Published in final edited form as:
J Hum Behav Soc Environ. 2007 ; 15(2-3): 199–218. doi:10.1300/J137v15n02_12.

Impact of Familial Factors and Psychopathology on Suicidality Among African American Adolescents

Sean Joe, MSW, PhD [Assistant Professor],
University of Michigan School of Social Work, Ann Arbor, MI.

Jenell Clarke, MSW [Doctoral Student],
University of Michigan School of Social Work.

Asha Z. Ivey, MA [Doctoral Student],
University of Michigan Department of Psychology.

David Kerr, PhD [Postdoctoral Fellow], and
University of Michigan Medical School.

Cheryl A. King, PhD [Associate Professor]
University of Michigan Medical School.

SUMMARY

Racial differences in familial factors, psychopathology, perceptions of social support, and socioeconomic status were examined in a matched sample of African American and White suicidal adolescents (N = 90) during a psychiatric hospitalization. Exploratory analyses suggest that significant differences were found in family support and its association with psychopathology, but most noteworthy were the many similarities between the two adolescent groups. The results presented in this study represent new knowledge on the characteristics of African-American adolescents at high risk of suicidal behavior, and replace conventional wisdom with empirical knowledge about an aspect of human behavior for this population. Implications for social work practice, suicide prevention, and future research are discussed.

Keywords

Black adolescents; suicide; family; social support; youth

INTRODUCTION

Recently the Institute of Medicine as well as the former U.S. Surgeon General, David Satcher, issued calls to alert the public to national trends for youth suicide, the third leading cause of death in children and adolescents aged 10 to 19 years (Institute of Medicine, 2002; U. S. Public

Address correspondence to: Sean Joe, School of Social Work, University of Michigan, 1080 South University Ave., Room 2780, Ann Arbor, MI 48109 (E-mail: sjoe@ssw.umich.edu).

Health Service, 2000). These trends included the alarming changes in the rates of suicidal behavior among minority adolescents, specifically Latino and African American.

In comparison to their White counterparts, African American suicide rates have been historically stable and relatively low. However, between 1980 and 1995, the suicide rate among African American youth has more than doubled (from 2.1 to 4.5 per 100, 000 population), exhibiting a 126% increase among those aged 15–19 and a 233% increase among those aged 10–14, compared to 19% and 120% for Whites, respectively (Centers for Disease Control and Prevention, 1998). Similarly, there were important changes in the trends in attempted suicide among this population, particularly among males (Joe & Marcus, 2003). According to the Centers for Disease Control and Prevention (CDC), the prevalence rates of attempted suicides in 2003 were higher among older African American (8.4%) and Latino (10.6%) high school students than their White (6.9%) peers (CDC, 2004). These statistics reflect a dramatic increase in the rates of suicidality among African American youth. Despite these rates, however, the suicide phenomenon within the African American community remains relatively unexplored and, hence, poorly understood (Joe & Kaplan, 2001). Consequently, difficulty arises in any attempt to reach empirical conclusions about factors that are relevant to suicide among African Americans.

Suicide research on the majority population has identified risk factors such as psychiatric and psychological disorders, physical illness, easy access to lethal methods, media contagion, and familial dynamics (Evans, Hawton, & Rodham, 2004). In this paper, we focus on familial and psychopathological factors that can induce risk of suicidal behavior among adolescents. Much of children's socialization takes place in the context of the family, for it is through the family that the developing child is afforded safety, basic needs, and the opportunities and experiences necessary to acquire the fundamental skills, behaviors, values, and knowledge that enable him or her to forge positive developmental trajectories (Maccoby, 1992). As such, the inherent influence of this context necessitates empirical exploration as we seek to understand the correlates and predictors of adverse outcomes, particularly suicidal behaviors. Research on the association between familial factors and suicidality has included family history, parental psychopathology, family structure and family relationships (Evans, Hawton, & Rodham, 2004; Wagner, Silverman, & Martin, 2003). The research literature, however, is equivocal about the psychopathological and familial risk factors that are associated with African American adolescent suicidal behavior.

LITERATURE REVIEW

Family History

Family history as a correlate of adolescent suicidal behavior and suicide implicates a social psychological theory known as the social learning theory (Henry, Stephenson, Hanson, & Hargett, 1993). According to this theory, adolescents become susceptible to suicide if there is a history of suicide within the family because they imitate suicidal behaviors in family members. Such a history facilitates adolescents' exposure to suicide and may contribute to a belief that suicide is an acceptable mechanism for coping with problems. Evans and colleagues (2004) reported 13 studies that found an association between suicidal phenomena in adolescents (i.e., ideation and suicidal behavior) and previous suicide in family members. The studies all pointed to a family history of suicide attempts as a significant independent contributor to adolescent suicidal phenomena. This increased risk is cited in family contexts where the first-degree relatives exhibit suicidal behavior (Brent et al., 1994; Pfeffer, Normandin, & Kakuma, 1994). Mixed findings, however, regarding the association of youth suicidal behavior and suicidal behaviors in first-degree relatives create a need for further studies to address this hypothesis (Wagner et al., 2003). Few, if any, studies show this association for African American youth.

