suicidal thoughts or behavior as illustrated by a study showing that stress associated with acculturation is associated with SI among African Americans (Joiner & Walker, 2002). Another mechanism through which acculturation may confer risk is the relinquishing of long-held values and traditions (Padilla, Alverez, & Lind-Holm, 1986; Thompson, Anderson, & Bakeman, 2000). In particular, relinquishing strong ties to community, family, and church that are presumed to protect Blacks from suicide may lead to increased risk (Joe, Romer, & Jamieson, 2007; Walker, 2007). The measure of perceived acculturation used in the present study does not inform which, if any, of these mechanisms (movement toward White society, acculturation-mediated stress, relinquishing of protective values and tradition) explains the association with SI. Studies of these and other mechanisms for the acculturation–suicidality link are needed. Moreover, despite its label, the instrument used to measure acculturation in the current study can be more properly described as a measure of "assimilation." The two concepts are subtly different, in that *assimilation* is the choice of giving up indigenous characteristics where as *acculturation* is the loss of characteristics through interaction. Therefore, the results may speak to the impact of assimilation on SI more specifically.

Analyses of perceived racism and discrimination did not support the hypothesized associations with SI or SA. Racism and discrimination are undeniably stressful experiences yet it may be that Black young adults rarely consider suicidal behavior in response. Because acts of racism and discrimination tend to be carried out by members of the dominant culture more so than by one's family and personal network, it may make these victimization experiences less risk promoting compared to other victimization experiences that are clearly linked with suicidal thoughts and behavior; for example, abuse during childhood (Dube et al., 2001), where the perpetrator is typically a family member. Moreover, because acts of racism and discrimination are carried out by an identifiable aggressor, young Black adults may be less apt to respond by turning against themselves. In contrast, acculturation (or assimilation) may act as a more subtle process, largely outside of the individual's awareness, and without an identifiable threat to steel oneself against. These ideas are admittedly speculative and, overall, this is a nascent research that requires further study.

There are several limitations. The authors of this study used a cross-sectional design. The analyses focused on SI and SA and are of unclear generalizability to suicide deaths. The data were gathered from one mid-sized metropolitan area in the northeastern United States. Recruitment used advertisements, a convenience method, and so it is not community representative, and the use of volunteers makes the study vulnerable to under-survey suicidal youth. Assessments relied on self-report measures of perceived discrimination, racism, and acculturation, with unclear generalizability to more objective measures of these variables. This point is noteworthy because self-reports of stressful life experiences may show only modest correlation to more objective measures of life stress or to interview-based assessments (Monroe, 2008). Cumulative experiences of racism, discrimination, and acculturation were assessed and, therefore, the impact of specific experiences of racism on short-term (or even long-term) risk for SI or SA could not be evaluated. Only individual-level data were analyzed, yet experiences of racism may be influenced by higher order variables (e.g., neighborhood) that were not measured. Perceptions of racism, discrimination, and acculturation may be expected to act in concert with other risk factors

for SI and SA in a dynamic fashion, yet exploration of the interrelationship among variables (e.g., racism as a mediator or moderator of aggression) in risk promotion is impractical given the limited sample size and cross-sectional research design. The internal consistency reliability (α = .63) of the assessment of acculturation is less than ideal. Because of the higher prevalence of SI (33%) than SA (13%), there is substantially greater power in the SI than the SA analyses (Whittemore, 1981), and therefore the non significant results for acculturation and SA may be attributable to low power. Further study of acculturation and suicidal behavior using larger samples and more definitive, prospective research designs is needed.

In conclusion, future studies of suicidal thoughts and behaviors among Black young adults should include a focus on acculturation as well as the potential mechanisms by which acculturation may contribute to risk. Such studies will require multidimensional assessments of acculturation. Investigations that use powerful prospective research designs will be most informative, acknowledging that the low rate of SAs and suicide make a focus on suicidal behavior difficult, particularly in nonclinical populations. Collaborations among experts in public health, minority health, and suicide research and prevention may be especially fruitful.

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TABLE 1

Associations of Perceived Racism, Discrimination, and Acculturation with Suicidal Ideation and Suicide Attempts

Predictor	Crude OR	95% CI	Multivariate[a] OR	95% CI
Suicidal ideation				
Perceived racism	1.02	1.00, 1.03	1.00	0.99, 1.02
Perceived discrimination	1.01	1.00, 1.02	1.00	0.99, 1.02
Perceived acculturation	1.06*	1.02, 1.11	1.07*	1.03, 1.12
Suicide attempt				
Perceived racism	1.02	1.00, 1.05	0.99	0.96, 1.02
Perceived discrimination	1.02	1.00, 1.04	1.00	0.98, 1.02
Perceived acculturation	1.03	0.97, 1.08	1.04	0.97, 1.10

[a]The predictors were adjusted for gender, depression, substance use, and aggression in the multivariate models.

*$p < .01$.

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