Family Psychopathology

Parental psychopathology has been identified as a potential risk for adolescent suicidality. Garber, Little, Hilsman, and Weaver's (1998) longitudinal study on family predictors of suicide symptoms in young adolescents, found that after controlling for their previous suicide symptoms, children whose mothers had a history of a mood disorder were significantly more likely to present suicide symptoms at a later time compared to children whose mothers had no history of psychopathology. Maternal depression history was no longer significant, once family functioning was entered into the model. This finding suggests that maternal depression history is predictive of youth suicide symptoms only to the extent that it interrupts the quality of the family environment, that is, family functioning. While the study informs our understanding of parental psychopathology as a predictor of youth suicide risk, it is not clear that its sample distribution (82% Caucasian vs. 14.7% African American) would allow us to make any conclusive predictions for African American youth. In another study, Yama, Tovey, Fogus and Morris (1995) found that parental alcoholism independently predicted higher levels of suicidality. Again, because of the sample size, it is not clear that this finding of parental alcoholism as a risk factor for youth suicide is applicable to African Americans.

Family Structure and Socioeconomic Status

Living in a family structure besides that of an intact, two-parent household has been linked to several adverse outcomes (Tomori, Keinhorst, De Wilde, & Van Den Bout, 2001). Research examining the influence of family structure on youth suicide has yielded mixed findings. Gould et al. (1996) found that suicide victims are more likely to come from non-intact families of origin. This finding, however, was largely explained by parental psychopathology. Similarly, Brent and colleagues (1994) found that suicide victims were less likely to have lived with both biological parents, but this is before controlling for history of psychopathology. In a recent review, Evans and colleagues (2004) found that in a small number of studies where the absence of either the mother or father was specifically investigated, the results were inconsistent. However, living apart from both parents was associated with an increased prevalence of suicidal phenomena (Ang & Ooi, 2004).

Several studies have found that suicides among African Americans were positively associated with education and wealth, whereas for Whites they were not (Burr, Hartman, & Matteson, 1999; Lester, 1991). Although previous studies have shown that socioeconomic status is related to psychiatric disorders and outcomes in an inverse fashion (Goodman & Haung, 2002), this relationship is not well-understood. Costello, Compton, Keeler, and Angold (2003) found that moving families out of poverty did not reduce the children's symptoms for depression, a major risk factor for suicide.

Parent-Child Relationships

Parent-child communication—Past research suggests that communication between parent and child is a relevant factor in risk of adolescent suicide. In their study, Gould and colleagues (1996) conducted psychological autopsies of 120 individuals under the age of 20 who had committed suicide and matched them on age, sex and ethnicity using 147 community control participants in the greater New York area. This study reported that suicide victims had significantly less frequent and less satisfying communication with their parents, indicating that parentchild communication is a notable suicide risk factor. Evans and colleagues (2004) also provide support for this hypothesis, reporting that good communication with, and feeling understood by, family members was associated with a lower prevalence of suicidal thoughts and behaviors (King et al., 1997).

Family support and cohesion—Additional family relationship and functioning characteristics, such as family support, have been linked to youth suicidal proneness. Wagner,

Silverman, and Martin (2003) cited studies indicating that family support distinguishes suicidal adolescents from both clinical and non-clinical controls. Perkins and Hartless (2002) found that for both African Americans and Whites, family support was a significant predictor of adolescent suicide attempt. The research evidence indicates that having unsupportive parents is directly associated with suicidal phenomena (Evans et al., 2004). In a sample of African American college students, Harris and Molock (2000) found that perceiving one's family as supportive was related to fewer experiences of suicide ideation. They also found that higher levels of family cohesion were linked to lower levels of suicide ideation. Similar results were found by O'Donnell, O'Donnell, Wardlow, and Stueve (2004), who examined risk and resiliency factors influencing suicidality among urban, economically disadvantaged African American and Latino youth. The study indicated that family closeness was protective against adolescent suicidal ideation and attempts. Items used in their measurement of family closeness included statements such as "Members of my family care about each other," and "I can really depend on my family." An earlier study provides congruent findings, suggesting that low perceived support and lack of family availability were related to suicidal risk (O'Donnell, Stueve, Wardlaw, & O'Donnell, 2003).

Psychopathology

Relatively few studies have examined the relationship between psychopathology and suicidality among African-American adolescents, although psychiatric disorders are strong correlates of suicide and suicidal behavior (Moscicki, 1995a). However, several communitybased and clinical studies examined the relationship among psychiatric history, depression, and the suicidal behavior of African Americans (Feldman & Wilson, 1997; Summerville, Kaslow, Abbate, & Cronan, 1994; Windle & Windle, 1997). For instance, Bagley and Greer (1972) found that African-American suicide attempters were less likely than White suicide attempters to be psychotic (8% versus 24%), and that the White suicide attempters were more likely to have histories of psychiatric problems. Jones (1997) found that suicidal African-American adolescents reported more alcohol use, drug use, and depression than did matched controls of African Americans who did not attempt suicide. Several other studies have demonstrated an association between substance abuse, attempted, and completed suicides. For example, in a study of Massachusetts's high school students containing a significant proportion of African Americans, Woods et al. (1997) found that every attempted suicide among African American male students was associated with carrying a gun, cigarette smoking, and injecting drugs.

There are important gender differences in the relationship between psychiatric disorder and suicidality among African Americans. Frierson and Lippmann (1990) found that African-American male suicide attempters were more likely than females to be schizophrenic, intoxicated, and psychotic, and that female suicide attempters were more likely to manifest clinical depression than their male counterparts. Furthermore, Garrison, Addy, Jackson, and McKeown (1991) found that among African Americans, particularly female adolescents, the strongest predictor of suicide ideation in a given year was the individual's level of depression in the previous year.

PRESENT STUDY

The Surgeon General's 1999 report resulted in heightened concern for suicide among youth; however, the alarming increase in suicide among African American youth still receives insufficient attention in the extant literature, leaving many questions unanswered (U. S. Public Health Service, 2000). Our understanding of the phenomenon has grown, but much of what we know is derived from White population samples; hence, the applicability of these findings to African American youth is questionable. Moreover, as the family context continues to be implicated in our understanding of correlates and predictors of adolescent suicide, further

research is needed to address the potential ethnic variation that may exist. The current study was designed to contribute to the literature by examining whether Black and White suicidal adolescents differ in terms of: (1) family structure, family income, and perceived social support from family and others; and (2) other previously studied risk factors for adolescent suicidal behavior, including gender, psychopathology, and functional impairment. We also investigated whether relationships between social support and adolescent functioning differ by race.

METHODS

The present study consisted of 60 White (42 female) and 30 African American adolescents (21 female) with a mean age of 15.14 (SD = 1.50) and 15.26 (SD = 1.45), respectively. Participants were recruited from two psychiatric inpatient units, both of which were located in Midwestern hospitals, for a larger intervention study of 289 suicidal adolescents (King et al., 2004). Inclusion criteria included a recent history of suicide attempt, suicidal intent, or severe suicidal ideation as indicated by scores indicating "moderate" or "severe" impairment on the Self-Harm subscale of the Child and Adolescent Functional Assessment Scale (CAFAS) (Hodges, 1997; Hodges & Wong, 1996). The racial composition of the larger study sample was 82.4% White, 10.2% African American, and 7.4% "other." This composition is consistent with the representation of these racial groups in the state where the study was conducted (U.S. Census Bureau, 2001).

A case control design was used because the larger intervention study was overrepresented by White adolescents. This design allowed for meaningful comparative analyses between White and African American suicidal adolescents on a number of variables. Youth were matched, retrospectively, by gender. Clear gender differences in suicidal behavior and completed suicide have been documented, which is why gender was selected as the control variable for the present study (Anderson & Smith, 2003; Institute of Medicine, 2002; King, 1997). Two consecutive White female youths (after each African American youth) were selected for the study sample. All demographic characteristics of the sample are displayed in Table 1. Only baseline data from the larger study are included in the present study.

Measures

Child and Adolescent Functional Assessment Scale (CAFAS). (Hodges & Wong, 1996)—The CAFAS is a structured parent-completed interview that requires approximately 30 minutes for completion. Based on parents' responses to the interview, trained clinicians rate levels of impairment in each area on a four-point Likert scale ranging from "minimal/no impairment" to "severe impairment." Data from Role Performance, Behavior Towards Others, and Moods/Self-Harm scales are used in the present study. The CAFAS has demonstrated high test-retest reliability, interrater reliability, construct related validity, and predictive validity (Hodges & Wong, 1996).

Suicidal Ideation Questionnaire-Junior (SIQ-Jr) (Reynolds, 1988)—The SIQ-Jr is a 15-item self-report questionnaire assessing the frequency of a wide range of suicidal thoughts. Examples include, "I wished that I had never been born," and "I thought about killing myself." Youth rate the severity of these thoughts on a seven-point Likert scale, which assesses the frequency with which the cognition occurs. Total scores have excellent, well-documented psychometric properties (Reynolds, 1988). The SIQ-Jr total scores of psychiatrically hospitalized adolescents have been found to be significant predictors of suicidal thoughts and attempts six-months post-hospitalization (King et al., 1997).

Reynolds Adolescent Depression Scale (RADS) (Reynolds, 1987)—The RADS is a 30-item measure specific to the evaluation depressive symptoms in adolescents. The items

reflect the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1980) symptoms for Major Depression and Dysthymic Disorder. Adolescents rate the severity of their depressive symptoms on a four-point Likert scale ranging from "almost never" to "most of the time." A number of studies have documented the total score to have high test-retest reliability as well as strong concurrent validity (Davis, 1990; Reynolds, 1987) and other studies have shown the RADS, overall, to be a reliable and valid measure of depression in adolescents (Davis, 1990; Reynolds, 1987; Reynolds & Miller, 1989).

Youth Self-Report (YSR) (Achenbach, 1991)—The YSR is a self-report instrument that uses a dimensional approach to assess a wide range of emotional and behavioral difficulties in adolescent samples. It consists of 119 problem behavior items that form two broadband scales (Internalizing, Externalizing) and eight problem scales (Withdrawn, Anxious/Depressed, Thought Problems, Delinquent Behavior, Somatic Complaints, Attention Problems, Social Problems, Aggressive Behavior). Only the Internalizing, Externalizing, and Delinquency scales were included in the present study. Scale development was based on 1,272 clinically referred youths and normed on 1,315 non-referred youths. The YSR has demonstrated adequate reliability and validity in inpatient samples (Thurber & Hollingsworth, 1992).

Personal Experience Screening Questionnaire (PESQ) (Winters, 1991)—The PESQ was used to assess participants' alcohol and substance use and abuse. The problem scale consists of 18 questions about the frequency with which respondents have engaged in behaviors indicative of alcohol/drug abuse. Respondents answer each question with one of four frequency ratings ("never" to "often"). Problem scale scores range from 18 to 72; higher scores indicate a more severe problem.

Perceived Emotional/Personal Support Scale (PEPSS) (Slavin, 1991)—The PEPSS assesses perceived emotional support. Participants are instructed to list three important people in each of three relationship categories: family members, non-family adults, and friends/coworkers. Then they indicate the type of relationship, gender, and first initial of each person listed. Using a four-point Likert scale, ranging from "hardly at all" to "very much," respondents answered questions about each person in the areas of personal concern, emotional closeness, concerns of supportive person, and satisfaction with support. Levels of perceived emotional support were computed by averaging all ratings for all supportive persons within each relationship category. In this way, three broad support variables were created: average perceived support from family, non-family adults, and peers. Slavin's (1991) factor analysis suggests that perceptions of social support are consistent within each of these categories and are relatively independent of that from people in the other two categories.

Procedures

Adolescents were screened upon admission to the participating psychiatric hospitals. If the study criteria were possibly met, the parents/guardians and adolescents were approached for written informed consent and assent, respectively. The study protocol was approved by the University of Michigan's Internal Review Board. Baseline assessments were usually conducted at the hospital, but if the family could not come in at the scheduled time, an independent evaluator would conduct the assessment at the place of residence. Both the parent(s)/guardian (s) and youth completed separate baseline measures, which required approximately 45 minutes and one hour, respectively.

RESULTS

Descriptive Statistics on Sample

Demographic data on African American and White suicidal adolescent participants are presented in Table 1. As indicated by independent samples t-test and chi-square analyses, African American and White participants did not differ in age, and were not differentially represented in categories of family income, maternal or paternal level of education, or on whether there were one or two parents in their household.

Race Differences on Psychopathology, Functional Impairment, and Psychiatric Treatment History

Descriptive statistics on the severity of participants' psychopathology, functional impairment, and psychiatric treatment history are listed in Table 2. *T*-tests suggested no significant differences by race on severity of internalizing or externalizing symptoms, depressive symptoms, suicidal ideation, or alcohol/substance abuse, nor on levels of functional impairment in the areas of role performance, behavior toward others, or mood and self-harm related impairment. Likewise, there were no race differences in age at first outpatient treatment or age at first psychiatric hospitalization. Also, chi-square analysis suggested no racial differences on whether youths had a history of multiple, single, or no prior (i.e., severe ideation only) suicide attempts.

Race Differences on Family and Other Sources of Social Support

Table 2 also lists descriptive statistics on the levels of social support perceived by participants. Compared to White adolescents, African American adolescents perceived significantly higher levels of social support from family members [$t\,(63) = 2.15$, $p = .035$]. There were no significant racial differences on levels of perceived support from non-family adults or peers.

Family Characteristics and Psychopathology: Patterns by Race

Pearson correlations were conducted to assess the strength of relationships among social support and psychopathology (RADS, SIQ-Jr, YSR Internalizing and Externalizing, and Personal Experience Questionnaire [PESQ] alcohol/substance abuse) and functional impairment (CAFAS total score) variables by race. Results are shown in Table 3. Among African American but not White participants, lower perceived family support was associated with significantly higher levels of depressive symptoms and suicidal ideation, and there was a trend toward higher levels of alcohol/substance abuse. Z-tests suggested that these race differences in correlations were not significant. Among African American but not White participants, perception of lower social support from non-family adults was significantly related to higher levels of depressive symptoms and a trend toward more severe suicidal ideation. Moreover, the negative relationship between non-family adult support and depressive symptoms differed significantly by race (Z-score = 2.5, $p = .01$). There were no significant associations between perceived social support from peers and either psychopathology or functional impairment.

DISCUSSION

Recent epidemiological research has pointed to a significant reduction in racial disparities in suicide, suicide ideation, and attempted suicides between African American and White adolescents. The current study presents some important preliminary findings regarding what factors might be associated with this ominous increase in suicidal behavior among African American adolescents that puts their level of suicidality to be increasingly on par with their White counterparts. The purpose of this exploratory study is to gain a better understanding of

the relationship between familial factors, psychopathology, and socioeconomic status and suicidal behavior among African American versus White adolescents. The study also examined racial differences in the characteristics of adolescents at high risk for suicide. As postulated in the study thesis, there were important racial differences among this sample of actually suicidal adolescents, namely differences in the relationship between family support and severity of adolescent problems.

The results indicated no significant racial differences in variables indicative of socioeconomic status. The high-risk group of African American adolescents in this study represented a middle class sample. This finding is similar to the findings and hypothesis proposed by researchers (see Joe & Kaplan, 2001). African American adolescents lived primarily with two caregivers, both mother's and father's levels of education tend to be high school and higher, and the family income levels ranged from low to high middle class. Although living with both parents has been found to be a protective factor in community samples (Garrison et al., 1991; Tomori et al., 2001), the finding of this study suggest that such a family structure is not sufficient to protect from acute suicidality for African American adolescents. A majority of the sample was female, which is consistent with existing literature (King, 1997).

An important indicator of our understanding of suicide is our scientifically-based knowledge of risk and protective factors (Moscicki, 1995b). We examined whether African American and White suicidal adolescents differ on a select list of risk factors and found racial differences only in regards to perceived familial support. Suicidal African American adolescents reported significantly more perceived social support than did White adolescents. This difference is critically important, given that previous research has provided evidence that familial support is related to suicidal risk (O'Donnell et al., 2003). The study is a contribution to the research on family functioning and serious suicidal behavior among African American adolescents (O'Donnell et al., 2003; Summerville et al., 1994). In contrast, among Whites there was no significant association between familial support, suicide ideation, depression, or adolescent functioning. A closer examination of social support by race and the association with suicide vulnerability factors reveals that less support from family and non-family sources was associated with more severe suicidal ideation and higher levels of depression and alcohol/substance abuse among African Americans. Our results are comparable with published works that show the risk for suicide among adolescents is associated with family factors (Hernandez, Lodico, & DiClemente, 1993; Summerville et al., 1994).

Racial Similarity in Levels of Risk Factors

Despite the sizeable evidence base linking adolescent psychopathology to suicide and suicidal behavior (Moscicki, 1995b), relatively few studies have examined the relationship between psychopathology and suicidality among African American adolescents. There are, however, several community-based studies that have found a relationship between psychiatric history, depression, and the suicidal behavior of African Americans (Feldman & Wilson, 1997; Frierson & Lippmann, 1990; Windle & Windle, 1997). The study results clearly indicate important similarities and differences in the factors related to suicide between White and African American adolescents. We found great similarities in demographic, income, education, psychopathology, depression, and treatment experiences between African Americans and White suicidal adolescents. African American and White adolescents were also alike on many primary risk factors for suicide, including the levels of suicide and attempted suicides, depression, alcohol and substance abuse, delinquency and antisocial behavior. Developmentally they were also similar on the severity of functional impairment. Clearly, African American adolescents are matched on suicide vulnerability factors with White adolescents in the present sample of acutely suicidal and psychiatrically hospitalized adolescents. These findings confound previous research suggesting that socio-demographic

and psychopathology factors differentiate the suicide risk profiles for different ethnic groups (Castle et al., 2004; Willis, Coombs, Drentea, & Cockerham, 2003). Although present findings may, to some extent, reflect the characteristics of an inpatient sample, they also suggest that prevention and treatment approaches proven effective with majority adolescents might be applicable to this population. For instance, improving psychopathological assessment and treatment after discharge from psychiatric facilities could therefore help decrease the risk for subsequent attempted suicide.

Suicide Prevention and Practice Implications of the Study

The great similarities in psychopathology, psychiatric treatment history, and socioeconomic status between African American and White suicidal adolescents underscore the importance of adequate preparation and training for those who work directly with this population. Social workers in their course of practice with African American adolescents in schools as well as in juvenile justice, child welfare, and recreation programs will be faced with the emerging public health problem of suicidal behavior among African-American youth. Social workers, like physicians, have a significant role to play in the national strategy to prevent suicide. In addition, like physicians, many have little incentive to take active steps to become skilled in suicide assessment or treatment. Therefore, it is important to inform social work practitioners of the characteristics of suicidal African American adolescents presented in this study, because too often suicidal behavior goes unrecognized. This study presents evidence to contradict conventional beliefs that African-Americans do not engage in serious suicidal behavior (Early, 1992), which can potentially cause many to misinterpret self-destructive behaviors among this population. Social workers should be skilled in talking with clients about the risk characteristics for suicide, providing interventions for those at imminent risk for the expression of suicidal behavior, and referring clients for expert assessment and treatment. Among the critical concerns for social workers are: (1) the ability to recognize conditions that enhance the probability that an attempted suicide will occur, (2) the knowledge and skills to intervene to prevent serious suicidal behavior, and (3) training in adequate and effective treatment techniques.

In summary, this study advances the research on racial differences in the risk factors for adolescent suicidal behavior. The study presents important differences and similarities in the risk characteristics between very suicidal African American and White adolescents. This study had several important limitations that must be mentioned, including a small sample size, the lack of risk controls, and the homogeneity of the sample in terms of suicide risk and socioeconomic status. Future research is needed to address these limitations and that can provide more representative results on the racial differences in the risk profile of actually suicidal African American and White adolescents. Nonetheless, the study moves ahead one aim of scientific inquiry, which is to replace conventional wisdom about an aspect of human behavior or health with empirical knowledge (Lacasse & Gmory, 2003). The results presented in this study represent new knowledge on the characteristics of African-American adolescents at high risk of suicide.

ACKNOWLEDGMENTS

This research was supported in part by funds from the National Institute of Mental Health, U.S. Department of Health and Human Resources (MH65499) awarded to Dr. Joe and grant support awarded to Cheryl A. King by the Ronald McDonald House Charities. The authors wish to thank Sanjeev Venkataraman, MD, Anne Kramer, MSW, ACSW, Lois Weisse, R.N., Lesli Preuss, PhD, Jason Washburn, PhD, Neshe Sarkozy, BA, and Jordana Ostro for assistance with study implementation, data collection, and data management. The authors also thank participating adolescents and their families, independent evaluators, and the inpatient staff at participating psychiatric hospitals.

REFERENCES

Achenbach, TM. Manual for the youth self-report and 1991 profile. Burlington, VT: University of Vermont, Department of Psychiatry; 1991.

Diagnostic and statistical manual of mental disorders. Washington, DC: American Psychiatric Press; 1980. American Psychiatric Association.

Anderson, RN.; Smith, BL. Deaths: Leading causes for 2001. Vol. 52. Hyattsville, MD: National Center for Health Statistics; 2003.

Ang RP, Ooi YP. Impact of gender and parent's marital status on adolescents' suicide ideation. International Journal of Social Psychiatry 2004;50(4):351–360. [PubMed: 15648748]

Bagley C, Greer S. Black suicide: A report of 25 English cases and controls. Journal of Social Psychology 1972;86:175–179. [PubMed: 5013923]

Brent DA, Perper JA, Moritz G, Liotus L, Schweers J, Balach L, et al. Familial factors for adolescent suicide: A case-control study. Acta Psychiatrica Scandinavica 1994;89:52–58. [PubMed: 8140907]

Burr JA, Hartman JT, Matteson DW. Black suicide in U.S. metropolitan areas: An examination of the racial inequality and social integration-regulation hypotheses. Social Forces 1999;77:1049–1081.

Castle K, Duberstein PR, Meldrum S, Conner KR, Conwell Y. Risk factors for suicide in blacks and whites: An analysis of data from the 1993 national mortality followback survey. American Journal of Psychiatry 2004;161:452–458. [PubMed: 14992970]

Centers for Disease Control and Prevention. Suicide among African-American youths–United States, 1980–1995. Morbidity and Mortality Weekly Report 1998;47:193–196. [PubMed: 9531022]

Centers for Disease Control and Prevention. Youth risk behavior surveillance–United States, 2003 (No. 53 [No. SS-2]). Atlanta, GA: Centers for Disease Control and Prevention; 2004.

Costello EJ, Compton SN, Keeler G, Angold A. Relationship between poverty and psychopathology: A natural experiment. Journal of American Medical Association 2003;290:2023–2029.

Davis NL. The Reynolds adolescent depression scale. Measurement and Evaluation in Counseling and Development 1990;23(2):88–91.

Early, KE. Religion and suicide in the African-American community. Westport, CT: Greenwood Press; 1992.

Evans E, Hawton K, Rodham K. Factors associated with suicidal phenomena in adolescents: A systematic review of population-based studies. Clinical Psychology Review 2004;24:957–979. [PubMed: 15533280]

Feldman M, Wilson A. Adolescent suicidality in urban minorities and its relationship to conduct disorders, depression, and separation anxiety. Journal of American Academy of Child and Adolescent Psychiatry 1997;36:75–84.

Frierson RL, Lippmann SB. Attempted suicide by black men and women: An 11 year study. Journal of the Kentucky Medical Association 1990;88:287–292. [PubMed: 2358745]

Garber J, Little S, Hilsman R, Weaver KR. Family predictors of suicidal symptoms in young adolescents. Journal of Adolescence 1998;21:445–457. [PubMed: 9757409]

Garrison CZ, Addy CL, Jackson KL, , McKeown RE. A longitudinal study of suicidal ideation in young adolescents. Journal of American Academy of Child and Adolescent Psychiatry 1991;30:597–603.

Goodman E, Haung B. Socioeconomic status, depressive symptoms, and adolescent substance use. Archive of Pediatric Adolescent Medicine 2002;156:448–453.

Gould MS, Fisher P, Parides M, Flory M, Shaffer D. Psychosocial risk factors of child and adolescent completed suicide. Archives of General Psychiatry 1996;53:1155–1162. [PubMed: 8956682]

Harris TL, Molock SD. Cultural orientation, family cohesion and family support in suicide ideation and depression among African-American college students. Suicide and Life Threatening Behavior 2000;30:341–353. [PubMed: 11210059]

Henry CS, Stephenson AL, Hanson MF, Hargett W. Adolescent suicide and families: An ecological approach. Adolescence 1993;28:291–308. [PubMed: 8317277]

Hernandez JT, Lodico M, DiClemente RJ. The effects of child abuse and race on risk-taking in male adolescents. Journal of the National Medical Association 1993;85(8):593–597. [PubMed: 8371280]

Hodges, K. CAFAS manual for training coordinators, clinical administrators, and data managers. Ann Arbor, MI: Kay Hodges; 1997.

Hodges K, Wong MM. Psychometric characteristics of a multidimensional measure to assess impairment: The child and adolescent functional assessment scale. Journal of Child and Family Studies 1996;5:445–467.

Reducing suicide: A national imperative. Washington, DC: National Academy Press; 2002. Institute of Medicine.

Joe S, Kaplan MS. Suicide among African American men. Suicide and Life-Threatening Behavior 2001;31(1):106–121. [PubMed: 11326755]

Joe S, Marcus SM. Trends by race and gender in suicide attempts among U.S. adolescents, 1991–2001. Psychiatric Services 2003;54(4):454. [PubMed: 12663832]

Jones GD. The role of drugs and alcohol in urban minority adolescent suicide attempts. Death Studies 1997;21:189–202. [PubMed: 10173143]

King, CA. Suicidal behavior in adolescence. In: Maris, RW.; Silverman, MM.; Canetto, SS., editors. Review of suicidology. New York: The Guilford Press; 1997. p. 61-95.

King CA, Hovey JD, Brand E, Wilson R, Ghaziuddin N. Prediction of positive outcomes for adolescent psychiatric inpatients. Journal of the American Academy of Child & Adolescent Psychiatry 1997;36 (10):1434–1442. [PubMed: 9334557]

King CA, Kramer A, Preuss L, Kerr DCR, Weisse L, Venkataraman S. Youth-nominated support team for suicidal adolescents (version 1): A randomized controlled trial. Unpublished Manuscript

Lacasse J, Gmory T. Is graduate social work education promoting a critical approach to mental health practice? Journal of Social Work Education 39(3):383–408.

Lester D. Social correlates of youth suicide in the United States. Adolescence 1991;26:55–58. [PubMed: 2048481]

Maccoby E. The role of parents in the socialization of children: A historical overview. Developmental Psychology 1992;28:1006–1017.

Moscicki EK. Epidemiology of suicidal behavior. Suicide and Life-Threatening Behavior 1995a;25:22–35. [PubMed: 7631373]

Moscicki EK. Epidemiology of suicidal behavior. Suicide and Life-Threatening Behavior 1995b;25:22–35. [PubMed: 7631373]

O'Donnell L, O'Donnell C, Wardlaw DM, Stueve A. Risk and resiliency factors influencing suicidality among urban African American and Latino youth. American Journal of Community Psychology 2004;33:37–49. [PubMed: 15055753]

O'Donnell L, Stueve A, Wardlaw D, O'Donnell C. Adolescent suicidality and adult support: The reach for health study of urban youth. American Journal of Health Behavior 2003;27:633–644. [PubMed: 14672394]

Perkins DF, Hartless G. An ecological risk-factor examination of suicide ideation and behavior of adolescents. Journal of Adolescent Research 2002;17:3–26.

Pfeffer CR, Normandin L, Kakuma T. Suicidal children grow up: Suicidal behavior and psychiatric disorders among relatives. Journal of the American Academy of Child and Adolescent Psychiatry 1994;33:1087–1097. [PubMed: 7982859]

Reynolds, WM. Reynolds adolescent depression scale: Professional manual. Odessa, FL: Psychological Assessment Resources; 1987.

Reynolds, WM. Suicidal ideation questionnaire: Professional manual. Odessa, FL: Psychological Assessment Resources; 1988.

Reynolds WM, Miller KL. Assessment of adolescents' learned helpless-ness in achievement situations. Journal of Personality Assessment 1989;53(2):211–228. [PubMed: 2724038]

Slavin LA. Validation studies of the PEPSS, a measure of perceived emotional support for use with adolescents. Journal of Adolescent Research 1991;6:316–335.

Summerville MB, Kaslow NJ, Abbate MF, Cronan S. Psychopathology, family functioning, cognitive style in urban adolescents with suicide attempts. Journal of Abnormal Child Psychology 1994;22:221–235. [PubMed: 8064030]

Thurber S, Hollingsworth DK. Validity of the Achenbach and Edelbrock youth self-report with hospitalized adolescents. Journal of Clinical Child Psychology 1992;21(3):249–254.

Tomori M, Keinhorst CWM, De Wilde EJ, Van Den Bout J. Suicidal behaviors and family factors among Dutch and Slovenian high school students: A comparison. Actva Psychiatrica Scandinavica 2001;104:198–203.

Census 2000 briefs and special reports: Overview of race and Hispanic origin. Washington DC: Author; 2001. U.S. Census Bureau.

U. S. Public Health Service. The Surgeon General's call to action to prevent suicide, 1999. Washington U. S: Public Health Service; 2000.

Wagner BM, Silverman MAC, Martin CE. Family factors in youth suicidal behaviors. American Behavioral Scientist 2003;46:1171–1191.

Willis LA, Coombs DW, Drentea P, Cockerham WC. Uncovering the mystery: Factors of African American suicide. Suicide and Life-Threatening Behavior 2003;33(4):412–429. [PubMed: 14695056]

Windle RC, Windle M. An investigation of adolescents' substance use behaviors, depressed affect, and suicidal behaviors. Journal of Child Psychology and Psychiatry 1997;38:921–929. [PubMed: 9413792]

Winters, KC. Personal experience screening questionnaire manual. Los Angeles, CA: Western Psychological Services; 1991.

Woods ER, Lin YG, Middleman A, Beckford P, Chase L, DuRant RH. The association of suicide attempts in adolescents. Pediatrics 1997;99:791–796. [PubMed: 9164770]

Yama MF, Tovey SL, Fogas BS, Morris J. The relationship among childhood sexual abuse, parental alcoholism, family environment and suicidal behavior in female college students. Journal of Child Sexual Abuse 1995;4:79–93.

TABLE 1

Demographic Characteristics of Race Groups

	Black	White
Sex (% female)	70.0	70.0
Age [years; mean (SD)]	15.3 (1.5)	15.1 (1.5)
Family Yearly Income		
% < $30,000	16.7	19.6
% $30,000 to $59,999	23.3	37.5
% ≥ $60,000	60.0	42.9
Mothers' education		
% > High school	70.4	58.2
% High school graduate	25.9	30.9
% < High school graduation	3.7	10.9
Fathers' education		
% > High school	65.2	61.2
% High school graduate	17.4	32.7
% < High school graduation	17.4	6.1
Family Structure		
% One caregiver	17.2	18.2
% Two caregivers	82.8	81.8

Note: There are no significant demographic differences between race groups.

TABLE 2

Descriptive Statistics by Race on Perceived Social Support, Measures of Psychopathology, Functional Impairment, Psychiatric History, and Suicide Attempt History

	Black Mean (SD)	White Mean (SD)
Social Support		
Family	11.9 (2.3)	10.5 (2.5) *
Non-Family Adult	10.4 (3.3)	10.0 (2.5)
Peer	12.8 (3.3)	13.2 (1.9)
Psychopathology		
RADS	75.3 (15.6)	77.1 (15.5)
SIQ-Jr	38.0 (23.1)	35.4 (25.2)
PESQ	26.9 (11.7)	29.2 (11.6)
YSR Internalizing	66.1 (10.4)	64.1 (12.1)
YSR Externalizing	61.3 (9.2)	62.6 (9.5)
YSR Delinquency	64.6 (10.0)	66.1 (9.5)
Functional Impairment		
CAFAS Role Performance	22.6 (9.4)	24.3 (9.2)
CAFAS Behavior	17.8 (11.9)	22.7 (9.6)
CAFAS Moods	25.9 (5.1)	25.9 (5.0)
Psychiatric History		
Age of 1st Outpatient Tx	12.5 (3.1)	11.9 (3.5)
Age of 1st Hospitalization	14.3 (1.4)	14.2 (2.0)
Suicide attempt history		
% Multiple attempts	26.7	20.0
% Single attempt	43.3	43.3
% Severe ideation only	30.0	36.7

Note: RADS: Reynolds Adolescent Depression Scale; SIQ-Jr: Suicide Ideation Questionnaire, Jr; PESQ: Personal Experience Screening Questionnaire (alcohol/substance abuse); YSR: Youth Self-Report; CAFAS: Child and Adolescent Functional Assessment Scale. Descriptive statistics based on normative standardization samples are reported for these measures in Achenbach (1991), Reynolds (1987), Reynolds (1988), and Hodges (1996), and include: RADS for females (M = 62.85, SD = 14.66) and males (M = 57.51, SD = 13.41), SIQ-Jr for females (M = 13.70, SD = 16.79) and males (M = 10.94, SD =15.71), and PESQ for total sample (M = 27.5, SD = 8.9). T-scores (YSR only) have a mean of 50 and a standard deviation of 10.

* *t*-test $p < .05$

TABLE 3

Correlations Between Measures of Adolescent Functioning and Perceived Social Support Conducted by Race

	Source of Perceived Social Support		
Race	**Family**	**Non-Family Adult**	**Peer**
Black			
RADS	–.49*	–.65**	–.18
SIQ-Jr	–.52*	–.42†	–.19
YSR Internalizing	–.14	–.23	–.37
YSR Externalizing	–.04	–.24	–.10
YSR Delinquency	–.37	–.29	.15
PESQ	–.39†	–.18	–.11
CAFAS Role Performance	–.03	–.06	–.29
CAFAS Behavior	.24	.24	–.10
CAFAS Moods	.09	.37	–.01
White			
RADS	–.19	–.03	–.12
SIQ-Jr	–.21	–.02	–.12
YSR Internalizing	–.17	–.13	–.08
YSR Externalizing	–.08	–.01	.02
YSR Delinquency	.16	.03	.06
PESQ	.02	–.08	.02
CAFAS Role Performance	.25	–.13	–.27
CAFAS Behavior	.13	.04	–.18
CAFAS Moods	.10	–.11	–.14

Note: Higher scores on measure of psychopathology indicated greater severity. Higher scores on measures of support indicate perceptions of higher support. YSR: Youth Self-Report; RADS: Reynolds Adolescent Depression Scale; SIQ-Jr: Suicide Ideation Questionnaire, Jr; PESQ: Personal Experience Screening Questionnaire (alcohol/substance abuse); CAFAS: Child and Adolescent Functional Assessment Scale.

† $p < .10$

* $p < .05$.

** $p < .01$